

# **SELF-ASSESSMENT REPORT (SAR)**

**For Accreditation of Undergraduate Engineering  
Programme (Tier-I)**

**Bachelor of Technology**

*in*

**Mechanical Engineering**



**Kalinga Institute of Industrial Technology (KIIT)  
Deemed to be University**

*Submitted to*



**NBCC Place, 4th Floor East Tower,  
Bhisham Pitamah Marg, Pragati Vihar New Delhi 110003**

**February 2023**

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## PART A: Institutional Information

### 1. Name and Address of the Institution:

Kalinga Institute of Industrial Technology (KIIT) Deemed to be University  
City: Bhubaneswar, State:- Odisha  
Pin Code: 751024  
Phone No (including STD Code):- 08114382201  
Website: - [www.kiit.ac.in](http://www.kiit.ac.in)  
E-mail:- [kiit@kiit.ac.in](mailto:kiit@kiit.ac.in)

### 2. Name and Address of the Affiliating University: Not Applicable

### 3. Year of establishment of the Institution: 1997; Declared Deemed to be University during 2004

### 4. Type of the Institution:

Institute of National Importance University	<input type="checkbox"/>
Deemed University	<input checked="" type="checkbox"/>
Autonomous	<input type="checkbox"/>
Any other (Please specify)	<input type="checkbox"/>

#### Note:

1. In case of Autonomous and Deemed University, mention the year of grant of status by the authority.
2. In case of University Constituent Institution, please indicate the academic autonomy status of the Institution as defined in 12<sup>th</sup> Plan guidelines of UGC. Institute should apply for Tier 1 only when fully academically autonomous.

### 5. Ownership Status:

Central Government	<input type="checkbox"/>
State Government	<input type="checkbox"/>
Government Aided	<input type="checkbox"/>
Self - financing	<input checked="" type="checkbox"/>

Trust

Society

Section 25 Company

Any Other (Please specify)

Provide details:

**6. Other Academic Institutions of the Trust/Society/Company etc., if any:**

Name of the Institution(s)	Year of Establishment	Programs of Study	Location
KIIT Polytechnic	1995	Diploma in Civil Engineering Diploma in Computer Science & Engineering Diploma in Electrical Engineering Diploma in Electronics & Telecommunication Engineering Diploma in Metallurgical Engineering Diploma in Mechanical Engineering	Campus - 2
KIIT ITI	1992	Electrician, Fitter & Electronics mechanic	Campus - 14

*Table A.6*

Note: Add rows as needed.

**7. Details of all the programs being offered by the institution under consideration:**

Name of the Program	Program Applied Level	Year of Start	Year of AICTE Approval	Initial Intake	Intake increase	Current Intake	Accreditation Status	From	To	Program for consideration	Program for Duration
B.Tech in Mechanical Engineering	UG	1997	1997	60	Yes	180	Granted accreditation for 6+1+1 years for the period	07-01-2014	30/07/2022	Yes	4
B. Tech in Mechanical (Automobile) Engineering	UG	2016	2016	60	Yes	120	Eligible but not applied			No	4
B. Tech in Mechatronics Engineering	UG	2020	2016	60	No	60	Not eligible for accreditation			No	4
B. Tech in Aerospace Engineering	UG	2020	2017	60	No	60	Not eligible for accreditation			No	4
M. Tech in Mechanical Engineering	PG	2007	2007	18	Yes	25	Eligible but not applied			No	2

*Table A.7*

- Granted provisional accreditation for two/three years for the period(specify period)
- Granted accreditation for 5/6 years for the period (specify period)
- Not accredited (specify visit dates, year)
- Withdrawn (specify visit dates, year)
- Not eligible for accreditation
- Eligible but not applied

**Note:** Add rows as needed.

**8. Programs to be considered for Accreditation vide this application**

Sl. No.	Level	Discipline	Program Name
1	UG	Engineering & Technology	Civil Engineering
2	UG	Engineering & Technology	Computer Science & Engineering
3	UG	Engineering & Technology	Electrical Engineering
4	UG	Engineering & Technology	Electronics and Telecommunication Engineering
5	UG	Engineering & Technology	Mechanical Engineering

**Table A.8**

**9. Total number of employees:**

**A. Regular Employees (Faculty and Staff):**

Year of Study	CAY		CAYm1		CAYm2	
	(2022-2023)		(2021-2022)		(2020-2021)	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in engineering (Male)	332	344	331	334	329	331
Faculty in engineering (Female)	132	134	133	132	128	129
Faculty in Maths, Science and Humanities teaching in Engineering Program (Male)	100	103	99	99	92	93
Faculty in Maths, Science and Humanities teaching in Engineering Program (Female)	60	62	56	57	53	53
Non-teaching staff (Male)	5560	5567	5554	5558	5463	5465
Non-teaching staff (Female)	4473	4482	4472	4476	3655	3660

**Table A.9a**

**Note:** All the faculty whether regular or contractual (except Part-Time), will be considered. The contractual faculty (doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Faculty Student Ratio. However, following will be ensured in case of contractual faculty:

1. Shall have the AICTE prescribed qualifications and experience.
2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.
3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit

**CAY – Current Academic Year**

**CAYm1- Current Academic Year minus 1 = Current Assessment Year**

**CAYm2 - Current Academic Year minus 2 = Current Assessment Year minus 1**

**B. Contractual Staff Employees (Faculty and Staff):** (Not covered in Table A):

Year of Study	CAY		CAYm1		CAYm2	
	(2021-2022)		(2020-2021)		(2019-2020)	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in engineering (Male)	0	0	0	0	0	0
Faculty in engineering (Female)	0	0	0	0	0	0
Faculty in Maths, Science and Humanities teaching in Engineering Program (Male)	0	0	0	0	0	0
Faculty in Maths, Science and Humanities teaching in Engineering Program (Female)	0	0	0	0	0	0
Non-teaching staff (Male)	0	0	0	0	0	0
Non-teaching staff (Female)	0	0	0	0	0	0

**Table A.9b**

**10. Total number of Engineering Students:**

Engineering and Technology-UG	√ Shift 1	Shift 2
Engineering and Technology-PG	√ Shift 1	Shift 2
Engineering and Technology-Polytechnic	Shift 1	Shift 2
MBA	√ Shift 1	Shift 2

MCA	√Shift 1	Shift 2
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**Engineering and Technology-UG-Shift 1**

Item	CAY	CAYm1	CAYm2
Total no. of boys	4582	4437	4323
Total no. of girls	2061	1994	1853
Total no. of students	6643	6431	6176

**Engineering and Technology-PG-Shift 1**

Item	CAY	CAYm1	CAYm2
Total no. of boys	156	153	155
Total no. of girls	66	69	67
Total no. of students	222	222	222

**Engineering and Technology-MBA-Shift 1**

Item	CAY	CAYm1	CAYm2
Total no. of boys	475	468	475
Total no. of girls	245	252	245
Total no. of students	720	720	720

**Engineering and Technology-MCA-Shift 1**

Item	CAY	CAYm1	CAYm2
Total no. of boys	255	249	252
Total no. of girls	105	111	108
Total no. of students	360	360	360

**Table A.10**

*(Instruction: The data may be categorized in tabular form separately for undergraduate, postgraduate engineering, other program, if applicable)*

*Note: In case the institution is running programs other than engineering programs, a separate table giving similar details is to be included.*

### 1. Vision of the Institution:

*To create an advanced centre of professional learning of international standing where pursuit of knowledge and excellence shall reign supreme, unfettered by the barriers of nationality, language, cultural plurality and religion.*

### 2. Mission of the Institution:

- *Imparting quality value based education of international standard and imbibing skill for solving real life problems.*
- *Inculcating global perspective in attitude.*
- *Creating leadership qualities with futuristic vision.*
- *Fostering spirit of entrepreneurship and realisation of societal responsibilities.*
- *Cultivating adaptation of ethics, morality and healthy practices in professional life.*
- *Instilling habit of continual learning.*
- *Encouraging and supporting creative abilities and research temperament.*
- *Establishing and promoting close interaction with industries and other utility sectors and keep abreast with state-of-the-art technology.*

### 3. Contact Information of the Head of the Institution and NBA coordinator, if designated:

Head of the Institution	
Name	Prof. (Dr.) Sasmita Samanta
Designation	Vice Chancellor
Mobile No	9937220218
Email Id	vicechancellor@kiit.ac.in

#### NBA Coordinator, If Designated

Head of the Institution	
Name	Dr. Dipti Ranjan Biswal
Designation	Deputy Director (National Accreditation)
Mobile No	9583595895
Email Id	dipti.biswalfce@kiit.ac.in



## PART B: Criteria Summary

Name of the program - B.Tech in Mechanical Engineering

Criteria No.	Criteria	Mark/Weightage	Institute Mark
<b>Program Level Criteria</b>			
1.	Vision, Mission and Program Educational Objectives	50	50
2.	Program Curriculum and Teaching –Learning Processes	100	100
3.	Course Outcomes and Program Outcomes	175	175
4.	Students’ Performance	100	96.22
5.	Faculty Information and Contributions	200	200
6.	Facilities and Technical Support	80	80
7.	Continuous Improvement	75	75
<b>Institute Level Criteria</b>			
8.	First Year Academics	50	49.5
9.	Student Support Systems	50	50
10.	Governance, Institutional Support and Financial Resources	120	120
	<b>Total</b>	<b>1000</b>	<b>995.72</b>

## PART B: Program Level Criteria

<b>CRITERION 1</b>	<b>Vision, Mission and Program Educational Objectives</b>	<b>50</b>
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### 1.1. State the Vision and Mission of the Department and Institute (5)

- **Vision of Kalinga Institute of Industrial Technology Deemed to be University:**

- The Vision of Kalinga Institute of Industrial Technology, Deemed to be University is “To create an advanced centre of professional learning of international standing where pursuit of knowledge and excellence shall reign supreme, unfettered by the barriers of nationality, language, cultural plurality and religion.”

- **Mission statements of Kalinga Institute of Industrial Technology Deemed to be University:**

**MI1:** Imparting quality value-based education of international standard and imbibing skill for solving real life problems.

**MI2:** Inculcating global perspective in attitude.

**MI3:** Creating leadership qualities with futuristic vision.

**MI4:** Fostering spirit of entrepreneurship and realisation of societal responsibilities.

**MI5:** Cultivating adaptation of ethics, morality and healthy practices in professional life.

**MI6:** Instilling habit of continual learning.

**MI7:** Encouraging and supporting creative abilities and research temperament.

**MI8:** Establishing and promoting close interaction with industries and other utility sectors and keep abreast with state-of-the-art technology.

### **The B .Tech program in Mechanical Engineering is offered from the School of Mechanical Engineering**

- **Vision of the School of Mechanical Engineering:**

- To deliver world-class education and research in Mechanical Engineering, with particular regard to their application in industry, healthcare and commerce in a diverse society.

- **Mission statements of the School of Mechanical Engineering:**

**MS1:** To prepare students for professional career, higher studies or entrepreneurship.

**MS2:** To facilitate students to utilize fundamental technical knowledge and skills in Mechanical engineering, to analyze and solve problems, and apply these abilities to generate new knowledge, ideas or products in academia, industry or government.

**MS3:** To encourage and facilitate students, to involve themselves in high end research work through

continuous learning, to build skills beyond curriculum.

**MS4:** To integrate training in engineering principles, critical thinking, hands-on projects, open-ended problem solving to build up creative abilities and research spirit.

**MS5:** To impart the essential skills of leadership, teamwork, communication and ethics so that they can interact and communicate effectively (written and/or oral) with others (e.g., supervisor, client and/or team).

**MS6:** To engage students with alumni, industry, government, and community partners through outreach activities in order to inculcate global perception.

● **Mapping between the mission statements of the School and the University**

	MS1	MS2	MS3	MS4	MS5	MS6
MI1			✓	✓		
MI2						✓
MI3					✓	
MI4	✓	✓	✓			
MI5				✓	✓	
MI6	✓	✓	✓	✓		
MI7		✓	✓	✓		
MI8						✓

**1.2. State the Program Educational Objectives (PEOs) (5)**

The B. Tech program (Mechanical Engineering) aims to prepare students so that they shall get widely employed in mechanical or allied disciplines and adhere to professional ethics in engineering practice. The program also aims to prepare the graduates with the following objectives:

**PEO-1** To produce graduates who can lead successful career in engineering and technological organizations in the areas associated with the mechanical engineering field while maintaining professional and ethical behaviour in the workplace.

**PEO-2** To prepare the students for higher studies and carry out research and development activities in organizations of national and international repute by providing the knowledge of fundamental basic sciences and engineering applications.

**PEO-3** To develop entrepreneurial skill and self-employment in the adopted mechanical engineering

program without compromise in the ethical values and cultural aspects.

**1.3. Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (15)**

- The vision and mission of the Deemed University is available at: <https://kiit.ac.in/about/#>
- The vision and mission of the Deemed University are also displayed through notice boards across the campus.
- The vision and mission of the school is available at: <https://mechanical.kiit.ac.in/about-us/>
- The vision and mission of the school are also displayed through notice boards inside the school.
- The Program Educational Objectives of the B. Tech Program in Mechanical Engineering is available at: <https://mechanical.kiit.ac.in/b-tech-mechanical-engineering/>
- The PEOs are also displayed through notice boards inside the school and in the Syllabus book of the program.
- The PEOs are reviewed every 3-4 years to ensure they are relevant and are aligned with missions of both the Deemed University and the School, Program outcomes and Program Specific Outcomes and the program curricula. This review is done through feedback's taken from faculty members, students, alumni, parents, industry experts, eminent academicians, members of Board of Studies and the academic audit team.
- Program outcomes and Program Specific Outcomes and the program curricula: This review is done through feedback's taken from faculty members, students, alumni, parents, parents, industry experts, eminent academicians, members of Board of Studies and the academic audit team.

**Process of dissemination among stake holders**

**List of stakeholders:** Internal & External

Internal:

1. Students: Display on noticeboards, Student Handbook, Induction programs, Tutor mentor meetings

Implementation Schedule

Display vide boards	Throughout the year in the School corridor
Induction Programs	Conducted annually
Tutor Mentor Meetings	Using Second Saturday of each month

2. Faculty: Faculty meeting, Course files, individual copy of Vision and Mission given for display at work station, Faculty circular through mail

3. Support staff: Display on notice board and corridors

4. Management: Individual copy of Vision and Mission handed over during faculty & staff meetings

External:

1. Parents: Parents-teachers Interactions

2. Alumni: Alumni meet / E-Mails/Alumni Website

3. Industry/employer: E-Mails /Institute Website
4. Affiliating University: E-Mails/ Institute Website
5. AICTE/NBA: SAR/Institute Website

**Extent of awareness of Vision, Mission and PEOs amongst stakeholders:**

Apart from this, Vision and Mission is disseminated to the stakeholders of the programs through faculty Meetings, FDPs, student awareness workshops, student induction programs, and parent-teacher meetings etc.

The faculty members and students demonstrate complete awareness during class meetings, faculty meetings, curriculum review meeting, program review meeting etc.

- Sap portal
- Introductory classes
- Tutor mentor meetings

**1.4. State the process for defining the Vision and Mission of the Department, and PEOs of the program (15)**

The vision and mission of the Department have been framed by considering short and long term goals for the School keeping alignment with the vision and mission of the Deemed University. The mission statements of the School define the path to achieve its vision. A school level committee had drafted the vision and mission statements after performing the SWOT analysis for the School and ensuring that the mission statements of the Deemed University were aligned with the program educational objectives of the different programs offered, the curricula and vice versa. The latest developments, future scope, issues of social, national and global interest were also taken into account.

Feedback on the vision and mission statements are also taken from the

- Graduates
- Alumni
- Parents
- Faculty members
- Industry representatives
- Eminent academicians
- Academic and Research partners
- Internal Quality Assurance Cell
- Management of the Deemed University

Finally, the vision and mission statements are approved by the Deemed University Academic Council. The detailed process of defining mission and vision is shown in Fig. 1.1.

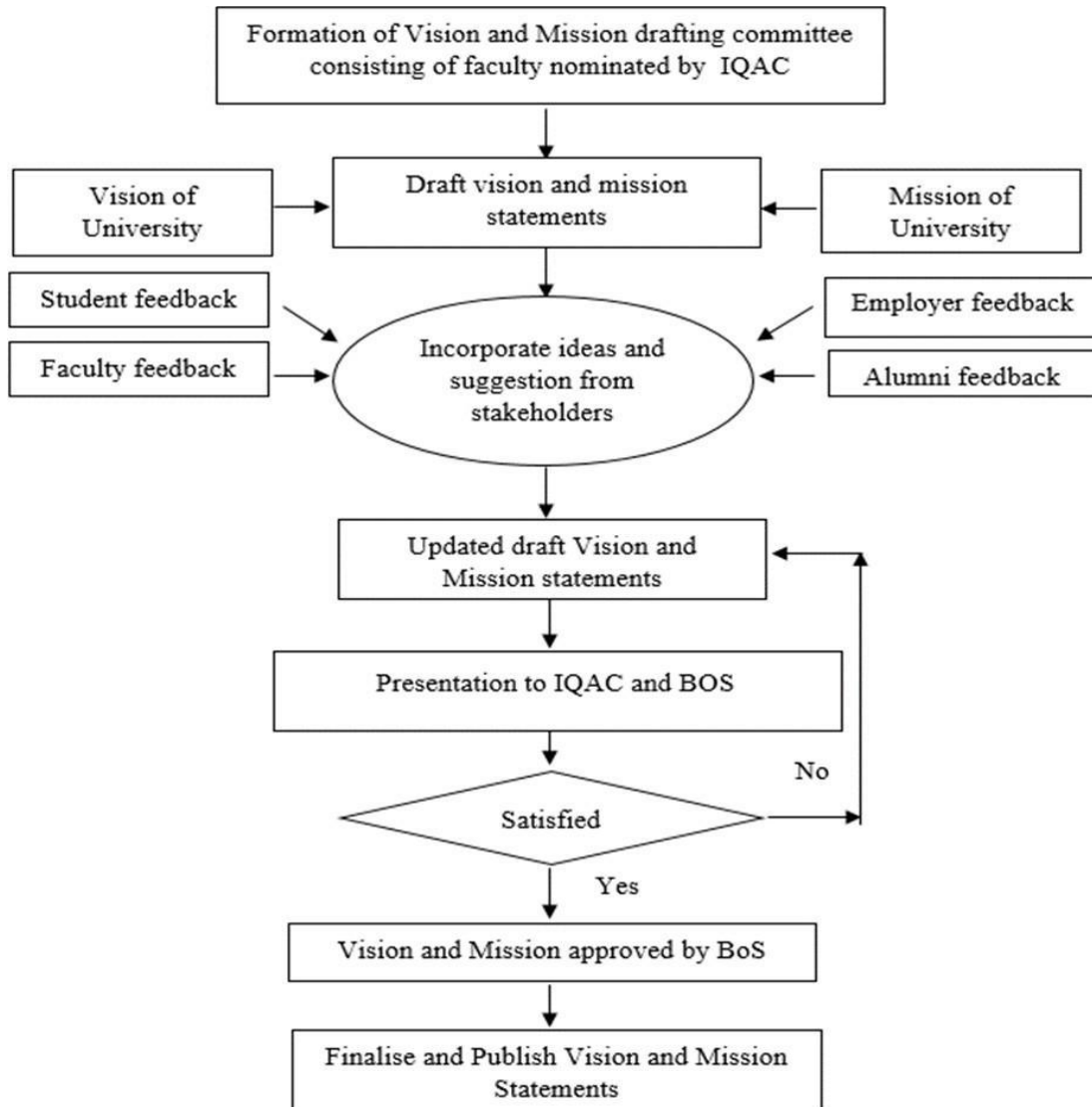


Figure 1.1: Process for defining Vision and Mission Statements

### Process for defining Programme Educational Objectives

The programme educational objectives of an engineering degree program are the statements that describe the expected achievements of graduates in their career, and also in particular, what the graduates are expected to perform and achieve during the first few years after graduation. In the first place, these objectives should help in fulfilling the mission of the department. Secondly, the students graduating from the programme are expected to lead a fruitful and meaningful life in the society by being useful in its progressive development.

Following process were adopted in defining the Program Educational Objectives as mentioned in figure 1.2.

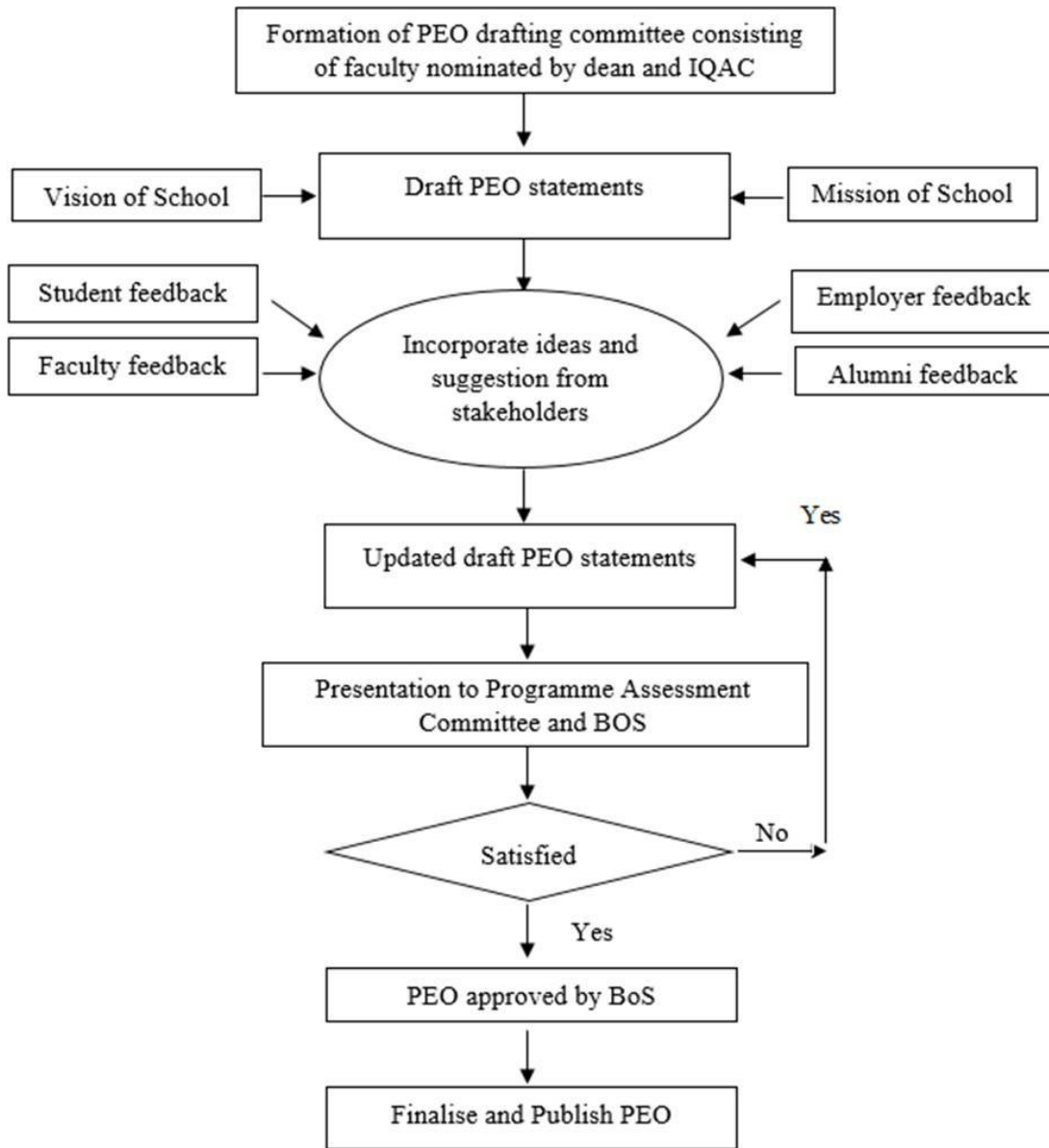


Figure 1.2: Process for defining Programme Educational Objectives

**1.5. Establish consistency of PEOs with Mission of the Department (10)**

The consistency of school missions with school PEOs are given below in mapping format:

**Tabel B.1.5:** Mapping between the school Mission with school PEOs are given below:

	MS-1	MS-2	MS-3	MS-4	MS-5	MS-6
PEO-1	3	3	2	3	1	1

<b>PEO-2</b>	1	2	2	3	3	1
<b>PEO-3</b>	3	1	2	-	3	2

**Note:**

Correlation levels 1, 2 or 3 as defined below:

- 1: Slight (Low)
- 2: Moderate (Medium)
- 3: Substantial (High)
- 4. No correlation, (-)

- ❖ **PEO-1** To produce graduates who can lead successful career in engineering and technological organizations in the areas associated with the mechanical engineering field while maintaining professional and ethical behaviour in the workplace.

Graduates shall demonstrate professional responsibility and thrive to reinforce their knowledge being a part of formal or informal education programs.

The institute and the school focus on providing and facilitating technical education of high quality and international standard to its students thereby producing able graduates in their field of expertise. The graduates are expected to possess analytical and creative skills based on their years of study in the program which includes an appropriate mix of professional core courses, wide choice of elective courses, laboratory sessions, industrial training's, hands-on projects and open ended exercises. They are also expected to keep themselves up dated with emerging technologies and industrial revolutions in their respective fields so as to provide or suggest suitable solutions to different Mechanical Engineering problems, and lead a successful career in their area.

Students can gain domain knowledge in design, manufacturing, heat power, and operational management by immersing themselves in fundamental technical knowledge and skills in mechanical engineering fields in order to solve real-world problems and develop new ideas or products in academia, industry, or government sector. Students were also involved in high end research work through continuous learning, critical thinking, hands on project and open-ended problems which inculcate research spirit and creative abilities in them. This also helps students prepare for obstacles in their professional, further education, or entrepreneurship careers.

- ❖ **PEO-2** To prepare the students for higher studies and carry out research and development activities in organizations of national and international repute by providing the knowledge of fundamental basic sciences and engineering applications.

The graduates will be able to perceive the limitation and impact of engineering solutions in different contexts (as mentioned in PEO 2) in a better way if they maintain close interaction with industries,



alumni and community partners, and keep themselves updated with state of the art technologies. Consequently, they are expected to take decisions in deploying engineering solutions or promoting entrepreneurship keeping social, legal, environmental and economical aspects in consideration. This will also help them to inculcate global perspective in attitude.

❖ **PEO-3** To develop entrepreneurial skill and self-employment in the adopted mechanical engineering program without compromise in the ethical values and cultural aspects.

All these mission statements directly reflect the professional responsibilities of a graduate for the concerned undergraduate engineering program. The professionals are expected to keep on learning and remain updated with emerging technologies from time to time. They should also emphasize on upgrading their academic qualification through different short term or long term educational programs.

<b>CRITERION 2</b>	<b>Program Curriculum and Teaching – Learning Processes</b>	<b>100</b>
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**2.1. Program Curriculum (30)**

**2.1.1. State the process for designing the program curriculum (10)**

The curriculum design process of KIIT Deemed to be University is a systematic process involving the University level committee and School level committee. The school has taken several measures through a process for designing the program curriculum in order to accomplish the program outcomes. The detailed procedure for designing the curriculum is as shown in figure 2.1.

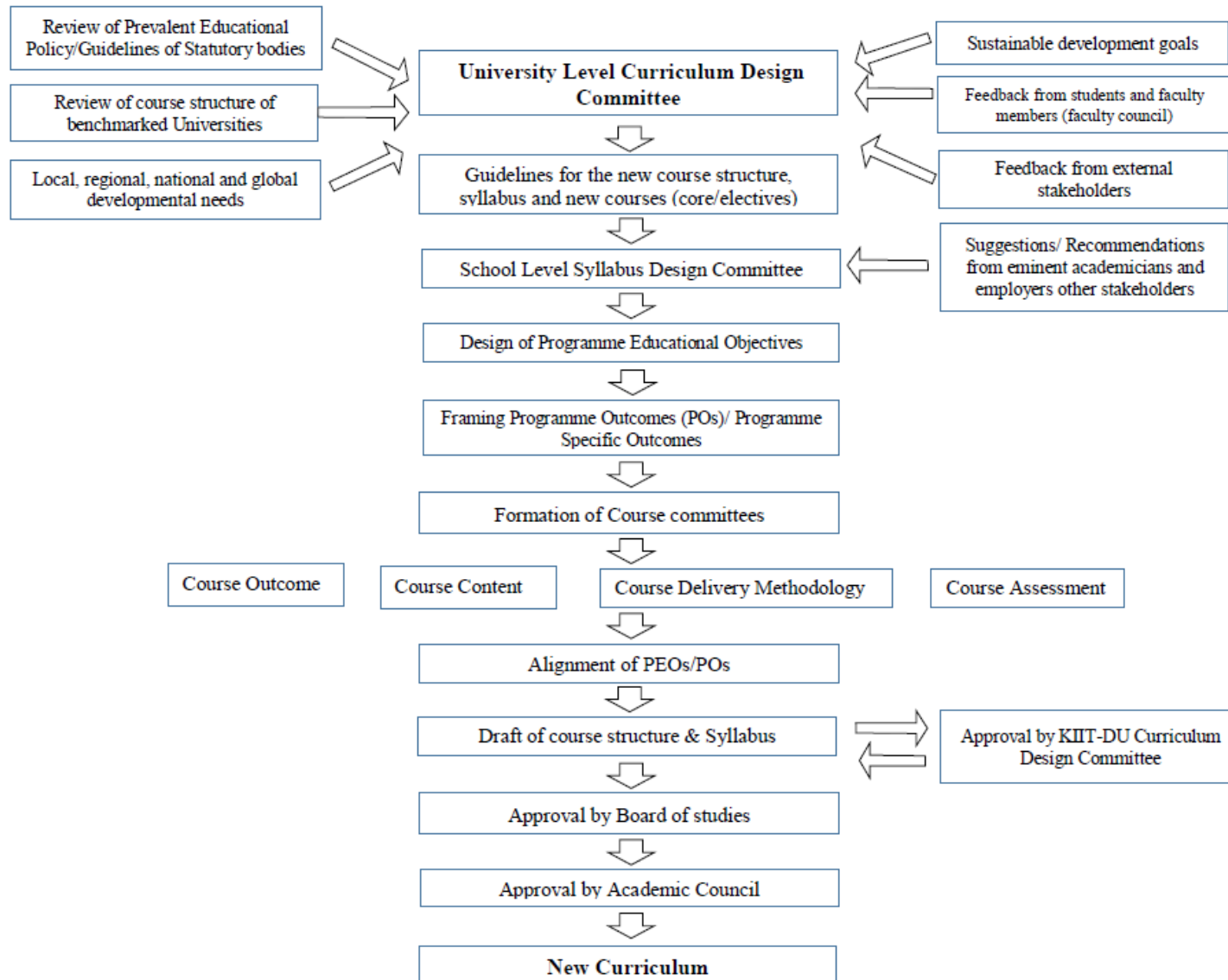


Figure 2.1: Process for Curriculum Design

2.1.2. Structure of the Curriculum (5)

Sl. No.	NBA Course Code	Course Name	Total Number of contact hours				No of Credits		
			Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	Theory Credit	Practical Credit	Total Credit
1	C101	Mathematics-I	3	1	0	4	4	0	4
2	C102	Physics	3	1	0	4	4	0	4
3	C103	Basic Electrical Engineering	3	0	0	3	3	0	3
4	C104	Engineering Mechanics	3	0	0	3	3	0	3
5	C105	Physics Lab	0	0	3	3	0	1.5	1.5
6	C106	Basic Electrical Engineering Lab	0	0	2	2	0	1	1
7	C107	Basic Manufacturing Systems	0	1	2	3	0	2	2
8	C108	Environmental Science	0	0	2	2	0	1	1
9	C109	Mathematics-II	3	1	0	4	4	0	4
10	C110	Chemistry	3	0	0	3	3	0	3
11	C111	Professional Communication	2	0	0	2	2	0	2
12	C112	Biology	2	0	0	2	2	0	2
13	C113	Chemistry Lab	0	0	3	3	0	1.5	1.5
14	C114	Computer Programming	0	2	4	6	2	2	4
15	C115	Language Lab	0	0	2	2	0	1	1
16	C116	Engineering Graphics	0	1	2	3	1	1	2
17	C117	Yoga and Human Consciousness	0	0	2	2	0	1	1
18	C201	Mathematics –III	3	1	0	4	4	0	4
19	C202	Fluid Mechanics and Hydraulic Machines	3	1	0	4	4	0	4
20	C203	Materials Science and Engineering	3	0	0	3	3	0	3
21	C204	Mechanics of Solids	3	1	0	4	4	0	4
22	C205	Engineering Thermodynamics	3	1	0	4	4	0	4
23	C206	Principles of Electronics Engineering	3	0	0	3	3	0	3
24	C207	Electronics Engineering Lab	0	0	2	2	0	1	1
25	C208	Material Testing Lab.	0	0	2	2	0	1	1
26	C209	Fluid Mechanics and Hydraulic Machines Lab	0	0	2	2	0	1	1
27	C210	Machine Drawing and Computer Aided Design	0	0	2	2	0	1	1
28	C211	Basic Manufacturing Processes	3	0	0	3	3	0	3
29	C212	Kinematics and Dynamics of Machines	3	1	0	4	4	0	4
30	C213	Internal Combustion Engines and Gas Turbines	3	0	0	3	3	0	3
31	C214	Industrial Engineering and Operations Research	3	0	0	3	3	0	3
32	C215	Engineering Metrology	3	0	0	3	3	0	3

33	C216	HS Elective-I	3	0	0	3	3	0	3
34	C217	Machine Kinematics and Dynamics Lab.	0	0	2	2	0	1	1
35	C218	Metrology and Instrumentation Lab.	0	0	2	2	0	1	1
36	C219	Manufacturing Practices	0	1	2	3	1	1	2
37	C220	Business Communication	0	0	2	2	0	1	1
38	C301	Manufacturing Processes and Automation	3	1	0	4	4	0	4
39	C302	Heat Transfer	3	1	0	4	4	0	4
40	C303	Design of Machine Elements-I	3	0	0	3	3	0	3
41	C304	Department Elective-I	3	0	0	3	3	0	3
42	C305	Department Elective-II	3	0	0	3	3	0	3
43	C306	Department Elective-III	3	0	0	3	3	0	3
44	C307	Computational Techniques Lab.	0	0	2	2	0	1	1
45	C308	Heat Transfer Lab.	0	2	0	2	0	1	1
46	C309	Advanced Manufacturing Processes Lab.	0	2	0	2	0	1	1
47	C310	Machine Design	0	2	0	2	0	1	1
48	C311	Refrigeration and Air Conditioning	3	0	0	3	3	0	3
49	C312	Inferential Statistics	3	1	0	4	4	0	4
50	C313	Metal Cutting and Tool Design	3	1	0	4	4	0	4
51	C314	Design of Machine Elements-II	3	0	0	3	3	0	3
52	C315	Department Elective-IV	3	0	0	3	3	0	3
53	C316	Department Elective-V	3	0	0	3	3	0	3
54	C317	Open Elective-I / (Minor-I)	3	0	0	3	3	0	3
55	C318	ICE and RAC Lab.	0	0	2	2	0	1	1
56	C319	Mechanical Engineering Lab.	0	0	2	2	0	1	1
57	C320	Computer Aided Design and Analysis	0	0	2	2	0	1	1
58	C321	Minor Project	0	0	4	4	0	2	2
59	C401	Professional Practice, Law & Ethics	2	0	0	2	2	0	2
60	C402	Open Elective-II / (Minor-II)	3	0	0	3	3	0	3
61	C403	Project-I / Internship	0	0	6	6	0	3	3
62	C404	Practical Training	0	0	4	4	0	2	2
63	C405	HS Elective-II	3	0	0	3	3	0	3
64	C407	Project	0	0	20	20	0	10	10

### 2.1.3. State the components of the curriculum (5)

Course Component	Curriculum Content (% of total number of credits of the program)	Total number of contact hours	Total number of credits
Basic Sciences	17.6	33	29
Engineering Sciences	8.5	19	14
Humanities and Social Sciences	7.9	16	13
Program Core	43.0	85	71
Program Electives	9.1	15	15
Open Electives	3.6	6	6
Project(s)	9.1	30	15
Internships/Seminars	1.2	4	2
Any other (Training and Placement)	17.6	33	29
<b>Total number of Credits</b>			<b>165</b>

**2.1.4. State the process used to identify extent of compliance of the curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I (10)**

The curriculum for B. Tech. in Mechanical Engineering maintains a balance among various categories of courses from Science, Mathematics, Engineering Science, Humanities and Management, Professional core, professional electives, open elective Projects and Internship components. The syllabus for each course has been designed to comply with the curriculum for attaining the POs and PSOs defined for the program.

Process used to identify extent of compliance with POs and PSOs (Fig. 2.2)

- The curriculum development process is illustrated in figure 2.1.
- All course outcomes of the courses are mapped with the POs and PSOs along with their level of correlation: 1 (low), 2 (medium) and 3 (high). (Table 2.1).
- It is ensured that all POs/PSOs are adequately covered by the courses being taught and each course is mapped to high correlation level with at least one PO.
- It also ensured that all POs/PSOs have high correlation with adequate number of courses. The course and PO mapping of all the compulsory courses have been provided in the sub Criteria 3.1 as programme articulation matrix. However, low level of mapping of course with PO/PSO shows curricular gap which are fulfilled through guest lectures, seminars, industrial visits etc.
- The POs and PSOs attainment is calculated considering cumulative internal examination and semester end examination. Feedbacks are also collected from external stake holders like Alumni, Graduates and Employers for indirect attainment of POs and PSOs. Finally,

the POs and PSOs attainment is calculated considering the relative weightage of direct attainment and indirect attainment (Fig. 2.2)

- PO/PSO attainments are analysed in the Programme Assessment Committee and BOS meeting; recommendations are suggested.

Table 2.1: Course Outcome with PO/PSO Mapping of Mechanics of Solids

Sl. No.	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
1	CO1	1	3	2	0	0	3	0	0	0	0	0	0	1	2	1
2	CO2	2	3	3	1	2	0	0	0	0	0	0	0	1	3	1
3	CO3	2	3	3	3	2	0	0	0	0	0	0	1	2	2	2
4	CO4	3	3	3	3	2	0	0	0	0	0	0	1	1	3	1
5	CO5	3	3	2	2	1	0	0	0	0	0	0	1	2	2	2
6	CO6	3	3	3	3	2	0	1	0	0	0	0	1	2	2	2

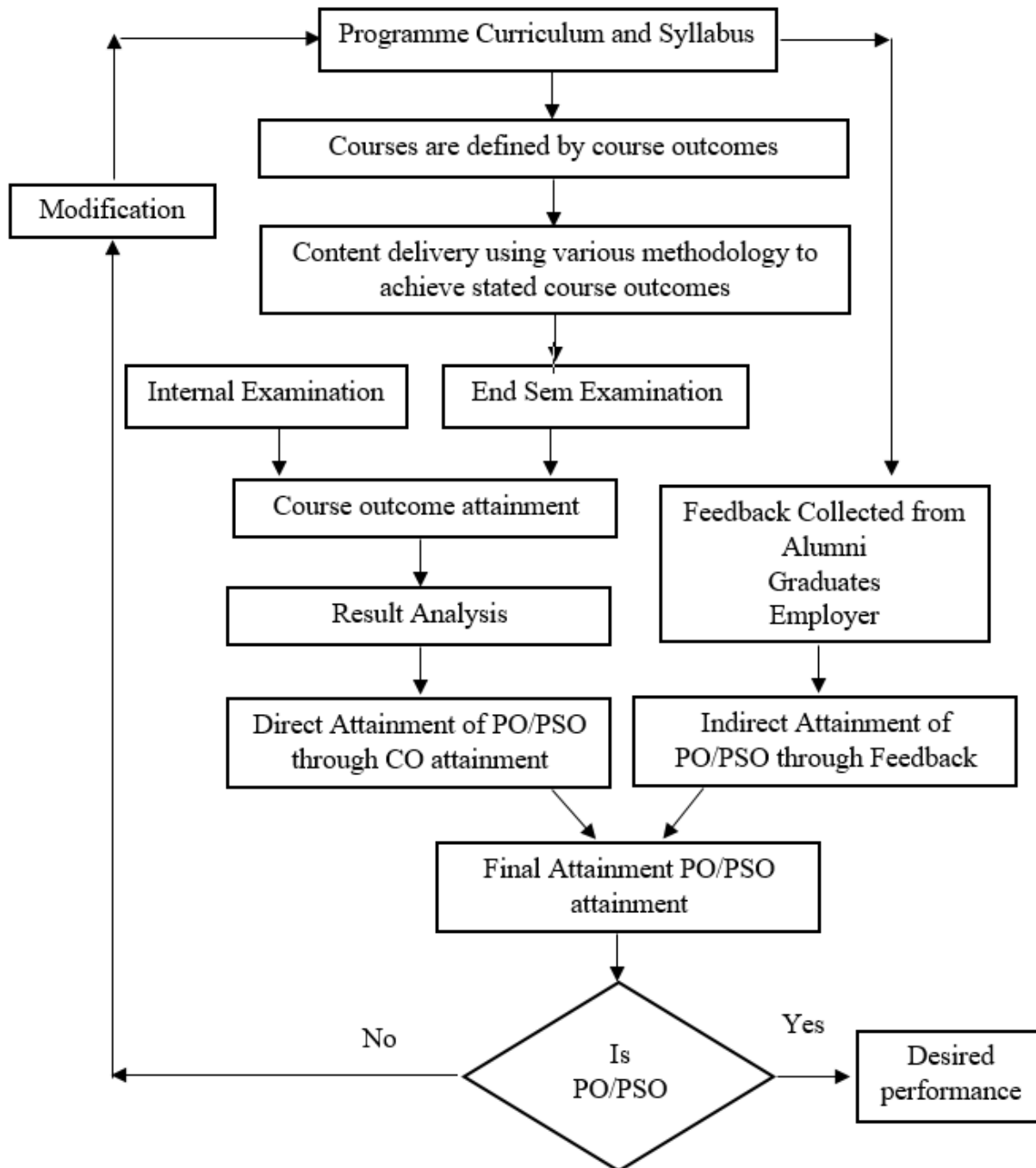


Fig. 2.2 Process for Identifying attainment gap of PO/PSO



## **2.2. Teaching-Learning Processes (70)**

### **2.2.1. Describe Processes followed to improve quality of Teaching & Learning (15)**

The Institute has adopted an integrated teaching learning process which includes different student centric methods aimed for enhancing learning experiences. The curricula and courses are updated periodically satisfying requirements by statutory bodies, addressing global issues, and course and program outcomes along with the Bloom's learning levels. School of Mechanical Engineering has a systematic procedure for improvement of teaching –learning process and thereby the students' performance. The process for **Teaching-Learning and Quality Improvement** in the school is focused on following broad criteria

#### **(A) Adherence to Academic Calendar**

The academic calendar of B. Tech. programmes is prepared by the university and shared to the Deans and Directors of the Schools and faculty members. The academic calendar contains following information related to reporting of students, commencement of classes, pre-mid semester session, mid semester session, post mid semester session, end semester session, all in a chronological order. All academic activities are being done in time without any disruption in the Academic Calendar.

#### **Subject allotment**

Subject allotment for each subject takes place in the previous semester as per the faculty specialization and students' choice so that the faculty members can get enough time to plan their pedagogical approach for the subject.

#### **Time Table**

A detailed time table is prepared at the school level by the programme head of the concerned programme for smooth functioning of the programme.

#### **B. Instructional Methods and Pedagogical Initiatives**

A course committee is formed for each course headed by course coordinator, who prepares the course handout in coordination with the course faculty. Course handout contains details of the course such as course code, course credit, course content, course outcome, lesson plan, assessment scheme, activity calendar, text books & Reference books etc. The lesson plan covers the details of the modulus /topics to be covered in each class along with the course outcome mapping and the chapters of textbook/reference book.

All the course teacher prepares the teaching /lecture materials and shares the materials with the students. For lab course lab manuals are shared with the students along with the course handout. Lab manuals are

prepared well in advance and all lab manuals will be thoroughly scrutinized by the mentor of the respective lab and if it is required.

**Class room lecture and Discussion:** The lecture hour is utilized for planning implementing evaluating and making decision in the class room. During each topic discussion first ten minutes are utilized for discussing the theory behind it and next 30 minutes are used to presenting the reader the practice situations in which the knowledge about the skills can be applied and evaluated. Further 10 minutes are used to connect with the practical situation and the last 10 minutes for discussions.

**Hands on practice:** A practical section demonstrates how theory can be verified by experiments through interpretation of results. For each laboratory course a well defined lab manual is prepared and shared with the students to perform the experiments. Further each labs conducted open ended experiments to check the skills of students in solving real life problems. Students normally performs the experiment which develops a zeal between the students to correlate the results with practical situations where in the students are exposed to get a glance of practical area's including the limitations with each exercise of practical.

**Assignments/Tutorial:** A batch of 5 to 6 students are formed in a class room and a topic/practical problem is given to them related to course out come and guided accordingly to have the access the e-media, journal, site visits, group discussions etc. Later on they are evaluated and asked to present their work so that it creates the learning environment and also helps the co-students.

**Seminar/Presentations:** The student's collect knowledge related to a topic and present it in a technical report and using power point presentation, the topic is presented to other students for their knowledge and benefits as mentioned above.

**Guest lecturers from industrial background:** Special qualified and experienced guest lecturers are arranged to get the real life experience and modern techniques, which are actually implemented in the field, and hence improves the understanding and learning experience. Therefore, the curriculum gap if any is fulfilled.

**Industrial visits:** The students are encourage to to undergo industrial visit to have an exposure of real-life problems and the solutions provided by the industry.

**Video lecture from Online sources:** Students are also encourage to learn from video lectures, animations, different images, open courseware, e-Resources Journals & Articles, Coursera, MOOCs, NPTEL, SWAYAM and KIITX etc.

**Smart Classrooms:** The classrooms are well equipped with advanced projector and smart writing board. Every classroom having PC system internet connectivity. All the laboratories are well equipped with the equipment, materials.

### **C. Continuous Learning Activity**

The continuous assessment of a student in a course requires full engagement in different activities as an individual or in a group. Group activities include group discussions, field work, surveys, laboratory tasks and group projects. Individual tasks vary from student to student as allocated by the course teacher.

**The institute has introduced a framework of learning activities with the following focus areas in all streams:**

**Interactive focus:** Activities include synchronous and collaborative discussions, group activities and assignments, etc.

**Critical thinking:** Activities include undertaking case studies, field surveys, problem identification, reviewing impacts created by previous researchers, identifying gaps and scope for further improvement and strategy formulation.

**Problem solving:** Activities include implementation of strategies under real life circumstances, developing an understanding of constraints, realizing relevant social, environmental, legal and economic implications and analyzing the impact created; activities also include solving real life open ended problems supported by simulations and modeling relevant to the purpose.

**Creation:** Activities include design and implementation tasks both at simulation level followed by hardware implementation, real time deployment and study of the impacts.

**Preparedness for competitive examinations and higher studies:** Activities include extra studies (self-learning) and problem solving as preparation for competitive examinations and higher studies.

### **D. Actions taken for Bright and Weak Students**

Course Committee meeting is conducted regularly to identify the bright students and weak students and suitable actions are taken

The identification of slow and advanced learners are continuous process. The process of assessment of the learning levels of the students and conduction of activities are done in two stages (Stage 1 and stage 2) which are explained in the figures 2.3 and 2.4.

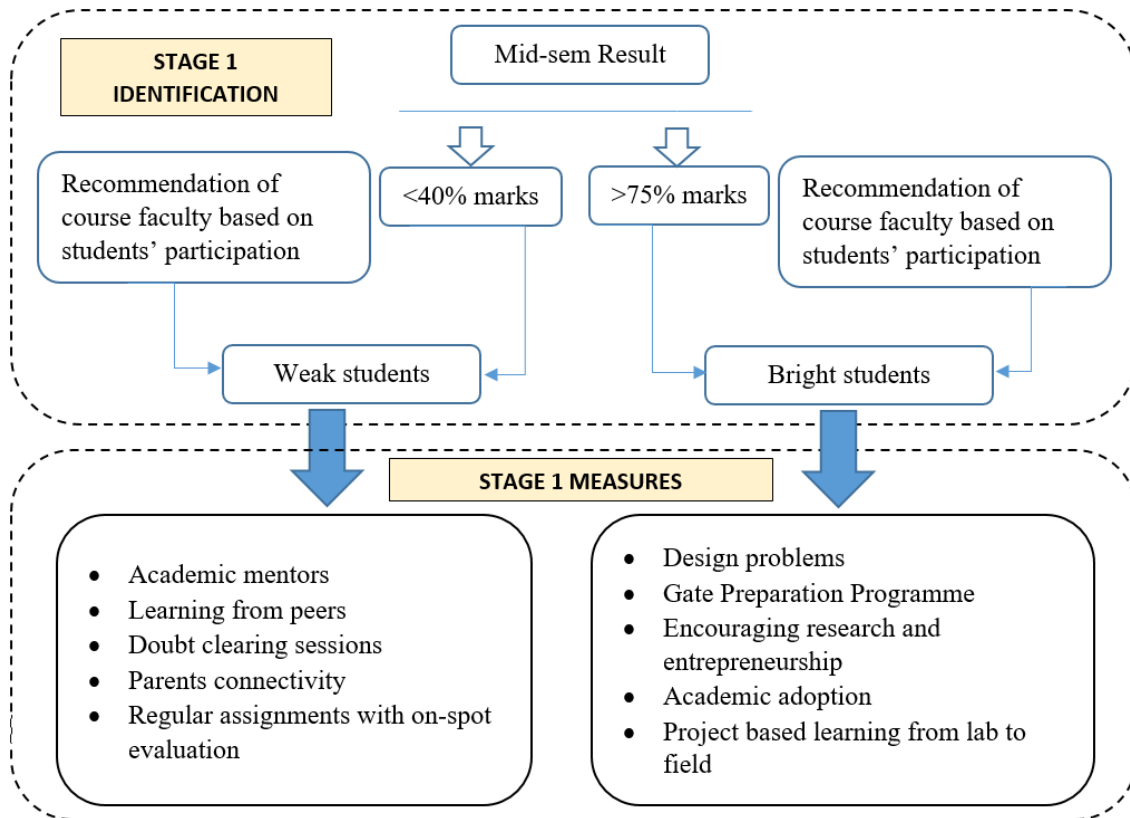


Fig. 2.3: Identification and measures for weak and bright students in stage 1

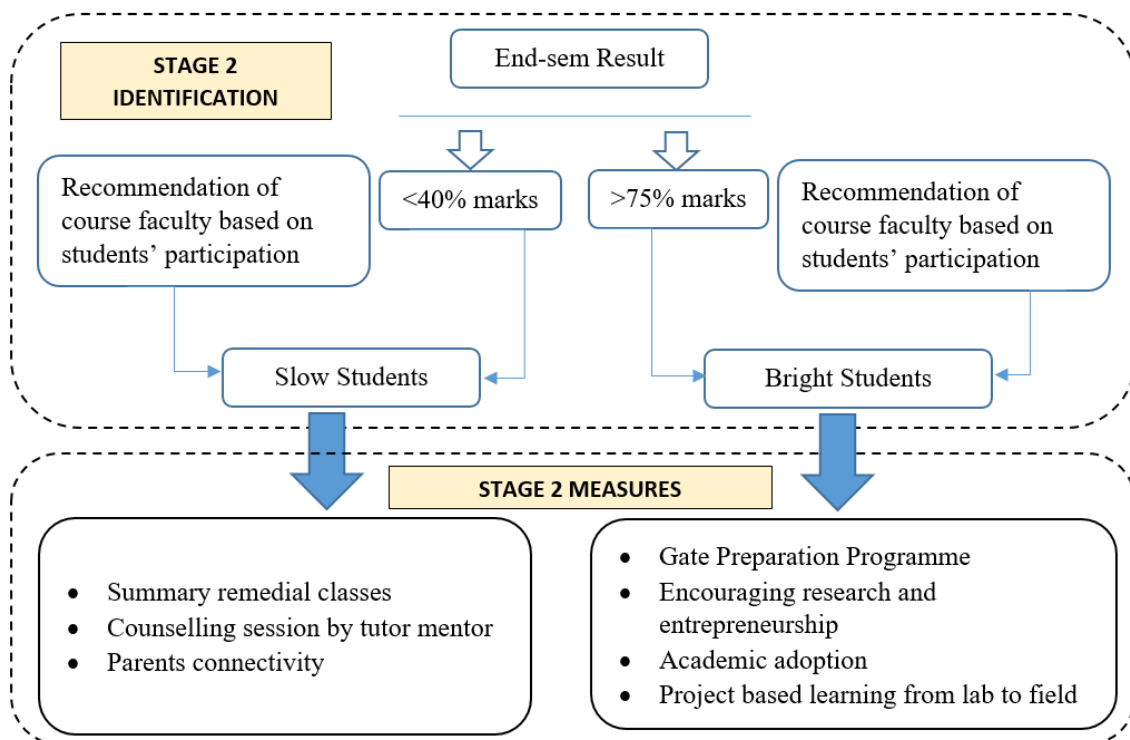


Fig. 2.4: Identification and measures for weak and bright students in stage 2

## Special Programmes for Weak and Bright Students

### D.1 Activities for Bright Students

a. **Introduction of Major-minor scheme:** A student having a Major in a Branch of Engineering can opt for a Minor in a different Branch of Engineering from another School. To get Minor in a discipline, a student has to complete 20 credits in that area (Six Theory subjects @ 3 credits each and Two Labs @ 1 credit each / a Minor Project of 2 credits).

a. **Introduction of B.Tech. with Honours:** A student has to undertake additional Three Advanced level courses (to the tune of 9 cr) to get a B.Tech Honours Degree. A student will be allowed to opt for the Honours scheme only if he/she has a minimum CGPA of 8.00 at the end of 5th semester and which is to be maintained constantly in the 6th, 7th and 8th semester.

b. **GATE Preparation Programme:** School of Mechanical Engineering in association with the University has started Gate preparation programme for the advanced learners. It includes classroom teaching, Gate standard problem solving, module wise practice test, practice test similar to Gate and doubt clearing class.

c. **Encouraging research and entrepreneurship:** Students are advised to actively join in various research groups in their field of interest with the help of faculty members. This helps the students to imbibe a research culture and have good publications from the start of their career. Further for the students, who have innovative entrepreneurial ideas, they are advised to actively participate in the lectures conducted by the school by inviting the successful industry people and entrepreneurs.

d. **Academic Adoption:** The Deemed University has initiated the 'Academic Adoption' scheme towards nurturing young minds towards research and higher education. This is also designed for teachers to promote their research interests. As a result, it's expected from students to achieve some publications with adopting faculty members, which will help them to achieve fellowships from institutes of higher learning. The process normally starts from 2nd year of the program where mentors are allotted to students with research bent of mind to handhold them and guide them through a well defined research path culminating in a major project cum research experience by the end of the graduation. This is also aimed at increasing student publications indexed in SCOPUS at the undergraduate level with faculty members as co-authors.

e. **Project based learning from lab to field:** Students are given the opportunity to be part of live

research and consultancy projects to have a better understanding of their theoretical knowledge.

## **D.2. Activities for Weak Students**

- a. Academic mentors:** Other than tutor-mentors, academic mentors are assigned specially for the slow learners who regularly supervise the overall academic improvement of their mentees.
- a. Learning from peers:** In a residential university like KIIT DU, where most of the students live in hostels, the peer groups always play a major role in the knowledge advancement of the slow learners. Therefore, special attention is given towards this aspect so as to engage advanced learners for the same.
- b. Doubt clearing sessions:** Concerned subject teachers take extra sessions for clearing the doubts of slow learners who usually skip asking during the regular classes.
- c. Summer remedial classes:** Summer remedial classes are conducted for the slow learners during the summer vacation.
- d. Parents connectivity:** Periodical meetings and phone calls are conducted with parents to discuss the academic as well as personality improvements of the students.
- e. Regular assignments with on-spot evaluation:** Students are given regular assignments. A fixed time is given to the students to submit the assignment and is checked on the same day to provide feedback regarding their performance.

## **E. Conduct of experiments**

- All lab manuals are prepared well before the commencement of the semester as prescribed by the University.
- Each class is divided into two groups and the two groups are sent to two separate Laboratories; in further they are divided into small groups, not more than five students.
- Each group will do the experiments separately in order to make them understand and conduct the laboratory experiment and to get individual attention from the faculty.
- The students record the experimental values in their observation after completing the relevant calculations; the students submit the same for evaluation.
- Continuous assessments done on the basis of submission of laboratory records, understanding of the experiment through viva-voce and participation in performing the experiment.

## **F. Project**

Projects are a significant part of the undergraduate engineering program where students can exercise complete freedom and will on the topic of their project work, frame their own time-line of different activities, work under the supervision of faculty-member/s of their choice, harness their skills and apply their expertise in executing the project work. The topic, execution, management and standard of major project reflect the engineering capabilities of the students and are easier to identify whether the different program outcomes for the relevant discipline are being met or not. In other words, the major project can act as a deciding factor on how well a student grasped the engineering concepts of a particular discipline.

There are two project components in the curriculum i.e. a minor project in the sixth semester and a major project in final year. Major project is divided into two parts, one in seventh semester and the other in eighth semester providing a total time span of 1 year. Previously, for 2015, 2016, and 2017 admitted batches minor project, project (Part-I) and project (Part-II) were carrying credits points as 2, 2, and 6 respectively. Currently, Minor project is carrying 2 credits whereas major Project (Part-I) and Project (Part-II) carry 3, and 10 credit points respectively.

B.Tech. Minor (6th Semester) and Major (7th and 8th Semester) Project Guidelines are as follows:

- ◆ Initially a notice is issued to the students for the formation of minor project groups within their sections consisting of maximum 5 students in the end of the 5th semester for doing minor project in 6th semester. The students are also informed about the research interest and technical domain of the faculty members. The same is also intimated to the faculty members of the School. A deadline has given to the students for the submission of group members to the FIC projects.
- ◆ Within the stipulated deadline, the students are required to submit the list of project group members and the supervisor name (accompanied by consent letter/form from the respective supervisor) as a project formation template to the FIC projects.
- ◆ The FIC projects process the information from the students regarding the members of the project groups and the supervisor names. After compilation of all the information, a notice used to issue to all the students regarding the allotment of the project supervisors and the students are advised to contact their supervisors and start the project work.
- ◆ The students in a group are expected to meet the supervisor regularly or periodically, perform relevant literature survey and study, finalize the project topic keeping in mind factors related to environment, safety, cost involved, industry standards and application of the process or product involved in the project work.
- ◆ Supervisors continually evaluate the performance of the students in the group based on their

involvement, contribution, regularity, ethics and coordination abilities.

- ◆ End semester evaluation is performed. The students are to present their own contribution, actively participate in deliberations with the panel members and demonstrate the process or model developed and tested by them in front of the panel members. In next section, the detail evaluation scheme is given.
- ◆ If the project work is extendable, the students may continue working on it in the final year (7th and 8th semester major project) or else the students may choose another project in consultation with the supervisor and inform the same to the project FICs.
- ◆ The students are provided with the templates and the guidelines for writing the project reports from the undergraduate project FICs. They are also required to submit individual contribution reports in the format given from the school. It is desirable that the plagiarism content should be minimal and plagiarism check report need to be provided along with the project report for the information of the supervisor and panel members. The plagiarism check report is generated from the school library using “Turnitin” software.

## **G. Maintenance of Course File**

Maintenance of Course File:-For each course, a course file is prepared and maintained by the concerned faculty member. The course file consists of the following points:-

Course Handout

Course Material (Teaching Material)

Mapping of the Course outcomes with the Program Outcomes/Program Specific Outcomes

Activity details (if assignments have been given):

- o *Assignment/quiz/group activity with marks allocated separately for different questions and instructions to the students.*
  - o *Model solution containing evaluation scheme.*
  - o *Samples of student assignments marked/evaluated with comments (if any).*
  - o *Marks obtained by different student in each assignment.*
  - o *Mapping of the questions with the Course Outcomes.*
- **Mid semester examination documents:**
    - o Mid semester question paper.
    - o Mapping of mid semester questions with course/learning outcomes.



- o Model solution of mid semester question paper along with the corresponding evaluation scheme.
- **End semester examination documents:**
  - o End semester question paper.
  - o Mapping of end semester questions with course/learning outcomes.
  - o Model solution of end semester question paper along with the corresponding evaluation scheme.
- **Course Attainment:**
  - o Course outcome attainment and result analysis
- **Minutes of meetings of the course committee** throughout the semester
- **Notification of extra classes, remedial and tutorial classes to help weak students or clarifying concepts for all students.-** One notification/Email is required
- **All E-mail communications with students and parents.**

## **H. Library and Internet Facilities**

**Library facilities:** College is been provided with good collection of books including text book, reference books, technical journals, magazines etc. Books are arranged according to subject classification and in a systematic manner. Also there is a separate newspaper section for day-to-day reference. In addition to this department is maintaining departmental library separately.

**Internet facility:** Internet facility allows our students to access internet 24/7. High speed Wi-Fi network surrounds campus and let student access it any time. Students can access E-books through internet. Our department has dedicated Internet Leased line of 2 Mbps, connected throughout the Campus. Students and faculties are free to access internet after the regular working hours. This helps the students to prepare papers on the latest technologies to be presented in various symposiums and seminars. With Internet facilities in the well-equipped computer lab, providing high speed of connectivity the student can surf the net together for unlimited information.

## **I. Teaching And Learning During Covid-19 PANDEMIC**

During COVID-19 pandemic in India, the academic and research activities of the Institute through were continued through the extensive use of following ICT facilities and associated technical infrastructure:

- 3.7 Gbps internet connectivity

- 35082 Laptops available with all faculty-members, executives and students of the University
- SAP /ERP Platform

The following apps/platforms are being extensively used for conducting the online classes supported by suitable Learning Management systems:

- Zoom
- Google Meet
- Cisco Webex
- Gsuite
- Moodle
- MyPerfectice

All the Lab class is conducted using virtual platform google meet and zoom. The experiments were explained through prerecorded video conducted by the concerned faculty members and technical assistant. Virtual labs developed Ministry of Education is also used for demonstration. Relevant informative videos related to experiments were also being shown to students from different internet sources.

#### **J. Student feedback of teaching learning process and action taken**

Feedback is collected from each student at every mid of the semester and at end of the semester and analyzed by the Internal Quality Cell. Feedback covers questions to course content, pedagogy, effectiveness of instructional methodology, Approach and attitude of faculty members.

The feedback's are used to strengthen the instructional methods and also the content of the course or teaching material. Based on the feedback, faculty members are encouraged to improve their skills and abilities. Reputed academicians are also invited deliver lecture on improving the efficiency of teaching-learning process. In case of any negative comment related to attitude or approach of faculty members, a counselling session is organized by the HoD for those faculty members who have secured low scores and negative comments, if any, in the feedback.

#### **2.2.2. Quality of end semester examination, internal semester question papers, assignments and evaluation (15)**

The courses taken up by the student are classified into theory, practical and sessional courses. A set of assessments are conducted for each of these courses through which the students' performance is currently evaluated as summarized below:

Courses	Assessment
Theory courses	<p>The assessment is done in three stages:</p> <p><b>Continuous assessment (30 marks):</b> Student is evaluated based on different tasks and learning activities throughout the semester for the course. The management, assignment and evaluation of tasks, assignments are done through different learning management systems like Google Classroom , Moodle etc.</p> <p><b>Mid semester examination (20 marks):</b> Student is evaluated based on mid semester examination (closed book examination) conducted towards the middle of the semester based on a part of the syllabus decided and announced by the course coordinator in discussion with other course teachers.</p> <p><b>End Semester examination (50 marks):</b> Student is evaluated based on end semester examination (closed book examination) conducted towards at the end of the semester based on the entire syllabus for the course.</p> <p>The mid semester and end semester examinations are conducted by the School Examination cell in coordination with the central examination cell under the supervision of the Controller of Examinations of the Institute. All evaluations are done online, marks are communicated to the students and grievances if any are immediately resolved.</p>
Practical courses	<p>The assessment is done in 2 stages:</p> <p><b>Continuous or Internal assessment (60 marks):</b> Student is evaluated based on their performance, concepts, performance as a group member, viva and documentation corresponding to different experimental tasks, simulations, programming and learning activities prescribed and carried out throughout the semester.</p> <p><b>End Semester examination (40 marks):</b> Student is evaluated based on their performance on a given experimental or hands-on task that has to be completed within a stipulated time under constant proctoring, and on their performance in the end semester viva examination.</p>
Sessional Courses	<p><b>Continuous assessment (100 marks):</b> Student is evaluated based on different tasks, learning activities, group tasks and /or reviews and viva conducted throughout the semester for the course. The management, assignment and evaluation of tasks, assignments are done through different learning management systems like Google Classroom , Moodle etc.</p>

KIIT Deemed to be University has set guidelines for conducting examinations including setting up the question papers of mid-semester and end-semester examination and continuous evaluation through activities. The guidelines of each component of assessment are given below.

**A. Continuous Evaluation through learning activities for each theory course:**

The activities in continuous assessments have been designed to facilitate/strengthen learning among the students. 30 marks have been assigned to the activities category in each course. The activities are to be designed such that the course teacher will be able to assess the student on following categories as well as to the intended course outcomes.

A set of suggested practices on the above aspects have been furnished in the table below. Course teachers are free to adopt a practice within or beyond the frame work suggested.

<b>Focus</b>	<b>Learning Practice</b>	<b>Brief description</b>	<b>Evaluation pattern</b>
<b>Interactivity Focus (Group based evaluation)</b>	Synchronous Discussion	Provide a set of questions to 20-30 students. Facilitate sharing of responses.	Course teacher to facilitate the presentation and Assess.
	Collaborative Discussion	Divide available set of information to 5-6 parts. Provide a part of information to 5-6 students. Allow sharing of information and further buildup among the subgroups.	Course teacher to facilitate the presentation and Assess.
	Group Assignment	In a group of 5-6 assign roles to members as project manager, schedule and records manager, presenters and researchers. Assign a project that can be developed in a semester.	The end-semester project to be assessed by the course teachers.
<b>Critical Thinking Focus</b>	Response to issues	Assign an ongoing practice / Text / Audio / Video. Student is supposed to critique based on set criteria.	Course teacher to evaluate the one-two pages report.
	Case Study	Students are supposed to identify issues, stakeholders, options, impacts and consequences.	Course teacher to evaluate the one-two pages report.
	Research need identification	Student is supposed to go through review papers / set of research papers to identify a pertinent research need. A two page report compiling the background, literature summary and research need is to be	Course teacher to evaluate the one-two pages report.

		presented.	
<b>Creation</b>	Info-graphic	To explain, describe and visualize the given information / process / procedure.	Poster / one page display to be assessed by the course teacher
	Written summary	From a specific aspect of a class / text / research article student is supposed to write a one page summary	Course teacher to evaluate the one page summary.
	Physical model/ mathematical model/ soft-model	Student is supposed to develop an appropriate model.	Course teacher to evaluate the viability / feasibility of the model
<b>Problem solving</b>	Assignments	Set of problems / cases to be solved and submitted	Course teacher to evaluate.
	Modeling and simulation	Students are supposed to develop algorithm/code/ mathematical model, to use appropriate software and simulate.	Course teacher to evaluate
<b>Preparedness for GATE/ And other competitive exams</b>	Quiz	Students are supposed to answer course questions set according to standard of GATE/ CES/ CS/ Other competitive exams.	Course teacher to evaluate
<b>Reflection (Self evaluation)</b>	Self assessment	Student to assess the quality of their work based on given criteria.	Student to evaluate self.
	Reflection on learning	A write-up reflecting what the student intended to learn before the course, reflect upon what is learnt and effectiveness of specific learning tools	

The activity are planned and informed to the students in the course handout at the start of the semester. the learning activities of each course are continuously monitored by Programme Assessment committee and University Quality Assurance Cell.

### **B. Quality of the Internal Question Paper**

Following processes is in place to maintain the quality of the internal question paper. The process is reviewed over the years and updated.

- The course coordinator decides the syllabus for the internal examination and requests question pool from the respective committee members.
- After collecting the questions from respective committee members, the course coordinator prepares the internal question paper and evaluates each question through following parameters.
  1. Mapping of individual questions of the question paper with the respective Course Outcomes (COs).

2. Mapping of individual question paper with the respective levels of questions based on the Bloom's Taxonomy.
  3. Mapping of individual question paper with the respective chapters of the course.
  4. Finally, the quality of the question is analyzed based on the prevalent guidelines related to the Bloom's Taxonomy requirement and the coverage of chapter and course outcomes.
- Then, the course coordinator shares the evaluation sheets with the committee members for review and feedback.
  - After the evaluation sheet data found to meet the quality standards, the question paper is submitted to Faculty-In-Charge Examination.

### **C. Quality of the end semester Question Paper**

Following process is in place to maintain the quality of the end semester question paper.

- The Course Co-ordinator recommends the name of any four/ five faculty members from the course committee for setting up the end semester question paper.
- A school level committee comprising of Dean, Program Head, Assistant Controller of Examination finalizes the list of end semester paper setters (any two/ three faculty members) and two moderators. The list is further sent to Vice Chancellor for approval. The paper setters are also faculty member from other premier institution of India.
- After receiving the approval from Vice Chancellor, the respective faculty members (both paper setter and moderators) are intimated confidentially regarding preparation of question paper along with the guidelines for setting up of question paper by the office of the Dean. During Covid time, the format of question paper was revised for online examination.
- The paper setter after setting up the question paper, evaluate the question paper and submits the question paper along with an evaluation sheet template to the moderator. The evaluation sheet template comprises of
  1. Mapping of individual questions of the question paper with the respective Course Outcomes (COs). The mapping is quantified through a score.
  2. Mapping of individual question paper with the respective levels of questions based on the Blooms Bloom's Taxonomy. The mapping is quantified through a score.
  3. Mapping of individual question paper with the respective chapters of the course. The mapping is quantified through a score
  4. Finally, the quality of the question is statistically analyzed.

- The moderator reviews the question paper along with the evaluation sheet template and finally submits the question paper (from three paper setters) to the Controller Of Examination after being sure about the quality standard of the question paper.

A sample template of question paper with the mapping of questions paper with course outcome and Bloom's Learning level is given below.

**Format-1(Default)**

**Pattern**

- SIX questions are to be attempted |
- Question paper consists of four SECTIONS that is, A, B, C and D
- Section-A is compulsory and to cover the entire syllabus.
- The examinee has to attempt **any five questions** from the **SECTIONS B,C,D** with **minimum one** question from each SECTION.

**Usefulness:**

- All levels of learning are assessed as per the Bloom's taxonomy
- Course Outcomes and Performance Indicators are achieved
- Suitable for lower semesters of the programmes

Question number	Learning levels as per Bloom's taxonomy	Description	Marks	Course Outcomes (CO)/ Performance Indicators(PI)	Additional Instructions
<b>Section A</b>			20% of total Marks to be assigned for Q1.	✓ All COs ✓ PI s related to Learning levels 1 and 2as per Bloom's taxonomy	The questions in SECTION-B,C and D should collectively cover all COs defined for the Course.
Q1 (a)-(j)	Learning levels 1 and 2	Questions based on remembering and understanding.			
<b>Section B</b>			16% of total Marks to be assigned to each question	✓ All COs ✓ PI s related to Learning levels 1, 2 and 3 as per Bloom's taxonomy	
Q2 Q3	Learning levels 1,2, and 3	Questions based on remembering, understanding and application			
<b>Section C</b>					
Q4 Q5 Q6	Learning Levels 3 and 4	Questions based on application and analysis.			
<b>Section D</b>				✓ All COs ✓ PI s related to Learning levels 4, 5 and 6 as per Bloom's taxonomy	
Q7 Q8	Learning levels 4,5,6	Questions based on analysis, evaluation, design, formulation or innovation.			

**C. Question quality Assessment:**

The quality of questions is assessed by a Question Quality Assessment Committee formed by the School.

The assessment is made with respect to the stated course outcomes, the learning levels as per Bloom's Taxonomy (LL1 to LL6 representing Remember, Understand, Apply, Analyze, Evaluate and Create respectively) and the chapter coverage.

The marks allotted with respect to the Course Outcomes, Learning Levels and Chapter IDs are compared against a desired set. The deviations are computed and the question quality with respect to the CO, LL and Chapters are marked as 'Strong', 'Moderate' and 'Weak'.

The process of question quality assessment is usually completed within one month of the assessment. The process covers the questions of mid-semester and end-semester. Through assessing the questions relating to the course during the semester a comprehensive analysis is taken up by the Quality Assurance Cell and the report is shared to the Program Assessment Committee.

### **Quality of the Evaluation**

Following processes has been defined to maintain the quality of evaluation of answer scripts. The process is reviewed over the years and updated.

- The answer scripts are scanned (By a third party service provider) and uploaded with an intimation to the evaluators.
- The evaluator evaluates the answer scripts online, using the login credentials. For every evaluation/ award of mark to the individual answers, there is a provision to give remarks about justification of the award of mark.
- The course coordinator prepares a scheme of evaluation, which is circulated among all evaluators and students.
- Once the evaluation is over, the chief examiner appointed by Vice Chancellor, reviews the evaluated answer sheets online, and does necessary updates with proper justification in the remark field. The chief examiner checks whether marks has been awarded judiciously or not.
- As transparency is another key focus point of the University, the reviewed answer sheets are sent for student view. Students go through their answer sheets online and apply for recheck.
- Then, the copies are sent back to the respective evaluator for recheck and after that final mark are generated.

### **Examination during Covid-19:**

During Covid-19, online exam was conducted with the help of following online platforms.

- Zoom with pro accounts for the invigilators and examinees (For uninterrupted online invigilation: Maximum 20 examinees per invigilator have been allowed).
- Moodle with cloud hosting to support 1000 examinees concurrent access.
- Google Drive used by invigilators to deal with issues with respect to uploading of scanned documents.
- WhatsApp Groups (for real time communication between examination officers, invigilators and examinees)

### **Reforms in Question Paper:**

- The University has approved six formats of end semester question paper to be used for all theory type course items offered from different Schools of the University. These formats have been prepared by a subcommittee of the Academic Monitoring Committee of the University for Implementation. The Course Committees of the School select the appropriate format of end semester question paper (one out of these six formats) for effective assessment of the course. The question paper format selected for the course are



included in the Course Handout for distribution to the students before the start of the teaching learning process for the Course.

A consolidated list containing the semester, subject name, subject code and selected question format are sent to the Office of the Controller of Examinations for implementation in the online evaluation process.

### 2.2.3. Quality of student projects (20)

As per BTech Mechanical curriculum for 2015, 2016 and 2017 admitted batches, each student has to undertake one projects during 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> semester as mentioned below

SL no.	Semester	Course code	Course name	Credits
1	6	ME 3082	Minor Project	2
2	7	ME 4081	Project (Part-I)	2
3	8	ME 4082	Project (Part-II)	6

Similarly, as per BTech Mechanical curriculum for 2018, 2019, 2020, 2021 and 2022 admitted batches, each student has to undertake one projects during 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> semester as mentioned below

SL no.	Semester	Course code	Course name	Credits
1	6	ME 3082	Minor Project	2
2	7	ME 4081	Project (Part-I)	3
3	8	ME 4082	Project (Part-II)	10

#### A. Identification of Projects and allocation methodology to faculty members

Process related to project identification, allotment, and monitoring are described in Fig. 2.5

A project coordinator is appointed by the Dean of the School, who is responsible for planning, scheduling and execution of all the activities related to the student project work.

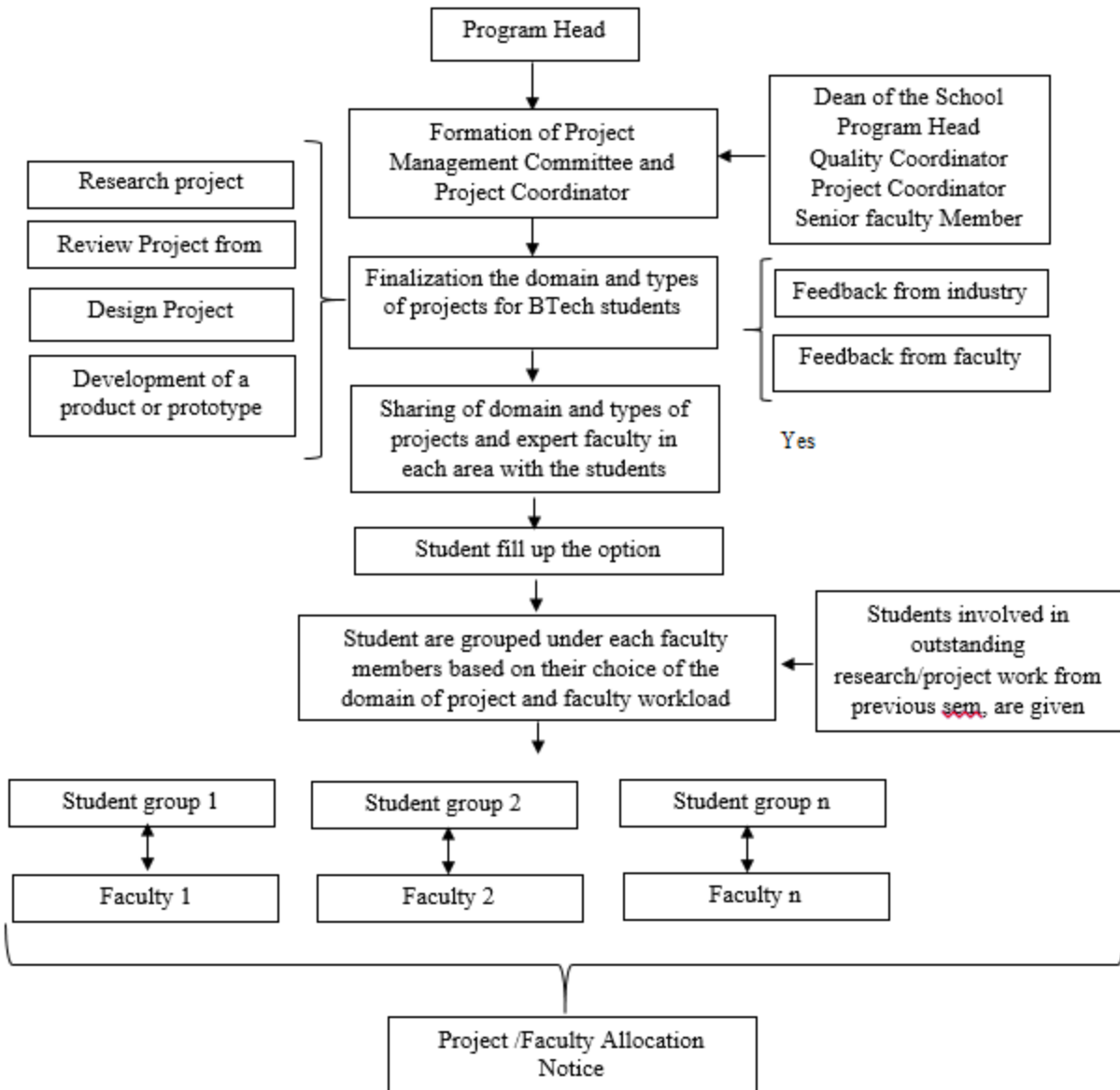


Figure 2.5. Process for Project Allocation methodology

### B. Planning, Scheduling, Monitoring and Execution

The project scheduling and monitoring is briefly explained in the following table.

Step	Task	Process description
Step-1	Project Identification	Projects are identified by faculty members and/or students in their respective area of interest. The detailed process is depicted in Fig. 2.5.
Step-2	Allotment	Projects are assigned to students and guides allotted to them. The laboratory is assigned and the resources are provided to students for project development.

Step-3	Continuous Monitoring	The progress of a project is monitored by the guide on day to day basis. The continuous progress is also assessed through periodic review by panel.
Step-4	Evaluation	Students have to give demonstration of the project works. Students have to present the working principle of the project works. Students have to explain implementation methodology, design process of components, performance of the system, application of projects and future scopes. Finally students have to submit the project report.

### Role of Students

- Regular interaction with guide with minimum 75% attendance. The attendance record will be maintained by the guide which will be submitted to the project coordinators before mid-semester and end-semester.
- Perform a literature review of current knowledge and developments in the chosen research area.
- Undertake detailed technical work in the chosen area consisting of:
  - Analytical and computational studies
  - Experimental works
  - Model and prototype creation
- Maintain a record of individual contribution to the project completed.
- Prepare a formal report, one for mid-semester, and another for end-semester (templates are attached) describing the work undertaken and results obtained so far with **similarity index less than 20% (Attach Plagiarism Report)**.
- The project should be linked to the Societal Impacts/ Sustainability/ Economic Viability.
- Present the work in a forum by preparing a formal presentation.
- Students have to participate in the 8<sup>th</sup> Semester project expo by preparing extended abstracts and presentation in consultation with their guides.

### Role of Guides:

- The guide must prepare the **project groups comprising maximum of 2 students**.
- The guide should send the proposed project title to the project coordinators within 15 days of the start of 7<sup>th</sup> semester.
- The guides should maintain the attendance record of their project students and submit the same to the project coordinators before mid-semester and end-semester.
- In case the progress is found to be unsatisfactory, it should be reported in advance to the project coordinators for their information and necessary action.

- The guides should submit their marks to project coordinators for mid-semester and end-semester exam before the committee evaluation.
- The guide should ensure that all the project reports should be prepared in the attached format given below and also submit **a plagiarism report with  $\leq 20\%$**  similarity before the final submission.
- The guide should ensure the participation of students in 8<sup>th</sup> Semester project expo and check the extended abstract.

#### **Role of Project Coordinators:**

- The coordinators will conduct the mid-semester and end-semester examination and therefore should mail the same prior to at least two weeks before the presentations.
- The coordinators will collect the proposed project titles within 15 days of the start of the 7<sup>th</sup> semester.
- The coordinators will collect the attendance report of project students before mid-semester and end-semester exams.

#### **Guidelines for presentation:**

- The Power Point presentation should be of 15-20 slides comprising:
  - Title (Project title, name/names (roll numbers) of students along with the name of supervisor)
  - Introduction (Background of the study, Significance of the study)
  - Objectives of the study
  - Review of literature
  - Materials and Methods (Description of study area/experimental design, data collection, materials and procedures to achieve the objective)
  - Results and Discussion (Graphs, tables or charts that demonstrate critical elements of the research findings or outcomes)
  - Societal Impacts/ Sustainability/ Economic Viability
  - Conclusion
  - Recommendations for future study
  - List of Publications, if any

#### **Guidelines for project report:**

- All the main text of the thesis should be in "Times New Roman 12" font style with 1.5 line spacing.
- No unnecessary gap should be provided in between paragraph, subheadings, page end etc. (follow the template).

- Cite the references in ASCE style.
- All the cited references in the main text must be listed under and vice versa.
- Provide table and figure number with caption for all the tables and figures in the main text. (Follow the template).
- The report should contain the following headings as per the attached templates.
  - Abstract
  - Introduction
  - Objectives of the Study
  - Review of the Literature
  - Materials and Methods/Software Tools/Data Collection and Extraction
  - Results and Discussion
  - Societal Impacts/ Sustainability/ Economic Viability
  - Conclusion

### **Project Evaluation Scheme**

- Performance in Project components is evaluated separately by the project guide, panel members, reviews and external evaluators. The assessment takes into account model/prototype/construction material development, use of modern engineering tools, quality of project work and innovation, student presentation, viva, reviews, report writing, and individual contributions.
- Since last two academic years, evaluation of major design projects involves external examiners and exhibition through Project Expo. Project Expo is a platform where the final year students are got a chance to show case their project and the project are evaluated by external experts from industry and academia
- **A detailed project assessment scheme is provided below**

<b>EC No.</b>	<b>Evaluation Component</b>	<b>Evaluation type</b>	<b>Marks/Weightage</b>	<b>Components of evaluation</b>
1	Mid Semester Examination	Presentation, viva and report submission	30 (Panel – 15, Guide – 15)	Report – 10 Presentation skills & content –10 Viva – 10
2	End Semester Examination	Presentation, viva and report submission	70 (Panel – 35, Guide – 35)	Report – 30 Presentation skills & content – 20 Viva – 20

### **C. Types and relevance of the projects and their contribution towards attainment of POs**

COs of the project are listed below

#### **ME-4081 Project (Part-I)**

CO1: conduct a detailed research survey or background study and summarize the theory and findings

CO2: formulate a research question or a general objective of the project

CO3: propose and outline the solution to the research question or a pathway for the implementation of the project with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

CO4: conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

CO5: function effectively as an individual, and as a member or leader in a team under multidisciplinary settings following ethical practices

CO6: communicate effectively with a range of audiences and prepare technical reports

ME4081	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	0	0	0	0	0	0	0	0	0	3	3	3	2
CO2	0	3	0	0	1	0	0	0	1	0	0	0	3	3	2
CO3	0	0	0	0	0	0	1	0	0	3	3	0	3	3	2
CO4	0	0	3	2	3	1	0	0	0	0	0	0	3	3	2
CO5	3	3	0	3	3	0	2	0	0	0	0	3	3	3	2
CO6	0	0	3	2	0	0	0	0	0	0	0	0	3	3	2

### ME-4082 Project(Part-II)

CO1: readily apply fundamental concepts in their area of study for executing the projects

CO2: demonstrate skill in using modern technical tools, apply advanced technical knowledge, integrate information from different sources, perform complex experiments and critically analyze the findings to draw conclusions

CO3: provide engineering solutions to predefined research question or project objective; design system components or processes with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

CO4: function effectively as an individual, and as a member or leader in a team under multidisciplinary settings following ethical practices

CO5: communicate effectively with a range of audiences and prepare detailed technical reports

CO6: demonstrate knowledge and understanding of the management principles in executing their project as a member or leader of the team, and willingness to engage in life-long learning

ME4082	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	1	3	3	1	1	1	3	0	1	3	3	3	2
CO2	3	3	3	3	3	2	2	2	3	1	3	3	3	3	2
CO3	2	1	0	0	1	0	1	0	3	3	2	3	3	3	2

CO4	2	1	3	3	3	2	2	3	3	1	1	3	3	3	2
CO5	3	3	3	3	2	1	2	1	3	0	2	3	3	3	2
CO6	3	2	3	3	3	2	2	2	3	1	3	3	3	3	2

**A list of major projects addressing various PO and PSO**

Sl. No.	Project Title	Group Code	Related PO/PSO
1	Design Analysis and Improvement of Solar Distillation System	18_2_1	PO1-PO12, PSO1-PSO3
2	Design and Development of a Lower Limb Exoskeleton for Load Redistribution	18_2_3	PO1-PO12, PSO1-PSO3
3	Free Convection from Isothermal Heated Hollow Tube with Annular Fins	18_2_7	PO1-PO12, PSO1-PSO3
4	Belt Brush Type Autonomous 360 degree Cleaning Robot	18_2_10	PO1-PO12, PSO1-PSO3
5	Design and Analysis of Automated Robot for Agriculture Application	17_2_14	PO1-PO12, PSO1-PSO3
6	Comparative Investigation on Machinability of UNS32750 Super Duplex Steel Under MQL and Al <sub>2</sub> O <sub>3</sub> in Nano-fluid Environments	17_2_15	PO1-PO12, PSO1-PSO3
7	Experimental Analysis of Average Surface Characteristics and Chip Morphology at Minimum Quantity Lubrication Environment During Turning of Inconel 800 Superalloy	17_2_17	PO1-PO12, PSO1-PSO3
8	Dry and Wet Floor Cleaning Robot	17_2_18	PO1-PO12, PSO1-PSO3
9	Design and Fabrication of Combined Power Tiller and Advanced Axial Flow Multi-Crop Thresher Machine for Agricultural Sector	17_2_19	PO1-PO12, PSO1-PSO3
10	Deformation Behaviour of Automotive Component and its Micro Structure Analysis	17_2_21	PO1-PO12, PSO1-PSO3
11	Analys of Carbon-Glass Hybrid Fibre Composite Laminates	17_2_30	PO1-PO12, PSO1-PSO3
12	Performance of Solar Powered Portable Elevator	17_2_28	PO1-PO12, PSO1-PSO3
13	Computational Investigation of a Venturi Type Air Biogas Mixer for A Biogas Fueled Four Stroke SI Engine	17_2_27	PO1-PO12, PSO1-PSO3
14	Fabrication Of Polymer Matrix Composites And Machining In Abrasive Jet Machine to Study The Effect of Process Parameters	16_2_1	PO1-PO12, PSO1-PSO3
15	Energy And Emission Analysis Of Impinging Flames On Plane Surface	16_2_4	PO1-PO12, PSO1-PSO3
16	A Decision On Advertising In a Closed-Loop Supply Chain Under Price Competition	16_2_5	PO1-PO12, PSO1-PSO3
17	Fabrication And Machining Characteristics Of Tungsten Carbide Reinforced a356 Metal Matrix Composite	16_2_8	PO1-PO12, PSO1-PSO3
18	Effect Of UV Radiation On The Mechanical Properties Of Glass Fibre Reinforced Polymer Embedded	16_2_10	PO1-PO12, PSO1-PSO3
19	Design And Analysis Of a Steel, Composite And Hybrid Leaf-Spring	16_2_11	PO1-PO12, PSO1-PSO3

### E. Evidences of papers published/ awards received by projects

The students are encouraged to publish their innovative works in to the national and international conferences, Journals etc. Many students do participate in national and international competitions. A list of student publications out of their project work are given below.

Sl. No	Name of the author	Title of the paper	Name of the Journal/ Conference/ Book	Year of Publication
1	Pratham Saha, Rohit Narain, Ramanuj Kumar, Deepak Singhal, Ashok Kumar Sahoo, Diptikanta Das	Cyogenic as a cleaner cooling strategy for machining applications: A concise review	International journal of energy for a clean environment	2022
2	Prashant Kumar Tiwari, Samar Raj, Ramanuj Kumar, Amlan Panda, Ashok Kumar Sahoo	Machinability Improvement investigation in face milling of Ti-3Al-2.5V alloys using TiAlN coated carbide insert under dual nozzle minimum quantity lubrication cooling environment	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineerign	2022
3	Ramanuj Kumar, Surjeet S Gour, Anish Pandey, Shrestha Kumar, Abhijeet Mohan, Pratik Shashwat, Ashok K Sahoo	Design and Analysis of a Novel concept-based Unmanned Aerial Vehicle with ground traversing capability	ACTA Machanica et Automatica	2022
4	Yash Raj, Nikhil Sinha, Shashwat Swain, Atulya Harshwardhan, Harsh Bhardwaj, Debankan Chakraborty, Biswajeet Nayak	Performance Of a Dual Fuel Diesel Engine Fueled with JOJOBA Biodiesel and Coir Pith Gas	International Journal of Energy for a Clean Environment	2022
5	Swapnil Sarkar, Ritik Verma, Saswata Baksi, Arka Mukherjee, Shivam Shandilya, Amritanshu Anubhawi, & Biswajeet Nayak	EFFECT OF POST MIXED BIODIESEL FUELS ON PERFORMANCE AND EMISSION CHARACTERISTICS OF A DIESEL ENGINE	International Journal of Energy for a Clean Environment	2022
6	Roshan Saha, Ashutosh Dixit, Ashutosh Verma, Ashwani Singh, Gargadeb Chakraborty, Chiranjeeb Rout, Biswajeet Nayak	PERFORMANCE AND EMISSION CHARACTERISTICS OF A DIESEL ENGINE USING WASTE COOKING BIODIESEL BLENDS	International Journal of Energy for a Clean Environment	2022
7	Utsav Kundu, Swapnil Dewangan, Sourin Roy, Vedanth Chakraborty, Arjun Dey,	INFLUENCE OF STORAGE PERIOD ON THE THERMAL AND OXIDATION STABILITY OF	International Journal of Energy for a Clean Environment	2022



	Shobhit Kumar, Biswajeet Nayak	JATROPHA BIODIESEL AND ITS BLENDS		
8	Anubhav Renu, Shivek Sarawgi, Atul Kumar, Rohit Kumar, Aniket Kumar, Prajwal Sharma, Abhishek Bharadwaj, Biswajeet Nayak	ANNONA OIL METHYL ESTER FUELLED-TURBOCHARGED DIESEL ENGINE: INFLUENCE OF COMPRESSION RATIO AND INJECTION TIMING UPON OVERALL EMISSION BEHAVIOR	International Journal of Energy for a Clean Environment	2022
9	Suhasee Sahu, Vikas Paroha, Subham Das, Abishek Singh, Aditya Singh, Nitish Kumar, Shobhit Kumar, & Biswajeet Nayak	INFLUENCE OF ANTIOXIDANTS UPON PERFORMANCE AND EMISSION CHARACTERISTICS OF A TURBOCHARGED DIRECT INJECTION DIESEL ENGINE FUELED WITH SIMAROUBA OIL METHYL ESTER	International Journal of Energy for a Clean Environment	2022
10	Arpit Sriwastav, Aditya Tripathi, Ashutosh Mandal, Ayush Gupta, Ashutosh Shahdeo, Biswajeet Nayak	INVESTIGATING THE OVERALL PERFORMANCE OF A DIESEL ENGINE OPERATED IN DUAL-FUEL MODE FUELED WITH WASTE PALM BIODIESEL AND PRODUCER GAS	International Journal of Energy for a Clean Environment	2022
11	Pradatta Behera, Akash Panda, Venkatakrishnan Karthik, K. Rahaman, Swapnish Sahoo, Sagnik Boral, Sandip Yadav, & Biswajeet Nayak	STUDY ON PERFORMANCE AND EMISSION BEHAVIOR OF A TURBOCHARGED DIRECT INJECTION ENGINE FUELED WITH HYDRO-TREATED NON-EDIBLE JOJOBA OIL METHYL ESTER	International Journal of Energy for a Clean Environment	2022
12	Ramanuj Kumar, Kartik Singh, Ekta Gogna, Himansu Ranjan Sinha, Ashok Kumar Sahoo	Comparative Analysis of Mechanical and Water Absorption Properties of nano/Micro-sized Alumina Filler based Glass-Jute Hybrid Composites	International journal of Integrated Engineering	2020
13	Ramanuj Kumar, Aniket Roy Choudhury, Ashok Kumar Sahoo, Amlan Panda, Arunjyoti Malakar	Machinability Investigation on Novel Incoloy 330 super alloy using coconut oil based SiO <sub>2</sub> Nano fluid	International journal of Integrated Engineering	2020
14	Jitupan Sarma, Ramanuj Kumar, Ashok Kumar Sahoo, Amlan Panda	Enhancement of material properties of titanium alloys through heat treatment process: A brief review	Materials Today: Proceedings	2020
15	Kartik Singh, Diptikant Das, Ramesh Kumar	Effect of Silanization on mechanical and tribological properties of	Materials Today: Proceedings	2020

	Nayak, Sourav Khandai, Ramanuj Kumar, Bharat Chandra Routara	kenaf-Carbon and keaf-glass hybrid polymer composites		
16	Prashant Kumar Tiwari, Ramanuj Kumar, Amlan Panda, Ashok Kumar Sahoo, Diptikant Das, Soumikh Roy	Performance evaluation of coated cermet insert in hard turning	Materials Today: Proceedings	2020
17	Ekta Gogna, Ramanuj Kumar, Ashok Kumar Sahoo, Amlan Panda	A comprehensive review on jute fiber reinforced composites	Advances in industrial and production engineering	2019
18	A. Pandey, R. Kumar, A. K. Sahoo, A Paul and A. Panda	Performance analysis of Trihexyltetradecylphosphonium Chloride Ionic Fluid under MQL condition in hard turning	International Journal of Automotive and Mechanical Engineering	2019
19	R. Kumar, A. Modi, A. Panda, A. K. Sahoo, A. Deep, P. K. Behera, R. Tiwari	Hard Turning on JIS S45C structural steel: an experimental, modelling and optimization approach	International Journal of Automotive and Mechanical Engineering	2019
20	Rishav Sen, Sougata P Choudhury, Ramanuj Kumar, Amlan Panda	A comprehensive review on the feasibility study of Metal Inert Gas Welding	Materials Today: Proceedings	2018

**A list of Student awards related to the Students' project work are given below.**

Sl. No.	Title of the Project	Name of the Award	Year
1	Design and Analysis of KIIT student Nano-satellites structured, Thermal & Micro pulsed plasma thruster	1 <sup>st</sup> Prize, KIIT Innovation Award, 2019	2019
2	Rover Dream Lander	1 <sup>st</sup> Prize, KIIT Innovation Award, 2018	2018
3	An innovative idea project	Titan Company for the final demonstration at the Company premises, Watch Division, Hosur, Tamilnadu	2018

#### **2.2.4. Initiatives related to industry interaction (10)**

School of Mechanical Engineering has developed a strong industry-academia partnership in order to maximize the benefit to the students. The School has taken a number of initiatives for a vibrant industry

interaction, some of which are given below.

- Industry Involvement in the Program Design and Curriculum
- Industry involvement in
- Industry Supported Laboratories
- Partial delivery in Partial delivery of course:
- Invited lectures by Industry Experts
- Workshops/Conferences
- Industrial visits
- Industry Electives
- Industry involvement in Research
- Industry involvement in student projects
- Internship

**Implementation:**

**Provide list of all category for last three years**

- Industry Involvement in the Program Design and Curriculum  
Write a brief informative para
- Industry Supported Laboratories

Sl. No.	Name of the Laboratory	Name of the associated industry	Brief detail about laboratory
1	Advanced Reliability Center	SKF India Limited, Pune	Advanced Reliability Center is developed with industry collaboration,SKF has provided all machine condition monitoring equipment's, laser based shafts and belts alignment kits. Besides, bearing mountings and dismounting tools and equipment's. This laboratory is mainly focused towards the experiments in the field of Vibration Analysis of Continuous Systems, Vibration Control by the use of various types of tuned mass damping, provide familiarity to a wide range of sensors, Classical Control of Various first and second order systems.
2	Green Engine Technology Centre	AICTE, New Delhi.	Green Engine Technology Centre is an outcome of research project sponsored by AICTE, New Delhi. The testing & performance analysis of both Diesel & Petrol engines along with the analysis of CO,CO <sub>2</sub> , HC & NO <sub>x</sub> produced through different designed silencer
3	NI Centre of Excellence	NI SYSTEM INDIA PVT. LTD., BANGALORE	NI Centre of Excellence provides exceptional space to support expanded educational and research activities in the field of engineering. This lab focuses on virtual instruments & LabVIEW software. This laboratory

			was developed in collaboration with National Instruments.
4	PLM LAB	SIEMENS Industry Software India Pvt. Ltd, Gurgaon	
5	IOT LAB	KernelSphere technologies Pvt Ltd, Hyderabad	

- Guest Lectures in Lecture series/Conferences/Seminars/workshops by Industry Experts

Sl. No.	Industry Expert	Designation including Affiliated organisation	Topic	Date
1	Mr. Sakti Parida	Vice President - Supply Chain & CPO at Crompton Greaves Consumer Electricals Ltd.	Role of Supply Chain Management in Crompton Greaves Ltd	22-Jul-22
2	Dr. Ranjan kumar Mishra	The Challenge for Sustainability and Zero Emission	Scientist & Regional Director, Regional Centre for Military Airworthiness, DRDO, Bangalore	03-Sep-22
3	Dr. Mukul Gupta	Scientist - G, UGC-DAE Consortium for Scientific Research, Indore	Synthesis and advanced characterization of hard metal-nitride coatings	27-May-22
4	Dr. R. K. Mishra	Scientist/ Associate Director Regional Center for Military Airworthiness , Bangalore, India	Development of Combustion System for Modern Aero Engines: A Challenge	23-Jan-20
5	Mr Vishal Kapur	Managing Director MEHO-HCP Air-System	Variable Refrigerant Flow Systems	23-Sep-19
6	Dr. Manas Paliwal	Senior Lead Scientist, Sandvik, Pune	Alloy example of two phase dissolution along with concurrent solute homogenization	18-Oct-19
7	Dr. Sudharshan Phani	Scientist at Center for Engineered Coatings (CEC), ARCI	Novel High speed nanomechanical testing techniques	18-Oct-19
8	Dr. Sastry Y. Kandukuri	Head of DNV GL Global Additive Manufacturing Innovation Centre of Excellence (AM CoE) in Singapore	Recent advances in innovative technologies for digital manufacturing - opportunities for innovation and R&D in 3D printing	18-Oct-19
9	Dr. R.K. Mishra	Scientist-G/Associate Director, RCMA (Engines), DRDO, Bangalore, India	Development of Engine for Fighter Aircraft: Challenges for Mechanical and Aeronautical engineers	11-Mar-19
10	Mr. Rajesh Handuja	Chief-Engineer, QUEST Global, Bangalore, India	Aeronautical Engineering - Industry Growth and Contribution from India	11-Mar-19

11	Dr. Wayne Chen	Director of Research, Managing Director of Asia Pacific Operation, Dynamic Systems, Inc., USA	Application of Gleeble Thermo Mechanical Simulator in Research and Study of thermo-mechanical behaviour and properties of Materials	02-Aug-19
12	Mr. Debashis Deb	Executive Director, Hindustan Aeronautics Ltd. (HAL), Koraput	State Of The Art Fighter Aircraft Engines	28-Sep-18
13	Mr. Gyana Prakash Kar	AGM Vedanta Limited, Jharsuguda	Thermal Power Plant Performance Management	11-Sep-18
14	Mr. Satheesh Jacob	Executive Director, Business strategy and excellence, EXCEL GATEWAY LTD, UK	Value proposition - Key benefits	01-Oct-18

### Impact Analysis

- A professional attitude is developed among students
- Students develop the ability to publish papers in national and international conferences and journals
- Students won prizes in various state level, national and international level project design contest
- Growth of technical skill among students in latest technologies.
- As the students develops extra skills required for Have an edge in the job market
- More focused growth for students
- Easy transition into a job

### 2.2.5. Initiatives related to industry internship/summer training (10)

#### Initiative:

Students undertake field/industry visits and undergo internships/training's to acquaint themselves with the industry and job requirements and develop an understanding of the real time issues. School level Industry Engagement Cell (IEC) along with Central IEC coordinates with various industry, government agencies, academic institutions for internship programme of students. During Covid-19, School of Civil Engineering has also conducted a number of internship programme for the students which are given below.

#### Implementation

Sl. No	Name of the industry	Title of the training	No of student	Duration of the training
1	High Radius Corporation	Full Stack development	75	30 days

		with AI		
2	High Radius Corporation	Deployment Of AI Enabled Fintech B2B Cloud Application	68	30 days
3	Tata Motors, Jamshedpur	Technical Internship/Summer Training	53	30 days
4	Central Tool Room And Training Centre, Bhubaneswar	Advance Diploma In CNC Programming Techniques & Practices	27	200 days
5	Central Tool Room And Training Centre, Bhubaneswar	Summer Training In Autocad / Catia	19	30 days
6	SNTI, Tata Steel, Jamsedpur	Industrial Training	10	50 days
7	Tata Steel, Jamshedpur	Field Maintenance/ Vocational Trainee	28	30 days
8	BHEL, Bhopal	Switch Gear	11	30 days
9	Indian Oil Corporation Limited	Vocational Training	18	30 days
10	Damodar Valley Corporation Chandrapura	Overview Of Thermal Power Plant	37	30 days
11	Durgapur Steel Plant(Dsp)	Vocational Training	14	11-14days
12	Indian Oil Corporation Limited, Guwahati, Assam	Vocational Training	7	30 days
13	National Aluminium Company Limited, Damanjodi	Summer Industrial Training	27	30 days
14	Neelachal Ispat Nigam Limited	Internship	12	30 days
15	Tata Motors	Industrial Training	14	21 days
16	Grasim Industries Ltd, Rehla, Jharkhand	Industries Internship	6	30 days
17	Larsen & Toubro	Industrial Training	24	32 days
18	Ashok Leyland	Heavy Vehicle Over Hauling And Maintenance	7	15 days
19	Diesel Locomotive Works, Varanasi	Industrial Internship	8	45 days
20	Dlw Varanasi	Ets, Lms, Lfs, Tas,	3	28 days
21	Mahanadi Coalfields Limited	Industrial Training	6	30 days
22	Cetex Petrochemicals Limited, Chennai	Learnt About Company Regulations And Safety Precautions, Boiler Operations, Workshops, Pipeline, Etc.	4	7 days

### Impact Analysis:

- The student's technical skills are improved.
- Student's placement in core companies is improved.
- The student's placement percentage has improved compared to the previous years.

- Students learn to appreciate the inter-disciplinary nature of work environment
- Students also develop a network of associations / relationships in the organizations they intern with, which translates into industry mentor-mentee relationships
- Students gain valuable work experience.
- Students have an edge in the job market
- Students participate in more technical events

**Feedback collection process**

- Feedback is obtained from the students regarding the industrial training/internship.
- Necessary actions with regard to the feedback given by the students who underwent training.

A sample feedback form is given below.

## STUDENT FEEDBACK ON INDUSTRIAL TRAINING/INTERNSHIP

Name of the Student:..... Semester.....

Duration:.....

Name of the organization/industry .....

Short title of training:.....

**PLEASE TICK APPROPRIATE OPTION (PART-A)**

Description	Below Average (1)	Average (2)	Good (3)	Very Good (4)	Excellent (5)
Relevance of the industrial training or internship with the curriculum					
Effectiveness in communicating the course content was The instructor's ability and willingness to answer the questions					
Ability to keep the session lively and interesting was					
Quality of training manual & handouts as future resource /learning tools Opportunity to learn from the internship work in the company Training environment with the co-interns/workers.					
Recommend the company for future training/internship					

**PART-B**

1. How did you find the training duration?      High       Appropriate       Less

2. Which subject did you like the most during the industrial training/internship?

3. What would you suggest to improve the industrial training/internship?

Signature of the Student



<b>CRITERION 3</b>	<b>Course Outcomes and Program Outcomes</b>	<b>175</b>
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**3.1. Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (25)**

- NBA defined Program Outcomes as mentioned in Annexure I and Program Specific Outcomes as defined by the Program. Six to ten matrices of core courses are to be mentioned with at least one per semester.
- Select core courses to demonstrate the mapping/correlation with all POs and PSOs.
- Number of Outcomes for a Course is expected to be around 6.

**(A) PROGRAM OUTCOMES (NBA defined Outcomes)**

**Engineering Graduates will be able to:**

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** understand the impact of the professional engineering solutions in societal and environmental contexts, demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics, responsibilities, and norms of the engineering practice.

9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

### Program Specific Outcomes (PSOs)

- PSO1** Continuously advance themselves by expanding their technical and professional skills through formal means as well as through informal self-study.
- PSO2** Join a technical workforce as successful professionals in a wide range of mechanical engineering and related domains.
- PSO3** Pursue advanced degrees in engineering, business, or other professional fields.

<b>No. of Core Courses : 6</b>	<b>C2 : 3</b>	<b>C3 : 2</b>	<b>C4 : 1</b>
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**Note : Number of Outcomes for a Course is expected to be around 6.**

<b>Course Name :</b>	<b>C203</b>	<b>Course Year :</b>	<b>2019-2020</b>
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<b>Course Name</b>	<b>Statements</b>
C203.1	recognize appropriate material for a particular engineering application
C203.2	develop and change the chemical, physical and mechanical properties of steel and its alloys for different structural applications.
C203.3	select different non-ferrous materials for different industrial and day to day life application.
C203.4	change the mechanical properties of steel with or without change in chemical compositions.
C203.5	use the technique to prevent corrosion of different ferrous and non-ferrous alloys
C203.6	use different material testing methods to identify different properties and behaviour of material at various conditions

<b>Course Name :</b>	<b>C204</b>	<b>Course Year :</b>	<b>2019-2020</b>
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<b>Course Name</b>	<b>Statements</b>
C204.1	interpret stress strain diagrams and compute significant material characteristics
C204.2	derive and apply stress equations under different load conditions to determine stress and strains
C204.3	analyze a system under complex load system
C204.4	derive and represent profiles for shear force, bending moment, slope and deflection of simple structural members under different load states.
C204.5	comprehend the concept of strain energy, derive and apply equations thereof in finding elastic profiles and stress under sudden or impact load
C204.6	apply the concepts to analyze columns, cylindrical shells, spherical shells, springs and composite beams

<b>Course Name :</b>	<b>C211</b>	<b>Course Year :</b>	<b>2019-2020</b>
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<b>Course Name</b>	<b>Statements</b>
C211.1	understand and select the casting process for a particular industrial product
C211.2	identify the suitable rolling process and sheet metal for different material and product.
C211.3	understand the forging process for various components and its application
C211.4	understand the fundamental processes of extrusion and drawing
C211.5	apply powder metallurgy process to produce powder of various materials and to manufacture new composite material
C211.6	identify the best welding technique for joining of various components and to produce defect free products

<b>Course Name :</b>	<b>C302</b>	<b>Course Year :</b>	<b>2020-2021</b>
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<b>Course Name</b>	<b>Statements</b>
C302.1	analyze the mechanism of conduction and its application to thermal and energy systems.
C302.2	solve the complex problems of conduction heat transfer in fluids for implementation in various industrial and scientific systems.
C302.3	calculate heat transfer of a convective problem by using various correlations for various conditions.
C302.4	develop an efficient heat exchange process for design and fabrication of heat exchangers used in various industrial purposes.
C302.5	formulate an analysis of radiation heat exchange process in various thermal and energy systems for the solution of heat transfer problems.
C302.6	design of the thermal equipment considering three modes of heat transfer simultaneously.

<b>Course Name :</b>	<b>C313</b>	<b>Course Year :</b>	<b>2020-2021</b>
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Course Name	Statements
C313.1	identify the necessity of manufacturing, purpose and principle of machining, demonstrate tool geometry and convert tool angles from one system to another.
C313.2	categorize between orthogonal and oblique cutting and chip flow deviation. Illustrate the mechanism of chip formation in machining ductile and brittle materials and able to conduct complex mechanical engineering experiments to analyze and interpret the experimental data.
C313.3	explain the benefits and the purposes of determining cutting forces and able to conduct complex mechanical engineering experiments to analyze and interpret the experimental data.
C313.4	assess failure of cutting tools, mechanisms and pattern of tool wear, the essential properties of cutting tool materials, and assess tool life, Machinability & economics of machining.
C313.5	conduct advanced conventional machining processes.
C313.6	design of cutting tools, press tool and forging die.

Course Name :	C401	Course Year :	2021-2022
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Course Name	Statements
C401.1	select appropriate engineering decisions in consideration of professional ethics in realization of more critical impact of engineering compared to general experiments.
C401.2	evaluate and prescribe risk reducing measures
C401.3	comprehend the dynamics in engineers' roles and responsibilities with emerging issues in global scene.
C401.4	know the various compliance requirements and the regulatory bodies to protect environment
C401.5	have a fair idea to protect their engineering inventions from unauthorised exploitation under Intellectual property rights system and laws relating to Information communication technologies
C401.6	understand, analyze and prevent misuse of IT related transactions

### Program Articulation Matrix

#### 1 . course name : C203

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C203.1	2	2	3	3	3	-	-	-	-	2	-	2
C203.2	3	2	3	3	1	1	1	1	-	3	-	2
C203.3	2	3	3	3	3	-	3	-	1	1	1	3
C203.4	2	3	3	3	1	-	3	-	1	1	1	1
C203.5	3	2	3	3	2	2	3	-	1	-	1	2
C203.6	3	2	3	3	3	3	1	-	3	-	-	2
<b>Average</b>	2.50	2.33	3.00	3.00	2.17	2.00	2.20	1.00	1.50	1.75	1.00	2.00

#### 2 . course name : C204

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C204.1	1	3	2	-	-	3	-	-	-	-	-	-
C204.2	2	3	3	1	2	-	-	-	-	-	-	-
C204.3	2	3	3	3	2	-	-	-	-	-	-	1
C204.4	3	3	3	3	2	-	-	-	-	-	-	1
C204.5	3	3	2	2	1	-	-	-	-	-	-	1
C204.6	3	3	3	3	2	-	1	-	-	-	-	1
<b>Average</b>	2.33	3.00	2.67	2.40	1.80	3.00	1.00	-	-	-	-	1.00

### 3 . course name : C211

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C211.1	1	-	2	1	2	1	1	-	1	-	2	1
C211.2	2	1	2	2	2	-	-	-	1	-	1	1
C211.3	2	-	3	1	3	-	-	-	1	-	1	1
C211.4	2	1	3	1	3	-	1	-	1	-	1	1
C211.5	2	1	3	1	2	1	1	-	1	-	1	1
C211.6	1	2	3	2	3	1	1	-	1	-	2	1
<b>Average</b>	1.67	1.25	2.67	1.33	2.50	1.00	1.00	-	1.00	-	1.33	1.00

### 4 . course name : C302

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C302.1	2	1	1	1	-	-	-	-	2	2	-	1
C302.2	2	2	2	1	-	-	-	-	2	2	-	1
C302.3	1	2	2	2	-	-	-	-	2	2	-	1
C302.4	2	3	3	2	-	-	-	-	2	2	1	2
C302.5	1	1	1	1	-	-	-	-	2	2	-	1
C302.6	3	2	2	2	1	-	-	-	2	2	1	2
<b>Average</b>	1.83	1.83	1.83	1.50	1.00	-	-	-	2.00	2.00	1.00	1.33

### 5 . course name : C313

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C313.1	3	3	3	3	1	1	3	1	2	2	2	3
C313.2	3	3	2	2	1	1	2	2	2	3	2	2
C313.3	3	3	3	3	3	1	3	2	2	3	2	3
C313.4	3	3	1	2	2	2	3	2	2	3	2	3
C313.5	3	3	1	3	2	1	3	2	3	3	3	3
C313.6	3	3	3	3	2	1	3	3	2	2	2	3
<b>Average</b>	3.00	3.00	2.17	2.67	1.83	1.17	2.83	2.00	2.17	2.67	2.17	2.83

**6 . course name : C401**

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C401.1	-	-	1	-	-	3	1	2	-	-	1	1
C401.2	-	-	1	-	-	3	1	2	-	-	1	1
C401.3	-	-	1	-	-	3	2	2	-	-	1	1
C401.4	-	-	1	-	-	3	1	2	-	-	1	1
C401.5	-	-	1	-	-	3	1	2	-	-	1	1
C401.6	-	-	1	-	-	3	1	2	-	-	1	1
<b>Average</b>	-	-	<b>1</b>	-	-	<b>3</b>	<b>1.17</b>	<b>2</b>	-	-	<b>1</b>	<b>1</b>

**1 . Course Name : C203**

Course	PSO1	PSO2	PSO3
C203.1	1	2	3
C203.2	3	3	3
C203.3	3	3	2
C203.4	2	3	2
C203.5	1	2	1
C203.6	3	3	3
<b>Average</b>	2.17	2.67	2.33

**2 . Course Name : C204**

Course	PSO1	PSO2	PSO3
C204.1	1	2	1
C204.2	1	3	1
C204.3	2	2	2
C204.4	1	3	1
C204.5	2	2	2
C204.6	2	2	2
<b>Average</b>	1.50	2.33	1.50

**3 . Course Name : C211**

Course	PSO1	PSO2	PSO3
C211.1	-	2	1
C211.2	-	2	1
C211.3	-	3	-
C211.4	-	2	-
C211.5	-	3	1

C211.6	-	3	1
<b>Average</b>	-	2.50	1.00

#### 4. Course Name : C302

Course	PSO1	PSO2	PSO3
C302.1	1	1	1
C302.2	1	1	1
C302.3	1	1	1
C302.4	2	1	1
C302.5	1	1	1
C302.6	2	2	2
<b>Average</b>	1.33	1.17	1.17

#### 5. Course Name : C313

Course	PSO1	PSO2	PSO3
C313.1	2	3	3
C313.2	2	2	2
C313.3	2	3	3
C313.4	2	3	3
C313.5	2	3	3
C313.6	2	3	3
<b>Average</b>	2.00	2.83	2.83

#### 6. Course Name : C401

Course	PSO1	PSO2	PSO3
C401.1	2	2	2
C401.2	2	2	2
C401.3	2	2	2
C401.4	2	2	2
C401.5	2	2	2
C401.6	2	2	2
<b>Average</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>

#### Program Articulation Matrix

Sl. No.	NBA Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
1	C101	3.00	2.83	3.00	2.67	1.50	1.60	2.00	-	1.00	-	-	2.00
2	C102	2.40	1.33	1.00	1.00	-	-	-	-	-	-	-	1.00
3	C103	2.00	2.00	2.17	1.83	-	1.50	1.67	-	-	-	-	1.40

4	C104	3.00	2.00	1.00	1.00	-	-	-	-	-	-	-	-
5	C105	2.20	1.67	2.00	-	-	-	-	-	-	-	-	-
6	C106	2.60	3.00	2.40	1.83	2.25	1.75	1.60	1.00	3.00	1.00	-	1.25
7	C107	1.50	1.33	1.40	1.80	1.50	1.33	1.50	1.50	2.33	1.00	1.50	1.33
8	C108	1.00	1.00	2.00	3.00	2.00	2.00	3.00	3.00	3.00	2.00	2.20	2.00
9	C109	3.00	3.00	1.00	3.00	-	-	-	-	-	-	-	2.67
10	C110	2.67	2.50	3.00	2.25	-	1.33	1.50	-	1.00	-	-	1.00
11	C111	-	-	-	-	-	-	3.00	2.25	-	3.00	1.00	2.00
12	C112	2.83	-	2.00	-	-	1.33	1.00	-	-	-	-	1.00
13	C113	2.20	2.33	-	2.50	1.00	-	1.00	-	-	-	-	-
14	C114	2.50	1.83	2.50	1.33	2.00	-	-	1.00	1.00	1.00	-	2.20
15	C115	-	-	-	-	-	1.00	-	1.00	-	2.50	-	2.00
16	C116	1.50	1.75	-	-	2.67	1.00	-	-	-	-	1.75	1.00
17	C117	-	-	-	-	-	1.00	-	3.00	-	-	-	2.00
18	C201	3.00	3.00	1.80	3.00	-	-	-	-	2.00	-	-	2.67
19	C202	2.17	2.33	2.40	2.17	1.67	1.67	1.00	1.00	1.50	1.00	1.33	1.25
20	C203	2.50	2.33	3.00	3.00	2.17	2.00	2.20	1.00	1.50	1.75	1.00	2.00
21	C204	2.33	3.00	2.67	2.40	1.80	3.00	1.00	-	-	-	-	1.00
22	C205	2.00	2.00	2.33	2.00	2.33	1.40	2.20	1.00	2.50	2.00	1.50	1.60
23	C206	3.00	2.50	2.33	1.67	-	2.67	-	-	2.17	1.00	-	2.17
24	C207	1.50	2.17	2.00	1.67	-	2.33	-	-	2.17	1.00	-	2.17
25	C208	2.50	2.33	3.00	3.00	2.17	2.20	2.20	1.00	1.50	1.75	1.00	2.00
26	C209	2.17	1.33	2.17	2.00	1.80	1.80	1.67	1.00	1.83	2.00	1.20	2.00
27	C210	1.50	1.40	2.17	1.33	2.00	1.00	-	-	1.00	1.83	1.50	2.00
28	C211	1.67	1.25	2.67	1.33	2.50	1.00	1.00	-	1.00	-	1.33	1.00
29	C212	2.33	2.17	1.67	1.67	1.00	1.67	1.33	1.00	-	1.33	1.00	1.00
30	C213	1.83	1.67	1.67	2.00	1.67	1.50	1.25	1.83	1.67	2.00	1.00	2.17
31	C214	2.00	2.33	2.50	2.00	2.33	1.50	1.33	1.25	1.33	1.17	2.33	1.17
32	C215	2.33	2.17	2.50	2.00	1.33	1.40	2.00	1.80	-	1.33	2.00	1.33
33	C217	2.17	2.67	2.00	1.33	1.00	2.00	1.00	-	-	1.00	-	1.00
34	C218	2.83	2.67	2.83	2.33	1.67	1.40	2.00	1.80	-	1.33	2.00	1.50
35	C219	1.50	1.33	1.40	1.80	1.50	1.33	1.50	1.50	2.33	1.33	1.50	1.33
36	C220	-	-	-	-	-	-	1.00	-	3.00	2.83	1.00	3.00
37	C301	2.33	2.33	2.50	2.67	2.80	2.00	1.67	1.67	2.17	2.50	2.50	2.50
38	C302	1.83	1.83	1.83	1.50	1.00	-	-	-	2.00	2.00	1.00	1.33
39	C303	2.17	2.00	2.17	1.83	1.83	1.20	1.17	1.50	1.83	2.33	1.17	1.50
40	C307	2.00	2.60	1.50	1.40	1.00	1.00	-	-	1.00	1.00	1.20	1.60
41	C308	1.83	1.83	1.83	1.50	1.00	-	-	-	2.00	2.00	1.00	1.33
42	C309	2.33	2.33	2.50	2.67	2.80	2.83	1.50	2.40	2.17	2.50	2.50	2.50
43	C310	2.17	1.50	2.50	1.25	-	-	-	-	1.50	1.17	1.50	2.00
44	C311	1.83	1.67	2.33	1.80	1.83	2.00	1.67	1.50	2.00	1.67	2.00	2.17
45	C312	3.00	3.00	1.80	3.00	-	-	-	-	2.00	-	-	2.67
46	C313	2.93	2.93	1.99	2.78	-	-	-	-	2.10	-	-	2.69



47	C314	2.17	2.00	2.17	1.83	1.83	1.20	1.17	1.50	1.83	2.33	1.17	1.50
48	C318	2.00	2.00	1.67	1.60	1.00	1.00	-	1.00	1.00	1.00	1.00	1.00
49	C319	1.83	1.83	1.83	1.50	1.00	-	-	-	2.00	2.00	1.00	1.33
50	C320	1.67	1.17	2.00	1.40	-	1.00	-	1.50	3.00	1.67	1.50	1.80
51	C321	1.00	3.00	3.00	3.00	3.00	-	-	-	-	3.00	3.00	3.00
52	C401	-	-	1.00	-	-	3.00	1.17	2.00	-	-	1.00	1.00
53	C403	3.00	3.00	3.00	3.00	3.00	-	-	-	-	3.00	3.00	3.00
54	C404	1.83	1.50	1.67	1.67	1.67	3.00	2.50	2.50	2.83	3.00	2.00	3.00
55	C407	2.67	2.00	2.60	3.00	2.50	1.60	1.67	1.80	3.00	1.50	2.00	3.00

Sl. No.	NBA Course Code	PSO1	PSO2	PSO3
1	C101	1.00	1.00	-
2	C102	1.00	1.00	-
3	C103	1.17	1.17	-
4	C104	-	2.17	1.00
5	C105	1.00	1.00	-
6	C106	1.17	1.17	-
7	C107	2.50	1.17	1.00
8	C108	-	-	-
9	C109	1.00	1.00	-
10	C110	0.67	1.00	-
11	C111	-	-	-
12	C112	-	1.00	-
13	C113	0.67	-	-
14	C114	2.17	1.50	2.20
15	C115	-	1.00	1.00
16	C116	1.00	1.00	1.00
17	C117	-	-	-
18	C201	1.00	1.00	-
19	C202	1.00	1.83	1.67
20	C203	2.17	2.67	2.33
21	C204	1.50	2.33	1.50
22	C205	1.67	1.83	1.00
23	C206	1.17	1.17	-
24	C207	1.17	1.17	-
25	C208	2.17	2.67	2.33
26	C209	2.00	1.25	1.00
27	C210	2.17	1.33	1.83
28	C211	-	2.50	1.00

29	C212	1.00	2.60	2.50
30	C213	2.00	1.80	2.00
31	C214	2.00	2.67	2.50
32	C215	2.40	1.33	1.20
33	C217	-	3.00	3.00
34	C218	2.40	1.33	1.20
35	C219	2.50	1.17	1.00
36	C220	1.00	-	-
37	C301	2.33	2.20	2.33
38	C302	1.33	1.17	1.17
39	C303	1.80	1.20	1.25
40	C307	1.00	2.00	2.00
41	C308	1.33	1.17	1.17
42	C309	2.33	2.20	2.33
43	C310	1.33	-	1.83
44	C311	2.50	2.40	2.17
45	C312	1.00	1.00	-
46	C313	1.55	1.99	-
47	C314	1.80	1.20	1.25
48	C318	2.00	1.00	1.00
49	C319	1.33	1.17	1.17
50	C320	1.25	1.80	1.60
51	C321	3.00	3.00	2.00
52	C401	2.00	2.00	2.00
53	C403	3.00	3.00	2.00
54	C404	3.00	3.00	3.00
55	C407	3.00	3.00	3.00

### 3.2. Attainment of Course Outcomes (75)

#### 3.2.1. Describe the assessment tools and processes used to gather the data upon which the evaluation of Course Outcome is based (10)

All the courses offered in the program curriculum are broadly classified into 4 categories with their individual assessment methods:

- Theory courses
- Practical courses
- Sessional courses
- Project.

The performance of student in each semester is assessed for a maximum of 100 marks for theory, practical and sessional/project components. These different categories of courses have different assessment schemes as discussed in the table below

<b>Course category:</b>	<b>Assessment Methods:</b>	<b>Evaluator</b>
Theory courses (assessed out of 100 marks)	<ul style="list-style-type: none"> <li>● <b>Continuous assessment of 30 marks:</b> <ul style="list-style-type: none"> <li>○ Assessment is done through student’s performance in different assignments/tests/tasks/learning activities given by the course faculty-member. The tasks are designed to address all the course outcomes almost uniformly. These tasks are given at different times in the semester.</li> </ul> </li> <li>● <b>Mid semester examination/assessment of 20 marks (questions corresponding to attainment of different COs):</b> <ul style="list-style-type: none"> <li>○ Assessment is done through student’s performance in the mid-semester examination which is conducted once in a semester which is currently of one hour duration. As the name implies, this examination is conducted in the middle of the semester.</li> <li>○ Frequency: once in a semester.</li> <li>○ Questions are set to assess the attainments of certain course outcomes defined for the course, through the students’ marks or scores.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Continuous assessment is done by the concerned faculty member for the course teaching the student.</li> <li>● Answer script for mid semester examination is evaluated by the designated faculty member and marks passed on to the examination cell for further compilation.</li> </ul>

	<ul style="list-style-type: none"> <li>● <b>End semester examination/assessment of 50 marks (questions correspond to attainment of different COs):</b> <ul style="list-style-type: none"> <li>○ Assessment is done through student's performance in the end-semester examination which is conducted at the end of every semester. This examination is currently of two hours duration.</li> <li>○ Frequency: once in a semester.</li> <li>○ Questions are set to assess the attainments of course outcomes defined for the course through the students' marks or scores.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Answer script for end semester examination is evaluated by the designated faculty member and marks passed on to the examination cell for further compilation.</li> </ul>
<p>Practical courses (assessed out of 100 marks)</p>	<ul style="list-style-type: none"> <li>● <b>Continuous assessment of 60 marks</b> <ul style="list-style-type: none"> <li>○ Assessment is done through student performance in day to day laboratory activities where the student's involvement, conduct of the experiment, recording of observations and analysis/ design outputs, documentation of results and observations, clarity of concept is taken into account by the designated laboratory faculty member.</li> <li>○ All the laboratory tasks are designed to assess the attainments of different course outcomes defined for the course through students' marks or scores.</li> </ul> </li> <li>● <b>End semester examination/ assessment of 40 marks</b> <ul style="list-style-type: none"> <li>○ Assessment is done through conduct of a given experiments tasks, viva, etc. This is normally conducted at the end of the semester and is normally of three hour duration.</li> <li>○ Frequency: once in a semester.</li> <li>○ The tasks, questionnaires are mapped to course outcomes and the students' marks or score is used to compute the attainment.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Continuous assessment is done by the concerned faculty member for the laboratory course teaching the student.</li> <li>● End semester examinations, tasks, viva are conducted by the concerned faculty member.</li> <li>● Marks from continuous assessment and performance in the end semester examination are passed onto the examination cell for further compilation.</li> </ul>

<p>Sessional courses (assessed out of 100 marks)</p>	<ul style="list-style-type: none"> <li>● <b>Continuous assessment of 100 marks:</b> <ul style="list-style-type: none"> <li>○ Assessment is done through student's performance in different assignments/tests/tasks/learning activities given by the course faculty-member. The tasks are designed to address all the course outcomes almost uniformly.</li> <li>○ Frequency: Assessed throughout the semester.</li> <li>○ Different tasks are mapped to different outcomes and the students' marks or score in that category is used to compute the attainment</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Continuous assessment is done by the concerned faculty member for the sessional course teaching the student and marks passed onto the examination cell for further processing.</li> </ul>
<p>Projects (assessed out of 100 marks)</p>	<ul style="list-style-type: none"> <li>● The project evaluation process is indicated below and includes consideration of factors related to contribution both as a group and as an individual in the process. Markings are based on : <ul style="list-style-type: none"> <li>a. Model or prototype/product development or software application (10 marks by panel and 10 marks by the Project guide/supervisor).</li> <li>b. Modern tools, software and their usage (10 marks by panel).</li> <li>c. Quality of project and innovation (10 marks by panel).</li> <li>d. Presentation given by the student illustrating individual contribution (10 marks by panel).</li> <li>e. Performance of the student in the viva (10 marks by panel)</li> <li>f. Project report (20 marks)</li> <li>g. Individual contribution report (10 marks by guide).</li> <li>h. Performance of the student as a member of the group (10 marks by guide).</li> </ul> <p>The panel reviewing the project work are external members from academia and industry. Suggestions made by the external members are noted by the project guides for future reference.</p> </li> </ul>	<ul style="list-style-type: none"> <li>● Evaluators are already mentioned. The logistics for undergraduate programs are looked after by a Project Monitoring Committee (PMC). Marks from different assessment components are compiled by the PMC are passed on to the examination cell.</li> </ul>

Every course has a defined set of course outcome statements which describes the abilities a student will

develop after successfully completing the course. The assessment methods are used to evaluate the attainment of the course outcomes on a scale of 0-3 lead to the direct attainment of program outcomes. The attainments of course outcomes are measured from marks obtained by the students in different examinations, course related assessments (different assessment and examination questions are framed to test the attainment of different course outcomes for a course).

**Class average is the average percentage of marks secured by all the students in a assessment component in a specific CO**

Targets are quantized into three different levels (Level 1, Level 2 and Level 3) based on Class average in each CO as per the rubrics given below.

Target Levels for CO Attainment				
Level	<b>0</b>	0	$\geq$ Class Average in each CO <	Threshold 1
Level	<b>1</b>	Threshold 1	$\geq$ Class Average in each CO <	Threshold 2
Level	<b>2</b>	Threshold 2	$\geq$ Class Average in each CO <	Threshold 3
Level	<b>3</b>	Threshold 3	$\geq$ Class Average in each CO <	100

Thresholds 1, 2, and 3 are normally set at 25%, 50% and 75% respectively. However, if the course coordinator and course committee involved in ascertaining the attainment levels can raise the thresholds if required.

**Data Acquisition Process:**

- All the questions of mid semester and end semesters are mapped with course outcomes during the preparation of question paper.
- All the activities/assignments/quiz/ experiments are mapped with course outcomes by the course coordinator.
- Exam papers are assessed and marks of obtained by all the students are saved in ediquity software which is shared with the course coordinator for further CO attainment analysis.
- During Covid 19, marks obtained by all the students are saved in Moodle which is shared with the course coordinator for further CO attainment analysis.
- Final computation of course outcome is done through spreadsheets and also through SAP.

CO attainment information will be compiled by the course coordinators and information passed on to the School Quality Assurance Cell and Program Assessment Committee for subsequent decisions and actions.

The calculation for attainments is performed after declaration of end semester examination results. All documentations related to attainments are maintained by the course coordinators.

Course outcome attainment for each type of courses are discussed below.

**Attainment of course outcomes for theory courses:**

The course outcomes attainment is assessed based on students' performance in cumulative internal examination (which included continuous assessment and mid semester) and semester end examination.

A summary of different assessment components and respective weightage is given in the table below.

Course Category	Assessment Tools	Marks	Category	Weightage
Theory Course	Continuous Evaluation	30	Cumulative Internal Examination (CIE)	50
	Mid-Semester Examination	20		
	End Semester Examination	50	Semester End Examination (SEE)	50

The students' marks in different questions are mapped to different Course Outcomes (COs) and are used to compute the class average corresponding to every CO in the course as described below:

Cumulative Internal Examination: Class average corresponding to each CO is assessed as below.

Course Outcomes	Continuous Evaluation		Mid Semester Examination		Cumulative Internal Examination		
	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Class Average
CO <sub>x</sub>	X'	X	Y'	Y	X'+Y'	X+Y	$\frac{X'+Y'}{X+Y} \times 100$

Semester End Examination: Class average corresponding to each CO is assessed as below.

Course Outcomes	Semester End Examination		
	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Class Average
CO <sub>x</sub>	Z'	Z	$\frac{Z'}{Z} \times 100$

Targets are quantized into three different levels (Level 1, Level 2 and Level 3) based on Class Average in

each CO as per the rubrics given below. The course outcome attainment is assessed based the set target levels as given below.

Table: 1. Attainment levels and threshold levels of course outcomes

Thresholds Levels for CO Attainment				
Level	<b>0</b>	0	$\geq$ Class Average in each CO <	25
Level	<b>1</b>	25	$\geq$ Class Average in each CO <	50
Level	<b>2</b>	50	$\geq$ Class Average in each CO <	75
Level	<b>3</b>	75	$\geq$ Class Average in each CO <	100

The CO attainment is assessed separately for CIE and SEE. The final CO attainment is measured based the weighted average of CIE (C) and SEE (S). For the theory course, the weightage of CIE and SEE is 50 % and 50%.

**Final Attainment level=**

**Weightage in CIE (=0.5) \* CO Attainment in Cumulative End Semester Exam (CIE) +**

**Weightage in CIE (=0.5) \* CO Attainment in Semester End Exam (SEE)**

**Attainment of course outcomes for Practical courses:**

The course outcome attainment is assessed based on the students' performance in cumulative internal examination (which included continuous assessment through experimental activities/tasks) and semester end examination. A summary of different assessment components and respective weightage is given in the table below.

Course Category	Assessment Tools	Marks	Category	Weightage
Practical Course	Continuous Evaluation (Experimental activities/ tasks)	60	Cumulative Internal Examination (CIE)	60
	End Semester Examination	40	Semester End Examination (SEE)	40

The experimental activities and tasks are mapped to different Course Outcomes (COs) and are used to compute the class average corresponding to every CO in the course as described below:

Cumulative Internal Examination: Class average corresponding to each CO is assessed as below.

Course Outcomes	Cumulative Internal Examination		
	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Class Average
CO <sub>x</sub>	X'	X	X'/X x100



Semester End Examination: Class average corresponding to each CO is assessed as below.

Course Outcomes	Semester End Examination		
	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Class Average
CO <sub>x</sub>	Z'	Z	Z'/Z x 100

The course outcome attainment is assessed based on the set target levels as given below.

Thresholds Levels for CO Attainment				
Level	<b>0</b>	0	≥ Class Average in each CO <	25
Level	<b>1</b>	25	≥ Class Average in each CO <	50
Level	<b>2</b>	50	≥ Class Average in each CO <	75
Level	<b>3</b>	75	≥ Class Average in each CO <	100

The CO attainment is assessed separately for CIE and SEE. The final CO attainment is measured based the weighted average of CIE (C) and SEE (S). For the practical theory course, the weightage of CIE and SEE is 60 % and 40%.

**Final Attainment level= Weightage in CIE (=0.6) \* CO Attainment in CIE + Weightage in CIE (=0.4) \* CO Attainment in SEE**

**Attainment of course outcomes for Sessional courses:**

The course outcome attainment is assessed based on the students' performance in cumulative internal examination (which included continuous assessment through different activities like design, development, analysis or any other tasks) and semester end examination. A summary of different assessment components and respective weightage is given in the table below.

Course Category	Assessment Tools	Marks	Category	Weightage
Practical Course	Continuous Evaluation (Experimental activities/ tasks)	100	Cumulative Internal Examination (CIE)	100

The experimental activities and tasks are mapped to different Course Outcomes (COs) and are

used to compute the class average corresponding to every CO in the course as described below:  
 Cumulative Internal Examination: Class average corresponding to each CO is assessed as below.

Course Outcomes	Cumulative Internal Examination		
	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Class Average
CO <sub>x</sub>	X'	X	X'/X x100

The course outcome attainment is assessed based on the set target levels as given below.

Threshold Levels for CO Attainment				
Level	<b>0</b>	0	≥ Class Average in each CO <	25
Level	<b>1</b>	25	≥ Class Average in each CO <	50
Level	<b>2</b>	50	≥ Class Average in each CO <	75
Level	<b>3</b>	75	≥ Class Average in each CO <	100

**Final Attainment level= CO Attainment in CIE**

**EXAMPLE OF COURSE OUTCOME ATTAINMENT OF A THEORY COURSE : Mechanics of Solids [C204]**

**Course Outcomes of Mechanics of Solids**

At the end of the course, the students will be able to:

CO1. interpret stress strain diagrams and compute significant material characteristics

CO2. derive and apply stress equations under different load conditions

CO3. to determine stress and strains analyze a system under complex load system

CO4. derive and represent profiles for shear force, bending moment, slope and deflection of simple structural members under different load states.

CO5. comprehend the concept of strain energy, derive and apply equations thereof in finding elastic profiles and stress under sudden or impact load

CO6. apply the concepts to analyze columns, cylindrical shells, spherical shells, springs and composite beams

**Table 1: Course Outcomes and Activities Mapping of Continuous Assessment**

Activity No	CO1	CO2	CO3	CO4	CO5	CO6
1	√					
2		√				
3			√			
4				√		

5					√	
6						√

**Table 2: Mark Calculation of Continuous Evaluation**

MARK CALCULATION OF CONTINUOUS EVALUATION										
Program me	Branch	Batch	Academic Year		Semester		Course Code		Course Name	
<b>B Tech</b>	<b>Mechanical Engg.</b>	<b>2018-2022</b>	<b>2019-2020</b>		<b>3rd</b>		<b>ME2029</b>		<b>Mechanics of Solids</b>	
Activity No		Full marks	CO1	CO2	CO3	CO4	CO5	CO6	Students appearing in the examination/attempting the question	Added Marks of all students for the question
<b>Activity 1</b>		5	5						194	781
<b>Activity 2</b>		5		5					195	771
<b>Activity 3</b>		5			5				192	760
<b>Activity 4</b>		5				5			192	757
<b>Activity 5</b>		5					5		192	758
<b>Activity 6</b>		5						5	191	749.5

CO Number	Total marks allotted corresponding to each CO	Total marks secured corresponding to each CO
CO1	970	781
CO2	975	771
CO3	960	760
CO4	960	757
CO5	960	758
CO6	955	749.5

**Table 3: Mark Calculation of Mid Semester Evaluation**

MARK CALCULATION OF MID SEMESTER EXAMINATION										
Program me	Branch	Batch	Academic Year		Semester		Course Code		Course Name	
<b>B Tech</b>	<b>Mechanical Engg.</b>	<b>2018-2022</b>	<b>2019-2020</b>		<b>3rd</b>		<b>ME2029</b>		<b>Mechanics of Solids</b>	
Question No	Sub Question No	Full marks	CO1	CO2	CO3	CO4	CO5	CO6	Students appearing in the examination/attempting the question	Added Marks of all students for the question
<b>Q1</b>	1a	1	1						201	172.5
	1b	1		1					194	158.5

	1c	1		1					183	125.5
	1d	1			1				119	49
<b>Q2</b>	2	4		4					201	470
<b>Q3</b>	3	4	4						166	165
<b>Q4</b>	4	4		4					166	197.5
<b>Q5</b>	5	4	4						168	328.5
<b>Q6</b>	6	4			4				101	109
<b>Q7</b>	7	4			4				135	231.5

CO Number	Total marks allotted corresponding to specific CO	Total marks secured to specific CO
CO1	1537	666
CO2	1845	951.5
CO3	1063	389.5
CO4	0	0
CO5	0	0
CO6	0	0

**Table 4: Calculation of Class average in Cumulative Internal Examination (CIE)**

CALCULATION OF CLASS AVERAGE (%) in CUMULATIVE INTERNAL EXAMINATION							
Programme	Branch	Batch	Academic Year	Semester	Course Code	Course Name	
<b>B Tech</b>	<b>Mechanical Engg.</b>	<b>2018-2022</b>	<b>2019-2020</b>	<b>3rd</b>	<b>ME2029</b>	<b>Mechanics of Solids</b>	
Course Outcomes	Continuous Evaluation		Mid Semester Examination		Cumulative Internal Examination		
	Total marks allotted corresponding to each CO	Total marks secured corresponding to each CO	Total marks allotted corresponding to each CO	Total marks secured corresponding to each CO	Total marks allotted corresponding to each CO	Total marks secured corresponding to each CO	Class Average
CO1	970	781	1537	666	2507	1447	<b>57.72</b>
CO2	975	771	1845	951.5	2820	1722.5	<b>61.08</b>
CO3	960	760	1063	389.5	2023	1149.5	<b>56.82</b>
CO4	960	757	0	0	960	757	<b>78.85</b>
CO5	960	758	0	0	960	758	<b>78.96</b>
CO6	955	749.5	0	0	955	749.5	<b>78.48</b>

**Table 5: Calculation of Class average in Semester End Examination (SEE)**

**CALCULATION OF CLASS AVERAGE IN SEMESTER END EXAM (SEE)**

Programme	Branch	Batch	Academic Year	Semester	Course Code	Course Name
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B Tech	Mechanical Engg.	2018-2022	2019-2020		3rd		ME2029		Mechanics of Solids	
			CO1	CO2	CO3	CO4	CO5	CO6	Students appearing in the examination/attempting the question	Added Marks of all students for the question
Question No	Sub Question No	Full marks								
Q1	1a	1				1			191	132
	1b	1				1			172	26.5
	1c	1			1				169	71
	1d	1					1		171	102
	1e	1		1					136	37.5
	1f	1	1						139	82.5
	1g	1		1					174	102
	1h	1						1	166	56
	1i	1			1				157	104
	1j	1						1	147	64.5
Q2	2a	2	2						165	164
	2b	6		6					178	686.5
Q3	3a	2		2					156	178
	3b	6			6				120	173
Q4	4a	4					4		193	498.5
	4b	4						4	174	399.5
Q5	5a	2			2				151	70
	5b	6				6			154	359.5
Q6	6a	4					4		119	141
	6b	4				4			129	189
Q7	7a	2		2					103	89
	7b	6			6				78	148.5
Q8	8a	2				2			121	53.5
	8b	6				6			187	435.5

CO Number	Total marks allotted corresponding to specific CO	Total marks secured to specific CO	Class Average (%)
CO1	469	246.5	52.56
CO2	1896	1093	57.65
CO3	1816	566.5	31.19
CO4	3167	1196	37.76
CO5	1419	741.5	52.26
CO6	1009	520	51.54

**Table 6. Final CO Attainment**

Final CO Attainment Calculation					
Programme	Branch	Batch	Academic Year		Semester
<b>B Tech</b>	<b>Mechanical Engg.</b>	<b>2018-2022</b>	<b>2019-2020</b>		<b>3rd</b>
Course Code	<b>ME2029</b>	Course Name	<b>Mechanics of Solids</b>		
Thresholds Levels for CO Attainment					
Level	<b>1</b>	20	$\geq$ Class Average $<$		50
Level	<b>2</b>	50	$\geq$ Class Average $<$		75
Level	<b>3</b>	75	$\geq$ Class Average $<$		100
CO Attainment					
Course Outcomes	Cumulative Internal Examination (CIE)		Semester End Examination (SEE)		Total CO Attainment
	Weightage	50%	Weightage	50%	
	Class Average	CO Attainment Level	Class Average	CO Attainment Level	
CO1	57.72	2	52.56	2	<b>2</b>
CO2	61.08	2	57.65	2	<b>2</b>
CO3	56.82	2	31.19	1	<b>1.5</b>
CO4	78.85	3	37.76	1	<b>2</b>
CO5	78.96	3	52.26	2	<b>2.5</b>
CO6	78.48	3	51.54	2	<b>2.5</b>

**Table 7. Observation of CO Attainment**

Course Outcomes	Final CO Attainment	Target CO	Attainment (Yes/No)
CO1	<b>2</b>	<b>2</b>	<b>Yes</b>
CO2	<b>2</b>	<b>2</b>	<b>Yes</b>
CO3	<b>1.5</b>	<b>2</b>	<b>No</b>
CO4	<b>2</b>	<b>2</b>	<b>Yes</b>
CO5	<b>2.5</b>	<b>2</b>	<b>Yes</b>
CO6	<b>2.5</b>	<b>2</b>	<b>Yes</b>

**3.2.2. Record the attainment of Course Outcomes of all courses with respect to set attainment levels (65)**

**The target or the expected attainment for the course:**

- o Achieve attainment level of 2 to 2.5 for all course outcomes defined for the course.

The attainment of course outcome in Cumulative Internal Examination [CIE] and Semester End Examination [SEE] is given below

<b>CO Attainment in Cumulative Internal Examination [CIE]</b>								
<b>Sl. No.</b>	<b>NBA Course Code</b>	<b>Course Name</b>	<b>CO1</b>	<b>CO2</b>	<b>CO3</b>	<b>CO4</b>	<b>CO5</b>	<b>CO6</b>
1	C101	Mathematics-I	2	2	3	3	3	2
2	C102	Physics	3	2	2	3	3	2
3	C103	Basic Electrical Engineering	2	2	2	3	2	2
4	C104	Engineering Mechanics	2	3	2	3	2	3
5	C105	Physics Lab	2	2	2	3	3	2
6	C106	Basic Electrical Engineering Lab	2	3	3	2	3	3
7	C107	Basic Manufacturing Systems	3	3	3	3	3	3
8	C108	Environmental Science	3	3	2	3	3	3
9	C109	Mathematics-II	3	2	3	2	2	3
10	C110	Chemistry	2	3	2	2	2	2
11	C111	Professional Communication	3	3	3	3	3	2
12	C112	Biology	2	3	2	3	2	3
13	C113	Chemistry Lab	3	2	2	2	2	3
14	C114	Computer Programming	2	3	2	3	2	3
15	C115	Language Lab	3	3	3	3	3	2
16	C116	Engineering Graphics	3	3	2	3	2	3
17	C117	Yoga and Human Consciousness	3	3	2	3	3	3
18	C201	Mathematics –III	2	3	2	2	2	2
19	C202	Fluid Mechanics and Hydraulic Machines	3	2	3	2	3	3
20	C203	Materials Science and Engineering	3	2	3	3	2	3
21	C204	Mechanics of Solids	2	2	2	3	3	3
22	C205	Engineering Thermodynamics	3	2	2	3	2	3
23	C206	Principles of Electronics Engineering	2	3	2	3	2	3
24	C207	Electronics Engineering Lab	3	2	2	3	3	2

25	C208	Material Testing Lab.	3	2	3	2	3	3
26	C209	Fluid Mechanics and Hydraulic Machines Lab	3	3	2	3	3	3
27	C210	Machine Drawing and Computer Aided Design	3	2	3	3	3	2
28	C211	Basic Manufacturing Processes	3	2	3	2	3	3
29	C212	Kinematics and Dynamics of Machines	3	2	3	3	3	3
30	C213	Internal Combustion Engines and Gas Turbines	2	3	3	2	3	3
31	C214	Industrial Engineering and Operations Research	3	2	3	3	3	3
32	C215	Engineering Metrology	3	2	3	3	3	2
33	C217	Machine Kinematics and Dynamics Lab.	3	3	3	3	3	3
34	C218	Metrology and Instrumentation Lab.	3	3	3	3	2	3
35	C219	Manufacturing Practices	3	3	3	3	3	3
36	C220	Business Communication	3	3	3	3	3	3
37	C301	Manufacturing Processes and Automation	2	2	3	2	2	3
38	C302	Heat Transfer	3	2	2	3	2	3
39	C303	Design of Machine Elements-I	2	3	3	2	3	3
40	C307	Computational Techniques Lab.	3	3	2	3	3	3
41	C308	Heat Transfer Lab.	2	3	3	2	2	3
42	C309	Advanced Manufacturing Processes Lab.	2	3	2	3	3	3
43	C310	Machine Design	2	3	2	3	3	3
44	C311	Refrigeration and Air Conditioning	2	3	2	3	2	3
45	C312	Inferential Statistics	2	2	3	3	2	3
46	C313	Metal Cutting and Tool Design	3	3	2	3	3	2
47	C314	Design of Machine Elements-II	2	3	3	2	3	3
48	C318	ICE and RAC Lab.	3	3	3	2	3	3
49	C319	Mechanical Engineering Lab.	2	2	3	2	3	3
50	C320	Computer Aided Design and Analysis	3	2	3	3	3	3
51	C401	Professional Practice, Law & Ethics	3	3	3	3	3	3

CO Attainment in Semester End Examination [SEE]								
Sl. No.	NBA Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6



1	C101	Mathematics-I	2	3	3	2	2	2
2	C102	Physics	3	2	3	2	3	2
3	C103	Basic Electrical Engineering	2	2	3	2	3	2
4	C104	Engineering Mechanics	2	2	2	2	3	3
5	C105	Physics Lab	2	3	2	2	3	2
6	C106	Basic Electrical Engineering Lab	2	2	2	3	2	2
7	C107	Basic Manufacturing Systems	3	2	3	3	3	2
8	C108	Environmental Science	3	2	2	3	2	3
9	C109	Mathematics-II	2	3	2	2	2	2
10	C110	Chemistry	2	2	3	2	2	2
11	C111	Professional Communication	3	3	3	2	3	2
12	C112	Biology	2	3	2	3	2	3
13	C113	Chemistry Lab	2	3	2	2	2	2
14	C114	Computer Programming	2	2	2	3	2	2
15	C115	Language Lab	3	3	2	2	2	3
16	C116	Engineering Graphics	3	3	3	2	2	3
17	C117	Yoga and Human Consciousness	3	3	3	2	3	3
18	C201	Mathematics –III	2	2	2	1	2	2
19	C202	Fluid Mechanics and Hydraulic Machines	3	2	2	3	2	2
20	C203	Materials Science and Engineering	2	2	1	2	3	2
21	C204	Mechanics of Solids	2	2	1	1	2	2
22	C205	Engineering Thermodynamics	2	3	2	2	3	2
23	C206	Principles of Electronics Engineering	2	2	3	2	1	2
24	C207	Electronics Engineering Lab	2	2	3	2	3	2
25	C208	Material Testing Lab.	3	2	2	3	2	2
26	C209	Fluid Mechanics and Hydraulic Machines Lab	2	3	3	3	3	2
27	C210	Machine Drawing and Computer Aided Design	3	3	3	2	2	3
28	C211	Basic Manufacturing Processes	2	2	3	3	2	2
29	C212	Kinematics and Dynamics of Machines	2	3	2	1	2	2
30	C213	Internal Combustion Engines and Gas Turbines	2	2	3	2	2	1
31	C214	Industrial Engineering and Operations Research	2	3	3	2	2	3
32	C215	Engineering Metrology	2	2	3	2	2	2
33	C217	Machine Kinematics and Dynamics Lab.	2	3	3	2	3	2
34	C218	Metrology and Instrumentation Lab.	2	3	2	3	3	2
35	C219	Manufacturing Practices	3	2	3	2	3	3
36	C220	Business Communication	2	3	2	3	2	2
37	C301	Manufacturing Processes and Automation	2	2	3	2	3	2
38	C302	Heat Transfer	2	2	3	3	2	2
39	C303	Design of Machine Elements-I	2	2	2	2	3	2
40	C307	Computational Techniques Lab.	3	3	2	3	2	3

41	C308	Heat Transfer Lab.	3	2	2	2	3	2
42	C309	Advanced Manufacturing Processes Lab.	3	2	2	2	3	3
43	C310	Machine Design	2	2	3	2	2	2
44	C311	Refrigeration and Air Conditioning	2	2	2	3	1	2
45	C312	Inferential Statistics	2	2	2	2	2	1
46	C313	Metal Cutting and Tool Design	3	3	2	2	3	3
47	C314	Design of Machine Elements-II	2	2	3	2	2	3
48	C318	ICE and RAC Lab.	3	3	2	3	2	2
49	C319	Mechanical Engineering Lab.	3	3	3	3	2	2
50	C320	Computer Aided Design and Analysis	3	2	2	3	2	3
51	C401	Professional Practice, Law & Ethics	3	3	2	2	3	2

Final CO attainment of all core courses

Sl. No.	Course Name	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Target	Remarks
1	C101	Mathematics-I	2	2.5	3	2.5	2.5	2	2	All CO Attained
2	C102	Physics	3	2	2.5	2.5	3	2	2	All CO Attained
3	C103	Basic Electrical Engineering	2	2	2.5	2.5	2.5	2	2	All CO Attained
4	C104	Engineering Mechanics	2	2.5	2	2.5	2.5	3	2	All CO Attained
5	C105	Physics Lab	2	2.4	2	2.6	3	2	2	All CO Attained
6	C106	Basic Electrical Engineering Lab	2	2.6	2.6	2.4	2.6	2.6	2	All CO Attained
7	C107	Basic Manufacturing Systems	3	2.8	3	3	3	2.8	2.5	All CO Attained
8	C108	Environmental Science	3	2.8	2	3	2.8	3	2	All CO Attained
9	C109	Mathematics-II	2.5	2.5	2.5	2	2	2.5	2.25	CO4, CO5 - Not Attained
10	C110	Chemistry	2	2.5	2.5	2	2	2	2	All CO Attained
11	C111	Professional Communication	3	3	3	2.5	3	2	2	All CO Attained
12	C112	Biology	2	3	2	3	2	3	2	All CO Attained
13	C113	Chemistry Lab	2.6	2.4	2	2	2	2.6	2	All CO Attained
14	C114	Computer Programming	2	2.6	2	3	2	2.6	2	All CO Attained
15	C115	Language Lab	3	3	2.8	2.8	2.8	2.2	2	All CO Attained
16	C116	Engineering Graphics	3	3	2.2	2.8	2	3	2.5	CO3, CO5 - Not Attained
17	C117	Yoga and Human Consciousness	3	3	2.2	2.8	3	3	2.5	CO3-Not Attained
18	C201	Mathematics –III	2	2.5	2	1.5	2	2	2	CO3-Not Attained
19	C202	Fluid Mechanics and Hydraulic Machines	3	2	2.5	2.5	2.5	2.5	2.25	CO2-Not Attained

20	C203	Materials Science and Engineering	2.5	2	2	2.5	2.5	2.5	2.25	CO2, CO3 - Not Attained
21	C204	Mechanics of Solids	2	2	1.5	2	2.5	2.5	2	CO4-Not Attained
22	C205	Engineering Thermodynamics	2.5	2.5	2	2.5	2.5	2.5	2.25	CO3- Not Attained
23	C206	Principles of Electronics Engineering	2	2.5	2.5	2.5	1.5	2.5	2	CO5- Not Attained
24	C207	Electronics Engineering Lab	2.6	2	2.4	2.6	3	2	2.25	CO2, CO6 - Not Attained
25	C208	Material Testing Lab.	3	2	2.6	2.4	2.6	2.6	2.5	CO2, CO4 - Not Attained
26	C209	Fluid Mechanics and Hydraulic Machines Lab	2.6	3	2.4	3	3	2.6	2.5	CO3 - Not Attained
27	C210	Machine Drawing and Computer Aided Design	3	2.2	3	2.8	2.8	2.2	2.5	CO2, CO6 - Not Attained
28	C211	Basic Manufacturing Processes	2.5	2	3	2.5	2.5	2.5	2.25	CO2 - Not Attained
29	C212	Kinematics and Dynamics of Machines	2.5	2.5	2.5	2	2.5	2.5	2.5	CO4- Not Attained
30	C213	Internal Combustion Engines and Gas Turbines	2	2.5	3	2	2.5	2	2.25	CO1, CO4, CO6 - Not Attained
31	C214	Industrial Engineering and Operations Research	2.5	2.5	3	2.5	2.5	3	2.5	All CO Attained
32	C215	Engineering Metrology	2.5	2	3	2.5	2.5	2	2.25	CO2, CO6- Not Attained
33	C217	Machine Kinematics and Dynamics Lab.	2.6	3	3	2.6	3	2.6	2.5	CO3- Not Attained
34	C218	Metrology and Instrumentation Lab.	2.6	3	2.6	3	2.4	2.6	2.5	CO5 - Not Attained
35	C219	Manufacturing Practices	3	2.8	3	2.8	3	3	2.5	All CO Attained
36	C220	Business Communication	2.8	3	2.8	3	2.8	2.8	2.5	All CO Attained
37	C301	Manufacturing Processes and Automation	2	2	3	2	2.5	2.5	2.5	CO5- Not Attained
38	C302	Heat Transfer	2.5	2	2.5	3	2	2.5	2.25	CO1, CO4- Not Attained
39	C303	Design of Machine Elements-I	2	2.5	2.5	2	3	2.5	2.25	CO1, CO4 - Not Attained
40	C307	Computational Techniques Lab.	3	3	2	3	2.6	3	2.55	CO3- Not Attained
41	C308	Heat Transfer Lab.	2.4	2.6	2.6	2	2.4	2.6	2.5	CO1, CO4, CO5 - Not Attained
42	C309	Advanced Manufacturing Processes Lab.	2.4	2.6	2	2.6	3	3	2.5	CO1, CO3- Not Attained
43	C310	Machine Design	2	2.8	2.2	2.8	2.8	2.8	2.5	CO1, CO3- Not Attained
44	C311	Refrigeration and Air Conditioning	2	2.5	2	3	1.5	2.5	2.25	CO1, CO3, CO5 - Not Attained

45	C312	Inferential Statistics	2	2	2.5	2.5	2	2	2	All CO Attained
46	C313	Metal Cutting and Tool Design	3	3	2	2.5	3	2.5	2.25	CO3 - Not Attained
47	C314	Design of Machine Elements-II	2	2.5	3	2	2.5	3	2.25	CO1, CO4 - Not Attained
48	C318	ICE and RAC Lab.	3	3	2.6	2.4	2.6	2.6	2.25	All CO Attained
49	C319	Mechanical Engineering Lab.	2.4	2.4	3	2.4	2.6	2.6	2.25	All CO Attained
50	C320	Computer Aided Design and Analysis	3	2	2.8	3	2.8	3	2.25	All CO Attained
51	C321	Minor Project	3	3	3	3	3	3	2.5	All CO Attained
52	C401	Professional Practice, Law & Ethics	3	3	2.5	2.5	3	2.5	2.25	All CO Attained
53	C403	Project-I / Internship	3	3	3	3	3	3	2.25	All CO Attained
54	C404	Practical Training	3	3	3	3	3	3	2.25	All CO Attained
55	C407	Project	3	3	3	3	3	3	2.25	All CO Attained

### 3.3. Attainment of Program Outcomes and Program Specific Outcomes (75)

#### 3.3.1. Describe assessment tools and processes used for measuring the attainment of each Program Outcome and Program Specific Outcomes (10)

##### B. Attainment of Program Outcomes

The Program outcome assessment tools are categorized into direct and indirect method of outcome assessment. The program regularly uses a documented processes for assessing and evaluating the extent to which the student outcomes are being attained.

Direct Programme outcome attainment is evaluated through the course outcome attainment or specified rubrics. Indirect PO attainment is evaluated through based on questionnaire survey of various stake holders such as Graduates, Alumni and Employers. The details of frequency of collection and responsible authorities are given below.

Type of Assessment	Weightage	Assessment tools	Assessment Criteria	Data Collection frequency	Responsible entity
Direct Assessment	80	Internal examination and External Examination	CO attainment	Once every semester	Course coordinator & School quality Cell
Indirect Assessment	20	Graduate survey, Alumni Survey and Employer Survey		Once in a year	Quality Cell & Programme Assessment Committee

The process of direct and indirect PO attainment is described below.

### B.1. Direct assessment and evaluation of Program Outcomes and Program Specific Outcomes

The direct PO<sub>x</sub>-attainment level = weighted average of course outcome attainment levels for course outcomes spanning all possible courses linked to PO<sub>x</sub> according to Program and course articulation matrix.

x-represents the PO/PSO number.

The formula for calculating the PO attainment considering the relevant courses and their outcomes is given below:

$$PO_x = \frac{\sum_{i=1}^N CO_i M_i}{\sum_{i=1}^N M_i}$$

'i' represents the i<sup>th</sup> CO in the PO-CO articulation matrix. CO<sub>i</sub> is the CO Attainment level for that CO and M<sub>i</sub> represents the mapping level (1, 2, or 3) between PO<sub>x</sub> and CO<sub>i</sub>.

The direct PO attainment is estimated by the School Quality Assurance Cell and intimated to the Program Assessment committee after the declaration of even semester results for an academic year.

#### EXAMPLE: DIRECT PO ATTAINMENT OF MECHANICS OF SOLIDS

Course Outcome and Program Outcome mapping of Mechanics of Solids

CO Number	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	3	2			3						
CO2	2	3	3	1	2							
CO3	2	3	3	3	2							1
CO4	3	3	3	3	2							1
CO5	3	3	2	2	1							1
CO6	3	3	3	3	2		1					1

The calculation of Programme Outcome Attainment of Mechanics of Solids is given below.

Programme	Branch		Batch			Academic Year			Semester		Course Code		Course Name	
<b>BTech</b>	<b>Mechanical Engg.</b>		<b>2018-2022</b>			<b>2019-2020</b>			<b>3rd</b>		<b>ME2029</b>		<b>Mechanics of Solids</b>	
CO Number	CO Attainment	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	
CO1	2	1	3	2			3							
CO2	2	2	3	3	1	2								
CO3	1.5	2	3	3	3	2							1	
CO4	2.5	3	3	3	3	2							1	
CO5	2.5	3	3	2	2	1							1	

CO6	2	3	3	3	3	2		1					1
Sum of Product		30	37.5	33	25	18.5	6	2	0	0	0	0	8.5
Sum of Mappings		14	18	16	12	9	3	1	0	0	0	0	4
<b>Attainment</b>		<b>2.14</b>	<b>2.08</b>	<b>2.06</b>	<b>2.08</b>	<b>2.06</b>	<b>2.00</b>	<b>2.00</b>	-	-	-	-	<b>2.13</b>

\*Attainment of PO1=  $(1 \times 2 + 2 \times 2 + 2 \times 1.5 + 3 \times 2.5 + 3 \times 2.5 + 3 \times 2) / (1 + 2 + 2 + 3 + 3 + 3) = 2.14$

## B.2 Indirect assessment and evaluation of Program Outcomes and Program Specific Outcomes

The indirect assessment of Program Outcomes and Program Specific Outcomes are obtained by the following survey tools:

Survey tools	Activity Owners	Compilation
Graduate Survey	School Quality Assurance Cell	Yearly once
Alumni Survey	School Alumni Cell	Yearly once
Employer Survey	Training and Placement Cell	Yearly once

The graduate survey form, alumni survey form and employer survey form are given in Appendices S1, S2 and S3 respectively. The draft survey format is developed by Internal quality assessment cell of university and shared with quality cell of each school. Quality cell and Programme assessment committee finalizes the survey form. The form is shared to the graduates/alumni/employer through the google form.

The surveys reports are passed on to the School QA cell for further computation as described below:

### B.2.1 Graduate Survey

- Section B of the graduate survey (appendix-S1) has a set of questions and statements which needs to be answered through ratings on a scale of 1 to 5 where '1' indicates poor and '5' indicates excellent rating. For each question in section B, the attainment level is calculated as given below:
  - o Attainment level corresponding to each statement= 3 (high) if more than/equal to 80% of students/graduates/alumni rate it as 3 or higher on a 5 point scale.
  - o Attainment level corresponding to each statement= 2 (medium) if more than/equal to 60% and less than 80% of students/graduates/alumni rate it as 3 or higher on a 5 point scale.
  - o Attainment level corresponding to each statement= 1 (low) if more than/equal to 40% and less than 60% of students/graduates/alumni rate it as 3 or higher on a 5 point scale.
  - o Attainment level corresponding to each statement= 0 (no attainment) if less than 40% of students/graduates/alumni rate it as 3 or higher on a 5 point scale.

- Section C of the graduate survey refers to students' involvement in different extracurricular activities/affairs/events in technical/domain oriented and/or social affairs/outreach activities. Two lists are maintained 'A' and 'B'.
  - List A mentions different categories of involvement in extracurricular activities/affairs/events in technical/domain:
    - Technical societies at KIIT-DU
    - KIIT Technology Business Incubator Cell
    - Coordination and participation in Technical events/fests/contests
    - Member of professional bodies/student chapters/student societies
    - Live and interdisciplinary projects
    - Research projects with faculty members
    - Associated with industry engagement cell
    - International student exchange program
  - List B mentions different categories of involvement in extracurricular activities/affairs/events in social and outreach activities:
    - Voluntary service/Social Outreach Activities/Community Services, etc.
    - Environmental and Social Awareness Programs
  - Attainment level corresponding to List A:
    - Attainment Level =3 (high) if more than 80% of the students were engaged/involved in any of the categories in list A.
    - Attainment Level =2 (medium) if more than 60% of the students were engaged/involved in any of the categories in list A.
    - Attainment Level =1 (low) if more than 40% of the students were engaged/involved in any of the categories in list A.
  - Attainment level corresponding to List B:
    - Attainment Level =3 (high) if more than 80% of the students were engaged/involved in any of the categories in list b.
    - Attainment Level =2 (medium) if more than 60% of the students were engaged/involved in any of the categories in list B.
    - Attainment Level =1 (low) if more than 40% of the students were engaged/involved in any of the categories in list B.

### **B.2.2 Alumni Survey**

- Section B of the alumni survey (appendix-S2) has a set of questions and statements which needs to be answered through ratings on a scale of 5 where ‘1’ indicates poor and ‘5’ indicates excellent rating. For each question in section B, the attainment level is calculated as given below:
  - o Attainment level corresponding to each statement= 3 (high) if more than/equal to 80% of students/graduates/alumni rate it as 3 or higher on a 5 point scale.
  - o Attainment level corresponding to each statement= 2 (medium) if more than/equal to 60% and less than 80% of students/graduates/alumni rate it as 3 or higher on a 5 point scale.
  - o Attainment level corresponding to each statement= 1 (low) if more than/equal to 40% and less than 60% of students/graduates/alumni rate it as 3 or higher on a 5 point scale.
  - o Attainment level corresponding to each statement= 0 (no attainment) if less than 40% of students/graduates/alumni rate it as 3 or higher on a 5 point scale.

### B.2.3 Employer Survey

The employer survey contains a set of rubrics (as depicted in Appendix S3) which are to be marked on a scale of 5 for the batch of students interviewed for placements by different recruiters. Attainment level is measured against each rubric based on the following procedure:

- Attainment Level =3 (high) if more than 80% of the respondents mark them as ‘good’ (rating 3) or above.
- Attainment Level =2 (medium) if more than 60% of the respondents mark them as ‘good’ (rating 3) or above.
- Attainment Level =1 (low) if more than 40% of the respondents mark them as ‘good’ (rating 3) or above.

The correlation of the PO/PSO statements with the survey reports is given below:

Programme Outcomes	Graduate Survey (Section B)	Graduate Survey (Section C)	Alumni survey	Employer Survey
PO1	1	1		1
PO2	1	1	1	1
PO3	1	1	1	1
PO4	1	1		
PO5	1	1	1	1
PO6		1	1	1
PO7		1	1	1
PO8		1	1	1
PO9		1	1	1
PO10	1	1	1	1



PO11	1	1	1	
PO12	1	1	1	
PSO1	1			
PSO2	1			
PSO3	1			

The different Program Outcomes indirect assessment is done by taking the average of the attainment-levels of the following statements from each survey:

POs	Graduate Survey Attainment level corresponding to question number (Section B)	Graduate Survey Attainment level corresponding to List (Section C)	Alumni survey Attainment level corresponding to question number	Employer Survey Attainment level corresponding to parameter/rubric
PO1	1,2	List A	1,2	1
PO2	1,2,3,4	List A	1,2,3	1
PO3	5,6	List A	4,7	4
PO4	3,4,6	List A	4,5	
PO5	7	List A	6	1
PO6	6,11	List B	7	5
PO7	11	List B	7,8,9	5
PO8	12	List A, B	10	5
PO9	8,9,10	List A, B	11,13,14	6,7
PO10	13,14	List A, B	12	2
PO11	15	List A, B	15	
PO12	16	List A, B	16	1,2,6,7,8
PSO1	1- 16		1- 16	1,2
PSO2	1- 16		1- 16	1,2
PSO3	1- 16		1- 16	1,2

### Overall attainment of Program Outcomes

The final PO/PSO attainment is evaluated considering 80% weightage of direct PO attainment and 20% weightage of PSO attainment.

Final PO/PSO attainment=0.8\*Direct Assessment (attainment level) + 0.2\*Indirect Assessment (attainment level)

### Target Attainment Level

The target attainment level for 2022 graduating batch is 2.5.

## **Appendix S1** **GRADUATE SURVEY**

Dear Graduand,

Greetings from Kalinga Institute of Industrial Technology, Deemed to be University!

Congratulations on completing your program of study at our University!

We request you to participate in the graduate survey and share your feedback with us. Your thoughtful responses will improve the educational experience for future students and guide us as we work to improve our services.

Thank you for helping make KIIT, Deemed to be University the best that it can be for future generations!

Sincerely,

Internal Quality Assurance Cell

Kalinga Institute of Industrial Technology, Deemed to be University.

Bhubaneswar-751024

India

## **SECTION A:**

### **Personal Information**

- Full name of the student:
- Email ID:
- Roll number:
- B. Tech Program of study:
- Choose the option applicable in your case at the moment:
  - Received job offer/s
  - Appearing for job interviews
  - Preparing for higher studies
  - Planning/preparing for entrepreneurship
- Kindly provide details with respect to the above (if you are placed ,provide your company details and your designation; if you are planning for higher studies, indicate the type of program and the institute if you have received admission letter; if you are planning for entrepreneurship, kindly provide details in terms of the name of the business unit, its brief profile, weblink,etc):

## **SECTION B:**

**Provide your response to the questions of this section as ratings on a scale of 1-5 where 1 indicates poor and 5 indicates excellent rating**

1. How far are you proficient in mathematics, basic sciences and engineering sciences?
2. How strong do you feel are your concepts in core courses pertaining to your program of study?
3. How successfully are you able to perform experiments, record, analyze and interpret data?
4. How well can you perceive, analyze and solve complex problems in your domain of study?
5. How well are you able to design products, prototypes and systems satisfying given specifications pertaining to your program of study?
6. How well can you perceive the limitations, feasibility and impact of your engineering solutions or designs with respect to social, cultural, health, economical, legal, and multidisciplinary contexts?
7. How well are you familiar with research methodology, and modern engineering tools for performing complex experiments, project work and research activities?
8. How well have you been involved as a member in group /team activities in sessional courses, labs and projects?
9. How do you rate your ability as a team leader?
10. How confident do you feel in executing tasks as an individual?
11. How well can you understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development?
12. How committed are you to professional ethics and responsibilities and norms of the engineering practice?
13. How well are you able to make presentations, communicate your ideas in seminars, technical discussions and group activities?
14. How well can you make documentations and reports pertaining to technical data, findings, analysis and inferences?
15. How well do you consider are your project and associated financial management skills ?
16. How strongly do you feel that you will need to engage in higher studies, self-learning as well as lifelong learning?

## **SECTION C:**

### **Student Engagement in Extracurricular Activities**

- Choose the ones you were involved in, during your study at KIIT-DU:
  - Technical societies at KIIT-DU
  - KIIT Technology Business Incubator Cell
  - Coordination and participation in Technical events/fests/contests
  - Member of professional bodies/student chapters/student societies
  - Live and interdisciplinary projects
  - Research projects with faculty members
  - Associated with industry engagement cell
  - International student exchange program
  - Voluntary service/Social Outreach Activities/Community Services, etc.
  - Environmental and Social Awareness Programs
- Provide specifics :

#### **SECTION D:**

##### **Review of Program Educational Objectives**

Program Educational Objectives (PEOs) as broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program's constituencies.

Weblink for PEO statements for B. Tech Programs offered by the School of Engineering:

- How far do you think your study in KIIT-DU has prepared you for attaining the Program Educational Objectives (corresponding to your program) in future: provide your response on a scale of 1-5:
- Would you like to suggest any changes in the statements?

#### **SECTION E:**

##### **Submission**

Suggestions (if any) for juniors with respect to academics and research:

## **Appendix S2**

### **ALUMNI SURVEY**

Dear Alumnus,

Greetings from Kalinga Institute of Industrial Technology (KIIT), Deemed to be University!

We hope that you and your family are fine amidst the pandemic.

The Institution is conducting an alumni survey and review of the program educational objectives for the B. Tech programs.

Program Educational Objectives (PEOs) are broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program's constituencies.

We request you to give your frank response in this survey. We also request you to reflect on the PEO statements and suggest changes you recommend in them.

We thank you for your time in participating in this review.

Thanking you,

Best Wishes,

Dr. S.S. Behura

Deputy Director (Student Services)

Kalinga Institute of Industrial Technology, Deemed to be University

Bhubaneswar, India.

#### **Section A: Review of Program Educational Objectives:**

Program Educational Objectives (PEOs) are broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program's constituencies.

<<Weblinks for PEOs>>

- Full name of the alumnus:
- Email ID:
- Indicate your discipline of study at KIIT-DU:
- Year of graduation:
- Roll number at KIIT-DU:
- Indicate your level of agreement with the PEO statements (on a scale of 1-5):
- Provide your suggestions and recommendations (if any) with respect to the PEO statements for your discipline of study at KIIT-DU:
- Kindly choose the option applicable in your case:
  - I am a working professional.
  - I am pursuing higher studies.
  - I am an entrepreneur.
- Kindly provide details about your employer (company and your designation, location) or about your higher studies (Institute and Program) or about your entrepreneurship (name of business unit, website, year of establishment):

**Section B: Survey: Kindly choose the score best acceptable in your case (on a scale of 1-5):**

1. How proficient are you in mathematics and basic sciences?
2. How advanced are your engineering and technical concepts and knowledge?
3. How well are you able to integrate your concepts and knowledge for solving complex problems or design systems/products?
4. How well can you design and perform experiments leading to new study and innovations?
5. How proficient are you in analyzing facts and figures and drawing relevant conclusions in your profession?
6. How proficient are you in using modern engineering and IT tools and resources?
7. How well can you perceive the limitations and impact of engineering solutions or professional practice in the context of societal, legal, health, safety, economical and environmental contexts?
8. How well can you predict the upcoming changes and challenges in your profession based on current scenarios nationally and globally?
9. How strongly do you feel the need for sustainable development in different contexts?
10. How well can you apply and realize the need and importance of engineering professionalism, responsibility and ethical standards?
11. How comfortable are you working in international/Global Environment?

12. How well can you communicate your ideas, findings and inferences to a range of audiences orally and through written form?
13. How strongly well do you perform as a member of diverse teams?
14. How capable are you in building teams and leading them?
15. How well can you manage projects? (Setting goals, building teams, team management, planning, project execution, etc.)
16. How strongly do you believe in the need and importance of higher studies, self and life-long learning?

**Section C: Suggestions**

Kindly provide suggestions (if any) on additional courses, laboratories, training modules, centers of excellence, project thrust areas, employability skills required for emerging recruiting sectors for the concerned discipline of study, which you think will lead to better attainment of the Program Educational Objectives:

**Appendix S3**

**EMPLOYER SURVEY**

Dear Employer,

The evaluation by the employers is regarded as most valuable as the industries / organizations are the ultimate standard.

We request you to put a tick (√) mark in the following table based on your observations / experience.

**Name of the Organization**.....  
**Name of the Representative**.....  
**Designation**.....**Contact No.**.....  
**Email ID**.....**Website**.....

RATING ⇨		Excellent [5]	Very Good [4]	Good [3]	Average [2]	Below Average [1]
SUBJECT ↓						
<b>FEEDBACK ON: STUDENTS/ GRADUATES (tick the relevant one)</b>						
1.	Technical Knowledge / Skills					
2.	Communication skills					
3.	Personal interest & Involvement					
4.	Innovativeness & Creativity					
5.	Responsible & Reliable					
6.	Effective team member / leader					
7.	Effectively address work place problems					
8.	Overall contribution to meet organizational goal					
<b>FEEDBACK ON INSTITUTION</b>						
1.	Course curriculum					
2.	Training of the students					
3.	Attitude of University Employees					
4.	Hospitality and logistic support					
<b>Suggestion (if any) for improvement:</b>						



**3.3.2. Provide results of evaluation of each PO & PSO (65)**

<b>NBA Course Code</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>	<b>PO11</b>	<b>PO12</b>
C101	2.42	2.38	2.42	2.47	2.50	2.38	2.50	-	2.00	-	-	2.42
C102	2.50	2.63	2.50	2.50	-	-	-	-	-	-	-	2.50
C103	2.29	2.29	2.23	2.27	-	2.22	2.20	-	-	-	-	2.29
C104	2.42	2.42	2.42	2.42	-	-	-	-	-	-	-	-
C105	2.33	2.24	2.60	-	-	-	-	-	-	-	-	-
C106	2.46	2.55	2.45	2.53	2.42	2.31	2.33	2.53	2.30	2.47	-	2.48
C107	2.93	2.95	2.94	2.93	2.93	2.93	2.93	2.93	2.94	2.93	2.96	2.93
C108	2.72	2.72	2.72	2.80	2.00	2.72	2.72	2.00	2.00	2.00	2.65	2.72
C109	2.33	2.33	2.33	2.33	-	-	-	-	-	-	-	2.34
C110	2.16	2.20	2.17	2.11	-	2.38	2.50	-	2.17	-	-	2.17
C111	-	-	-	-	-	-	3.00	2.56	-	2.75	2.67	2.75
C112	2.53	-	2.50	-	-	2.63	2.50	-	-	-	-	2.50
C113	2.20	2.23	-	2.21	2.24	-	2.27	-	-	-	-	-
C114	2.40	2.40	2.40	2.35	2.44	-	-	2.40	2.30	2.30	-	2.40
C115	-	-	-	-	-	2.70	-	2.90	-	2.73	-	2.77
C116	2.58	2.49	-	-	2.58	2.55	-	-	-	-	2.49	2.60
C117	-	-	-	-	-	2.83	-	2.83	-	-	-	2.83
C201	2.00	2.00	2.11	2.00	-	-	-	-	2.25	-	-	2.00
C202	2.50	2.54	2.50	2.50	2.5	2.5	2.50	2.50	2.50	2.50	2.38	2.60
C203	2.33	2.32	2.33	2.33	2.35	2.42	2.32	2.00	2.42	2.21	2.33	2.29
C204	2.14	2.08	2.06	2.08	2.06	2.00	2.50	-	-	-	-	2.13
C205	2.42	2.38	2.39	2.42	2.39	2.43	2.41	2.50	2.40	2.44	2.42	2.44
C206	2.25	2.27	2.25	2.25	-	2.25	-	-	2.23	2.25	-	2.23
C207	2.40	2.40	2.43	2.46	-	2.41	-	-	2.48	2.43	-	2.48
C208	2.51	2.53	2.53	2.53	2.63	2.45	2.49	2.44	2.57	2.43	2.53	2.55
C209	2.71	2.73	2.80	2.78	2.87	2.89	2.80	2.8	2.84	2.74	2.77	2.75
C210	2.67	2.57	2.68	2.70	2.67	2.67	-	-	2.67	2.64	2.73	2.67
C211	2.50	2.40	2.53	2.44	2.53	2.50	2.50	-	2.50	-	2.50	2.50
C212	2.43	2.42	2.40	2.45	2.40	2.40	2.44	2.50	-	2.44	2.50	2.42
C213	2.50	2.50	2.45	2.46	2.50	2.33	2.20	2.41	2.50	2.46	2.00	2.38
C214	2.67	2.64	2.67	2.71	2.68	2.67	2.69	2.70	2.75	2.71	2.68	2.64
C215	2.54	2.54	2.50	2.54	2.44	2.57	3.00	2.33	-	2.38	2.75	2.50
C217	2.82	2.80	2.80	2.85	2.80	2.80	2.80	-	-	2.80	-	2.80
C218	2.71	2.73	2.68	2.71	2.66	2.69	2.60	2.80	-	2.80	2.80	2.71
C219	2.93	2.90	2.94	2.93	2.97	2.93	2.93	2.93	2.94	2.93	2.93	2.93
C220	-	-	-	-	-	-	2.87	-	2.85	2.86	2.87	2.87

C301	2.32	2.43	2.40	2.38	2.39	2.35	2.33	2.50	2.42	2.40	2.33	2.40
C302	2.45	2.50	2.50	2.50	2.50	-	-	-	2.42	2.42	2.75	2.50
C303	2.50	2.42	2.35	2.36	2.36	2.42	2.50	2.33	2.41	2.36	2.36	2.33
C307	2.62	2.68	2.60	2.74	2.50	3.00	-	-	2.80	2.00	2.77	2.83
C308	2.44	2.40	2.40	2.42	2.60	-	-	-	2.43	2.43	2.30	2.40
C309	2.53	2.63	2.63	2.63	2.61	2.61	2.53	2.63	2.60	2.63	2.67	2.63
C310	2.60	2.49	2.63	2.56	-	-	-	-	2.07	2.51	2.40	2.45
C311	2.23	2.25	2.32	2.39	2.41	2.38	2.35	2.22	2.25	2.40	2.33	2.31
C312	2.17	2.17	2.22	2.20	-	-	-	-	2.25	-	-	2.19
C313	2.67	2.67	2.62	2.66	2.55	2.64	2.65	2.63	2.69	2.66	2.69	2.65
C314	2.54	2.46	2.50	2.50	2.55	2.58	2.50	2.39	2.50	2.54	2.43	2.39
C318	2.85	2.68	2.68	2.63	2.53	2.60	-	2.70	2.64	2.64	2.60	2.60
C319	2.53	2.56	2.56	2.60	2.60	-	-	-	2.57	2.57	2.50	2.55
C320	2.74	2.66	2.72	2.63	-	2.70	-	2.87	2.80	2.72	2.73	2.76
C321	3.00	3.00	3.00	3.00	3.00	-	-	-	-	3.00	3.00	3.00
C401	-	-	2.75	-	-	2.75	2.71	2.75	-	-	2.75	2.75
C403	3.00	3.00	3.00	3.00	3.00	-	-	-	-	3.00	3.00	3.00
C404	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C407	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

#### PO Attainment Indirect

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Graduate Survey	3	3	3	3	3	3	3	3	3	3	3	3
Employer Survey	2	2	2	PO4	2	2	2	2	2.5	3	PO11	2.6
Alumni Survey	3	3	3	3	3	3	3	3	3	3	3	3

#### PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Indirect Attainment	2.67	2.67	2.67	3	2.67	2.67	2.67	2.67	2.83	3	3	2.87
Direct Attainment	2.53	2.52	2.54	2.54	2.57	2.58	2.60	2.59	2.51	2.58	2.63	2.56

#### PSO Attainment

Course	PSO1	PSO2	PSO3
C101	2.40	2.50	-
C102	2.50	2.50	-
C103	2.21	2.21	-
C104	-	2.38	2.42
C105	2.40	2.33	-
C106	2.49	2.40	-

C107	2.93	2.91	2.93
C108	-	-	-
C109	2.30	2.38	-
C110	2.25	2.13	-
C111	-	-	-
C112	-	2.50	-
C113	2.40	-	-
C114	2.38	2.37	2.40
C115	-	2.90	2.87
C116	2.67	2.67	2.67
C117	-	-	-
C201	1.90	2.00	-
C202	2.50	2.55	2.50
C203	2.27	2.31	2.32
C204	2.11	2.07	2.11
C205	2.40	2.41	2.38
C206	2.29	2.21	-
C207	2.37	2.46	-
C208	2.46	2.50	2.53
C209	2.82	2.92	2.87
C210	2.68	2.70	2.75
C211	-	2.53	2.38
C212	2.50	2.38	2.40
C213	2.33	2.33	2.33
C214	2.67	2.69	2.70
C215	2.46	2.38	2.50
C217	-	2.80	2.80
C218	2.67	2.73	2.73
C219	2.93	2.91	2.93
C220	2.90	-	-
C301	2.36	2.45	2.36
C302	2.50	2.43	2.43
C303	2.44	2.42	2.30
C307	2.80	2.53	2.62
C308	2.40	2.46	2.46
C309	2.67	2.58	2.67
C310	2.55	-	2.62
C311	2.27	2.25	2.35
C312	2.20	2.25	-
C313	2.67	2.65	2.65
C314	2.67	2.50	2.50
C318	2.70	2.70	2.70
C319	2.55	2.57	2.57

C320	2.76	2.84	2.85
C321	3.00	3.00	3.00
C401	2.75	2.75	2.75
C403	3.00	3.00	3.00
C404	3.00	3.00	3.00
C407	3.00	3.00	3.00

**PSO Attainment Indirect**

Survey	PSO1	PSO2	PSO3
Graduate Survey	3	3	3

**PSO Attainment Level**

Course	PSO1	PSO2	PSO3
Direct Attainment	2.54	2.54	2.61
Indirect Attainment	3	3	3

<b>CRITERION 4</b>	<b>Students' Performance</b>	<b>100</b>
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*Table 4.1*

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY (2022-23)	CAYm1 (2021-22)	CAYm2 (2020-21)	CAYm3 2019-2020	CAYm4 2018-2019	CAYm5 2017-2018	CAYm6 2016-2017
Sanctioned intake of the program (N)	180	180	180	180	180	180	180
Total number of students admitted in first year minus number of students migrated to other programs/institutions, plus no. of students migrated to this program (N1)	180	180	180	180	180	180	180
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	NA	18	18	25	24	36	36
Separate division students, if applicable (N3)	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Total number of students admitted in the Program (N1 + N2 + N3)	180	198	198	205	204	216	216

*Table 4.2*

Year of entry	N1 + N2 + N3 (As defined above)	Number of students who have successfully graduated without backlogs in any semester/year of study (Without Backlog means no compartment or failures in any semester/year of study)			
		I Year	II Year	III Year	IV Year
<b>CAY (2022-23)</b>	<b>180</b>				
<b>CAYm1</b>	<b>198</b>	180			
<b>CAYm2</b>	<b>198</b>	180	198		
<b>CAYm3</b>	<b>205</b>	180	205	205	
<b>CAYm4 (LYG)</b>	<b>204</b>	180	204	204	204
<b>CAYm5 (LYGm1)</b>	<b>216</b>	180	216	216	216
<b>CAYm6 (LYGm2) (2016-17)</b>	<b>216</b>	180	216	216	216

**Table 4.3**

Year of entry	N1 + N2 + N3 (As defined above)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]			
		I Year	II Year	III Year	IV Year
CAY	180				
CAYm1	198	180			
CAYm2	198	180	198		
CAYm3	205	180	205	205	
CAYm4 (LYG)	204	180	204	204	204
CAYm5 (LYGm1)	216	180	216	216	216
CAYm6 (LYGm2)	216	180	216	216	216

**4.1. Enrolment Ratio (20)**

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2022-23 (CAY)	180	180	100
2021-22 (CAYm1)	180	180	100
2020-21 (CAYm2)	180	180	100

Average [ (ER1 + ER2 + ER3) / 3 ] : 100.00

Assessment : 20.00

#### 4.2. Success Rate in the stipulated period of the program (20)

##### 4.2.1. Success rate without backlogs in any semester/year of study (15)

Item	Last Year of Graduate , LYG	Last Year of Graduate minus 1, LYGm1	Last Year of Graduate minus 2, LYGm2
Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable	216	216	216
Number of students who have graduated without backlogs in the stipulated period	216	216	216
Success Index (SI)	1.0	1.0	1.0
Average SI	1.0		
Success Rate	15		

##### 4.2.2. Success rate in stipulated period of study [Total of with backlog + without backlog] (5)

**Note:** If 100% students clear without any backlog then also total marks scored will be 20 as both 4.2.1 & 4.2.2 will be applicable simultaneously

#### 4.3. Academic Performance in Second Year (10)

Academic Performance	CAYm1 (2021-22) 2020AB	CAYm2 (2020-21) 2019AB	CAYm3 (2019-20) 2018AB
Mean of CGPA or Mean Percentage of all successful students (X)	8.5	8.47	8.3
Total no. of successful students (Y)	198	205	204
Total no. of students appeared in the examination (Z)	198	205	204
API = X* (Y/Z)	8.5	8.47	8.3
Average API = (AP1 + AP2 + AP3)/3	<b>8.42</b>		

#### 4.4. Placement, Higher Studies and Entrepreneurship (30)

Item	CAYm1 (2021-22) 2018AB	CAYm2 (2020-21) 2017AB	CAYm3 (2019-20) 2016AB
Total No. of Final Year Students (N)	204	216	216
No. of students placed in companies or Government Sector (x)	190	177	215
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.) (y)	0	5	1
No. of students turned entrepreneur in engineering/technology (z)	0	1	0
$x + y + z =$	190	183	216
Placement Index : $(x + y + z)/N$	0.93	0.85	1.0
Average placement = $(P1 + P2 + P3)/3$	0.93		
Assessment Points = $30 \times$ average placement	27.8		

#### Program Name : Mechanical Engg.

Assessment Year : 2021-22 (CAYm1)

Sl. No	Name of the student placed	Enrollment no.	Name of the Employer	Appointment letter reference no. with date
1	AADITYA SHARMA		AdPushup (through calyxpod)(5.50)	AdPushup (through calyxpod)(5.50)
2	ABHISHEK KUMAR MUKHERJEE		Cognizant(4.00)	Cognizant(4.00)
3	HRITHIK KUMAR		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
4	ABINASH MOHANTY		Trisys IT Services(3.50)	Trisys IT Services(3.50)
5	ADARSH SINGH		HighRadius Technologies Batch-16(8.00)	HighRadius Technologies Batch-16(8.00)
6	ADITYA RAJ SINHA		GyanSys(4.50)	GyanSys(4.50)
7	SUMIT ROY		HighRadius Technologies Batch-32(8.00)	HighRadius Technologies Batch-32(8.00)
8	AKASH GHOSH		Cognizant(4.00)	Cognizant(4.00)
9	AMAN KUMAR		Cognizant(4.00)	Cognizant(4.00)
10	AMAN SINGH		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)



11	SWAPNANIL SARKAR		Capgemini(4.00)	Capgemini(4.00)
12	AMBARISH GANGULY		Capgemini(4.00)	Capgemini(4.00)
13	AMIT KAMAL SAHOO		HCL Technologies (5.50)	HCL Technologies (5.50)
14	AMIT KUMAR		Cognizant(4.00)	Cognizant(4.00)
15	ANKIT CHAUDHARY		KPMG(Digital Trust)(5.75)	KPMG(Digital Trust)(5.75)
16	ARCHAN SAROAJ TRIPATHI		RISEWPU(6.60)	RISEWPU(6.60)
17	ARIJIT BHATTACHARYA		Jindal Steel Works (Through Calyxpod)(8.00)	Jindal Steel Works (Through Calyxpod)(8.00)
18	VIJEET SINGH		Jindal Steel Works (Through Calyxpod)(8.00)	Jindal Steel Works (Through Calyxpod)(8.00)
19	ABINASH BISWAL		Cognizant(4.00)	Cognizant(4.00)
20	ADITYA BHUSHAN SINGH		PhysicsWallah(10.00)	PhysicsWallah(10.00)
21	ADITYA MANDAL		KPIT(3.60)	KPIT(3.60)
22	ARYAN ANJNEY JHA		PhysicsWallah(10.00)	PhysicsWallah(10.00)
23	ASHISH KUMAR		Jindal Steel Works (Through Calyxpod)(8.00)	Jindal Steel Works (Through Calyxpod)(8.00)
24	HIMANSHU RANJAN KUMAR		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
25	AYUSH DWIVEDI		HCL Technologies (5.50)	HCL Technologies (5.50)
26	CHIRANJEEV CHAKROBERTY		Cloud Analogy(3.00)(Allow)	Cloud Analogy(3.00)(Allow)
27	AKASH SINGH		Amazon Non Tech(12.50)	Amazon Non Tech(12.50)
28	DEBANIK CHATTERJEE		Cognizant(4.00)	Cognizant(4.00)
29	SHIVANSH KUMAR		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
30	DEBTUJ NATH		Collabera Services Ltd. (3.60)-2nd Visit	Collabera Services Ltd. (3.60)-2nd Visit
31	JYOTISHMAN KALITA		MyCaptain(4.50)	MyCaptain(4.50)
32	MAINAK SAMANTA		Infosys(3.60)	Infosys(3.60)
33	MD ASHFAQ MUSTAFA ALI		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
34	MOHAMMAD TAQUI ANSARI		Synoriq(3.25)	Synoriq(3.25)
35	NEETHI BARUAH		HighRadius Technologies Batch-86(8.00)	HighRadius Technologies Batch-86(8.00)
36	BISWAJIT SAHU		LnT Technology Services(4.00)	LnT Technology Services(4.00)

37	PIYUSH NANDA		Timex Group Precision(3.00)	Timex Group Precision(3.00)
38	CHANDRANEEL PAL		Deloitte USI Consulting(7.60)	Deloitte USI Consulting(7.60)
39	TANISHK SUBODH KUMAR		Climber knowledge and Careers (P) Ltd. (MyCaptain)	Climber knowledge and Careers (P) Ltd. (MyCaptain)
40	RAJDEEP GANGULI		HighRadius Technologies Batch-19(8.00)	HighRadius Technologies Batch-19(8.00)
41	RAMAN KUMAR		Verzeo(5.00)	Verzeo(5.00)
42	RASHMI RANJAN SAHOO		Amazon Non Tech(12.50)	Amazon Non Tech(12.50)
43	ROHAN PAL		Amazon Non Tech(12.50)	Amazon Non Tech(12.50)
44	RUBIN SINGH		Cognizant(4.00)	Cognizant(4.00)
45	DEEPANSHU GUPTA		Wipro(3.50)	Wipro(3.50)
46	SAI VISHAL DATTA B		Consultadd(5.00)	Consultadd(5.00)
47	SAMARPEET DHAL		Forech India (P) Ltd.	Forech India (P) Ltd.
48	EDDIMI SHREYASH		JSW Energy Ltd.(8.00)	JSW Energy Ltd.(8.00)
49	SHIKHAR		GR Infraprojects Ltd(4.25)	GR Infraprojects Ltd(4.25)
50	RAJENDRA NARAYAN NAYAK		Artech Infosystem(4.68)	Artech Infosystem(4.68)
51	SHUBHAM RAJ		Cognizant(4.00)	Cognizant(4.00)
52	SHUBHAM SWAIN		Cognizant(4.00)	Cognizant(4.00)
53	SIDDHANT BHANDARI		Ericsson India Global Services(4.50)	Ericsson India Global Services(4.50)
54	SOUHARDYA SIDDHANTA		HighRadius Technologies Batch-76(8.00)	HighRadius Technologies Batch-76(8.00)
55	SOUMYA RANJAN PRADHAN		AMNS(ArcelorMittal Nippon Steel India)(Allow)	AMNS(ArcelorMittal Nippon Steel India)(Allow)
56	SOURYA MUKHERJEE		Tata Advanced(3.99)(Allow 5.80 above CTC)	Tata Advanced(3.99)(Allow 5.80 above CTC)
57	SUDHANSHU SHUKLA		HighRadius Technologies Batch-16(8.00)	HighRadius Technologies Batch-16(8.00)
58	SUMIT KUMAR ROY		Power Mech Projects(2.16)	Power Mech Projects(2.16)
59	SUMIT RAY		HCL Technologies (5.50)(Allow)	HCL Technologies (5.50)(Allow)

60	SUPREET ACHARYA		Ericsson India Global Services(4.50)	Ericsson India Global Services(4.50)
61	VIPIN KUMAR		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
62	YASH CHAUHAN		Tata Advanced(3.99)(Allow)	Tata Advanced(3.99)(Allow)
63	YASHWANT KUMAR SINGH		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
64	HRISHIKESH NAG		VoltBek Home Appliances (P) Ltd(3.50)	VoltBek Home Appliances (P) Ltd(3.50)
65	KSHITIJ ANAND		Cognizant(4.00)	Cognizant(4.00)
66	ABHIRUP BHATTACHARJEE		Cognizant(4.00)	Cognizant(4.00)
67	ABHIRUP CHAKRABARTI		Capgemini(4.00)	Capgemini(4.00)
68	ABHISHEK KOLAY		HighRadius Technologies Batch-20(8.00)	HighRadius Technologies Batch-20(8.00)
69	AKASH PANDA		Cognizant(4.00)	Cognizant(4.00)
70	AMAN AQUIB PARVEZ		Sanmina (3.25)	Sanmina (3.25)
71	KUSHAL AGARWAL		HighRadius Technologies Batch-54(8.00)	HighRadius Technologies Batch-54(8.00)
72	D MOKSH JACOB		Capgemini(4.00)	Capgemini(4.00)
73	ANIKET KUMAR		Coffee Day Beverages(3.00)	Coffee Day Beverages(3.00)
74	ANKUSH NANDY		Amazon Facility Manager(14.90)	Amazon Facility Manager(14.90)
75	ANUBHAB ROY		Nexturn Technologies(4.00)	Nexturn Technologies(4.00)
76	ANUBHAV RENU		Quest Global(3.00)	Quest Global(3.00)
77	ARJUN DEY		KPMG(Digital Trust)(5.75)	KPMG(Digital Trust)(5.75)
78	PARTHA SARATHI TRIPATHY		Wipro(3.50)	Wipro(3.50)
79	PRIYARANJAN		Accelalpha India(6.50)	Accelalpha India(6.50)
80	AYUSH KUMAR BISWAL		Capgemini(4.00)	Capgemini(4.00)
81	CHIRANJEEB ROUT		Infosys(3.60)	Infosys(3.60)
82	RUNAL GAUTAM		Verzeo(5.00)	Verzeo(5.00)
83	ISHAN VATS		Jindal Steel Works (Through Calyxpod)(8.00)	Jindal Steel Works (Through Calyxpod)(8.00)
84	SATYABRATA PANI		Cognizant(4.00)	Cognizant(4.00)
85	K RANABIR RAHAMAN		Cognizant(4.00)	Cognizant(4.00)

86	KASHICA PATHAK		Jindal Steel Works (Through Calyxpod)(8.00)	Jindal Steel Works (Through Calyxpod)(8.00)
87	KEVIN V JOHN		Jindal Steel Works (Through Calyxpod)(8.00)	Jindal Steel Works (Through Calyxpod)(8.00)
88	SATYAM SHANKAR PRADHAN		LnT Technology Services(4.00)	LnT Technology Services(4.00)
89	SHANTANU BERA		Codeyoung(7.00)(Allow)	Codeyoung(7.00)(Allow)
90	SHIVAM MOHAPATRA		Cognizant(4.00)	Cognizant(4.00)
91	SHUVRANIL BISWAS		Skywa(8.00)	Skywa(8.00)
92	SUJIT GAUTAM		Power Mech Projects(2.16)	Power Mech Projects(2.16)
93	MRIGANK CHAUDHARY		Adani Group(7.00)	Adani Group(7.00)
94	NIKHIL KUMAR		Verzeo(5.00)	Verzeo(5.00)
95	VAKACHARLA BHARAT KUMAR		Deloitte USI Consulting(7.60)	Deloitte USI Consulting(7.60)
96	PATNALA DHEERAJ		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
97	VIKASH KUMAR		Verzeo(5.00)	Verzeo(5.00)
98	PRADATTA NIGAMANSHU BEHERA		HighRadius Technologies Batch-32(8.00)	HighRadius Technologies Batch-32(8.00)
99	YASH BHATTER		Hexagon(5.50)	Hexagon(5.50)
100	RANEET PRABHAT SAHOO		Cognizant(4.00)	Cognizant(4.00)
101	RITESH BISWAS		Tata Power(6.06)	Tata Power(6.06)
102	AMRITANSHU ANUBHAWI		Capgemini(4.00)	Capgemini(4.00)
103	ANSHUL KUMAR SAHOO		HCL Technologies (5.50)	HCL Technologies (5.50)
104	ROHIT DAS		Xenonstack(4.50)(Allow)	Xenonstack(4.50)(Allow)
105	ROHIT KUMAR		GirnarSoft (CarDekho)(3.50)	GirnarSoft (CarDekho)(3.50)
106	RUTVIK RAJU DHOTE		Verzeo(5.00)	Verzeo(5.00)
107	ASHISH SAMANTRAY		Accenture(6.50)-Additio nal	Accenture(6.50)-Additio nal
108	SAYAK MUKHERJEE		Hexagon(5.50) (allow)	Hexagon(5.50) (allow)
109	SAYANI SENGUPTA		Cognizant(4.00)	Cognizant(4.00)
110	SHIVAM YADAV		HCL Technologies (5.50)	HCL Technologies (5.50)
111	SOHUM SINGH		AdPushup (through calyxpod)(5.50)	AdPushup (through calyxpod)(5.50)
112	SOURASHIS CHAKRABORTY		Amazon Non Tech(12.50)	Amazon Non Tech(12.50)

113	SOURAV MITRA		Escorts Limited(3.75)	Escorts Limited(3.75)
114	SOURAV SINGH		Codeyoung(7.00)(Allow)	Codeyoung(7.00)(Allow)
115	SOUREESH DE		Johnson Tiles (H&R Johnson-4.50)	Johnson Tiles (H&R Johnson-4.50)
116	SOURODIP BASU		Timex Group Precision(3.00)	Timex Group Precision(3.00)
117	SURJEET SINGH GOUR		Akon Group of Industries(4.20)	Akon Group of Industries(4.20)
118	ASHWANI KUMAR SINGH		Cognizant(4.00)	Cognizant(4.00)
119	SWAPNIL DEWANGAN		Cognizant(4.00)	Cognizant(4.00)
120	SWAPNISH SAHOO		Wipro(3.50)	Wipro(3.50)
121	UTSAV KUNDU		Sanmina (3.25)	Sanmina (3.25)
122	VAIBHAV KUMAR SINGH		HighRadius Technologies Batch-69(8.00)	HighRadius Technologies Batch-69(8.00)
123	VEDANTH CHAKRABORTY		Cognizant(4.00)	Cognizant(4.00)
124	CHIRASHMAY SAI RAJ		HighRadius Technologies Batch-36(8.00)	HighRadius Technologies Batch-36(8.00)
125	GARGADEB CHAKRABORTY		Wipro(3.50)	Wipro(3.50)
126	ABHINEET		Verzeo(5.00)	Verzeo(5.00)
127	ABHISHEK MAHANTA		Cognizant(4.00)	Cognizant(4.00)
128	ADITYA TRIPATHI		Accelalpha India(6.50)(Allow)	Accelalpha India(6.50)(Allow)
129	AMARJEET YADAV		HCL Technologies (5.50)	HCL Technologies (5.50)
130	AMIT SAMAL		Tudip Technologies(3.22)	Tudip Technologies(3.22)
131	AMAN KUMAR		Verzeo(5.00)	Verzeo(5.00)
132	RITAM DAS		Cognizant(4.00)	Cognizant(4.00)
133	SIDDHANT SINHA		Wipro(3.50)	Wipro(3.50)
134	ARKA PRAVA MUKHERJEE		Keka-Quality Analyst(6.00)	Keka-Quality Analyst(6.00)
135	ARPIT SRIWASTAV		Cognizant(4.00)	Cognizant(4.00)
136	ASHISRANJAN PRADHAN		GR Infraprojects Ltd(4.25)	GR Infraprojects Ltd(4.25)
137	ASHUTOSH MANDAL		Capgemini(4.00)	Capgemini(4.00)
138	ASHUTOSH SHAHDEO		Unschool(5.00)	Unschool(5.00)
139	UTKARSH PRAKASH SINGH		HighRadius Technologies Batch-98(8.00)	HighRadius Technologies Batch-98(8.00)
140	KESHAV PAREEK		Pyramid IT Consulting Ltd(4.67)	Pyramid IT Consulting Ltd(4.67)

141	AYUSH GUPTA		Cognizant(4.00)	Cognizant(4.00)
142	BIDYABRATA RATH		Tudip Technologies(3.22)	Tudip Technologies(3.22)
143	BIKI KUMAR SAH		Jindal Steel Works (Through Calyxpod)(8.00)	Jindal Steel Works (Through Calyxpod)(8.00)
144	BRAJESH KUMAR SINGH		Cognizant(4.00)	Cognizant(4.00)
145	DEBANKAN CHAKRABORTY		Cognizant(4.00)	Cognizant(4.00)
146	DIBYENDU SARKAR		Unschool(5.00)	Unschool(5.00)
147	GAURAV SINGH		Amazon Non Tech(12.50)	Amazon Non Tech(12.50)
148	ADITYA SINHA		Accelalpha India(6.50)	Accelalpha India(6.50)
149	HIMANSHI SHASHANK KADU		Wipro(3.50)	Wipro(3.50)
150	HARSHIT LALA		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
151	KUMAR MAYANK		HighRadius Technologies Batch-27(8.00)	HighRadius Technologies Batch-27(8.00)
152	KUMAR SAURABH		HighRadius Technologies Batch-56(8.00)	HighRadius Technologies Batch-56(8.00)
153	MIRZA MOHAMMAD ARSHAD BAIG		Codeyoung(7.00)(Allow)	Codeyoung(7.00)(Allow)
154	MOHIT SINGH		Power Mech Projects(2.16)	Power Mech Projects(2.16)
155	NEHA PANDEY		Codeyoung(7.00)(Allow)	Codeyoung(7.00)(Allow)
156	PITLA HARISH		Mu Sigma(30.00)(Allow)	Mu Sigma(30.00)(Allow)
157	PRAJWAL SHARMA		PhysicsWallah(10.00)	PhysicsWallah(10.00)
158	SHIVAM SHARMA		HighRadius Technologies Batch-82(8.00)	HighRadius Technologies Batch-82(8.00)
159	PRATYUSH CHOUDHURY		Codeyoung(7.00)(Allow)	Codeyoung(7.00)(Allow)
160	RAHUL PRADHAN		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
161	PRATIK JUGANT MOHAPATRA		Capgemini(4.00)	Capgemini(4.00)
162	RITIK VERMA		HCL Technologies (5.50)	HCL Technologies (5.50)
163	RITOBRATA DAS		Amazon Non Tech(12.50)	Amazon Non Tech(12.50)
164	RAHUL KUMAR SHARAD		HighRadius Technologies Batch-87(8.00)	HighRadius Technologies Batch-87(8.00)
165	ROSHAN KUMAR SAHA		Adani Group(7.00)	Adani Group(7.00)
166	SAGNIK BORAL		Newgen Software(3.60)	Newgen Software(3.60)

167	SAMYAK NIKHIL SIDDHANTA		Cognizant(4.00)	Cognizant(4.00)
168	PRINCE RAJA		Deloitte USI Consulting(7.60)	Deloitte USI Consulting(7.60)
169	SURYA PRAKASH SAHOO		Capgemini(4.00)	Capgemini(4.00)
170	PRATIK PRIYADARSHI		HighRadius Technologies Batch-90(8.00)	HighRadius Technologies Batch-90(8.00)
171	SAUMYAJIT PANDIT		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
172	SHIVAM SHANDILYA		Jindal Steel Works (Through Calyxpod)(8.00)	Jindal Steel Works (Through Calyxpod)(8.00)
173	SHUBHAM PALAI		Verzeo(5.00)	Verzeo(5.00)
174	SIDHANT KUMAR BEHERA		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
175	TUSHAR		Quest Global(3.00)	Quest Global(3.00)
176	SOMESH KUMAR SHARDA		Cognizant(4.00)	Cognizant(4.00)
177	SOMESH MAHENDRA SANT		Agelix Consulting(5.20)	Agelix Consulting(5.20)
178	SOUNAV BANERJEE		Amazon Non Tech(12.50)	Amazon Non Tech(12.50)
179	SOURAV KUMAR AGRAWAL		Acmegrade(4.00)	Acmegrade(4.00)
180	SOURAV PATTNAIK		HighRadius Technologies Batch-19(8.00)	HighRadius Technologies Batch-19(8.00)
181	AASIF IQBAL		GR Infraprojects Ltd(3.25)	GR Infraprojects Ltd(3.25)
182	EVANGELIN BARLA		Cloud Analogy(3.00)(Allow)	Cloud Analogy(3.00)(Allow)
183	RAJEEV KUMAR		Wipro(3.50)	Wipro(3.50)
184	SARTHAK ROUT		Quest Global(3.00)	Quest Global(3.00)
185	SASWATA BAKSI		HighRadius Technologies Batch-16(8.00)	HighRadius Technologies Batch-16(8.00)
186	SOUMYA RANJAN DAS		GR Infraprojects Ltd(3.25)	GR Infraprojects Ltd(3.25)
187	SOURIN ROY		SkillVertex(6.00)(Allow)	SkillVertex(6.00)(Allow)
188	TARANSHU PRIYADARSHI PATTNAIK		Acmegrade(4.00)	Acmegrade(4.00)
189	TUSHAR KANTI SAHOO		Merkle Sokrati(4.38)	Merkle Sokrati(4.38)
190	SARAT SIKANDAR		Urban Living (20,000)	Urban Living (20,000)

Assessment Year : 2020-21 (CAYm2)

<b>Sl. No.</b>	<b>Name of the Student Placed</b>	<b>Enrollment no.</b>	<b>Name of the Employer</b>	<b>Appointment letter reference no. with date</b>
1	Abhinav Sinha	17029652048	Cognizant	Cognizant
2	Abhishek Das	17029752049	Cognizant	Cognizant
3	Abhishek Srivastava	17029852050	Escort	Escort
4	Abhishek Rohan	17648758274	K12 Techno Services	K12 Techno Services
5	Adarsh Rajpal	17029952051	Amazon- Non Tech(Allow other Company)	Amazon- Non Tech(Allow other Company)
6	Anant Kumar	17030052052	Cognizant	Cognizant
7	Avijit Kumar	17030252054	ANDRITZ HYDRO Ltd.	ANDRITZ HYDRO Ltd.
8	Aviral Mishra	17030452056	PlanetSpark	PlanetSpark
9	Biki Kumar Shah	17030652058	Megha Engineering & Infrastructure Ltd.	Megha Engineering & Infrastructure Ltd.
10	Deepak Tiwari	17030752059	Timex Group	Timex Group
11	Dhruv Pathak	17030852060	Infosys	Infosys
12	Divyalok Samal	17030952061	Deloitte (A&C)	Deloitte (A&C)
13	Gaurav Kumar	17031152063	Infosys-5th	Infosys-5th
14	Murari Singh	17031752069	Voltbek Home Appliances Ltd	Voltbek Home Appliances Ltd
15	Manish Prasad Kalwar	17031852070	Tudip Technologies(Ninja)	Tudip Technologies(Ninja)
16	Pragyan Borthakur	17032052072	KPMG	KPMG
17	Pratik Kumar Mohanty	17032252074	Cognizant	Cognizant
18	Priyanshu Singh	17032352075	Escort	Escort
19	Rahul Yadav	17032652078	Amazon- Non Tech	Amazon- Non Tech
20	Ronak Mohanty	17033052082	Cognizant	Cognizant
21	Saurabh Kumar	17033452086	Cognizant -2	Cognizant -2
22	Sayan Pal	17033552087	Infosys	Infosys
23	Shrey Mishra	17033652088	Cognizant	Cognizant
24	Shubham Tripathy	17033752089	Accenture (4.50)	Accenture (4.50)
25	Shubham Kumar	17033852090	Infosys	Infosys
26	Siddhant	17033952091	Capgemini (3.8 LPA)	Capgemini (3.8 LPA)
27	Simranpreet Singh	17034052092	KPMG	KPMG



28	Soumik Chakrabarty	17379455550	Capgemini (3.8 LPA)	Capgemini (3.8 LPA)
29	Sudhanshu Kumar	17034152093	Amazon- Non Tech	Amazon- Non Tech
30	Swaraj Pandey	17034352095	Megha Engineering & Infrastructure Ltd.	Megha Engineering & Infrastructure Ltd.
31	Tushar Mandal	17034452096	The Sanamar Group	The Sanamar Group
32	Aanjaney Gupta	17034552097	Wipro	Wipro
33	Abhijeet Kumar	17034652098	DXC	DXC
34	Aiman Adhikari	17034852100	BYJU'S-Think and learn(10.00)	BYJU'S-Think and learn(10.00)
35	Anand Raj	17035152103	Accenture (4.50)	Accenture (4.50)
36	Anish Mukherjee	17035252104	Vasava Engineering Ltd.	Vasava Engineering Ltd.
37	Ankit Kumar	17035352105	Amazon- Non Tech	Amazon- Non Tech
38	Anurag Nath	17587957654	Unschool	Unschool
39	Asnal Areeb Jameel	17035652108	Artech Infosystem(2nd Visit)	Artech Infosystem(2nd Visit)
40	Debanjan Dasgupta	17035752109	PlanetSpark	PlanetSpark
41	Debashree Dutta	17035852110	Voltbek Home Appliances Ltd	Voltbek Home Appliances Ltd
42	Debraj Dey	17035952111	Wipro	Wipro
43	Gadi Prasun	17036052112	HighRadius (46th Batch)	HighRadius (46th Batch)
44	Harshvardhan	17036152113	Planetspark 2nd Visit	Planetspark 2nd Visit
45	Jaanish Ahmed	17036352115	HighRadius(18th Batch)	HighRadius(18th Batch)
46	Kumar Aman	17036552117	Cognizant	Cognizant
47	Mahadeep Nanda	17036652118	Amazon- Non Tech	Amazon- Non Tech
48	Mohit Kumar Chaudhary	17036752119	Amazon- Non Tech(Allow other Company)	Amazon- Non Tech(Allow other Company)
49	Nilesh Kumar Sau	17036952121	Cognizant	Cognizant
50	Prashant Kumar Tiwari	17037152123	Chegg India(Allow Other Company)	Chegg India(Allow Other Company)
51	Praveer Kumar Singh	17037252124	Cognizant	Cognizant

52	Prince Kumar Singh	17037352125	Amazon- Non Tech(Allow other Company)	Amazon- Non Tech(Allow other Company)
53	Pulastya Mohanty	17037552127	Capgemini (3.8 LPA)	Capgemini (3.8 LPA)
54	Rahul Mishra	17037852130	Tudip Technologies(Ninja)	Tudip Technologies(Ninja)
55	Sandeep Prahallad Seth	17038252134	Tudip Technologies(Ninja)	Tudip Technologies(Ninja)
56	Shubham Kumar	17038652138	Megha Engineering & Infrastructure Ltd.	Megha Engineering & Infrastructure Ltd.
57	Subham Goswami	17038852140	Amazon- Non Tech	Amazon- Non Tech
58	Subhrajit Dey	17039052142	HCL Technology	HCL Technology
59	Susree Sonali	17039252144	Climber	Climber
60	Abhishek Brian Gomes	17039552147	Capgemini (3.8 LPA)	Capgemini (3.8 LPA)
61	Adrish Bhandary	17039652148	Verzeo -2	Verzeo -2
62	Amit Sutar	17039852150	KPMG	KPMG
63	Anshuman Sarkar	17575057520	Escort	Escort
64	Apurv Singh	17039952151	Capgemini (3.8 LPA)	Capgemini (3.8 LPA)
65	Arindit Saha	17040152153	Cognizant -2	Cognizant -2
66	Arpit Na	17040252154	Infosys	Infosys
67	Ashish Kumar	17040352155	Trident Group	Trident Group
68	Aushman Kumar Pattnaik	17040552157	TCS(Ninja)-2	TCS(Ninja)-2
69	Ayanava Mondal	17040652158	Verzeo -2	Verzeo -2
70	Ayush Sinha	17040752159	Infosys	Infosys
71	Giridhar Sahu	17040852160	Infosys	Infosys
72	Indranil Dey	17040952161	Stellantis	Stellantis
73	Krishanu Ranjan Sarma	17041052162	Capgemini (3.8 LPA)	Capgemini (3.8 LPA)
74	Nayan Arora	17041352165	ITC Agri	ITC Agri
75	Partha Sarthi Pattanaik	17575257522	Capgemini (3.8 LPA)	Capgemini (3.8 LPA)
76	Polaki Balaji	17041652168	Accenture (4.50)	Accenture (4.50)
77	Rishabh Roy	17041952171	Cognizant	Cognizant
78	Rohan Khatri	17042152173	Timex Group	Timex Group

79	Roshan Pranab Kalita	17042252174	Tudip Technologies(Ninja)	Tudip Technologies(Ninja)
80	Sayantana Saha	17042452176	TAFE	TAFE
81	Shailesh Kumar Sharma	17042552177	Codevita(Allow)	Codevita(Allow)
82	Shubhendu Krishnamani	17042852180	Adani Wilmar	Adani Wilmar
83	Sohini Rudra	17042952181	Amazon- Non Tech(Allow other Company)	Amazon- Non Tech(Allow other Company)
84	Soubhik Bagchi	17043052182	Tata Advanced Systems Ltd.	Tata Advanced Systems Ltd.
85	Subhrakant Das	17043452186	MUVI	MUVI
86	Supratim Mukherjee	17043652188	Infosys	Infosys
87	Tamojit Roy	17043752189	HighRadius (31st Batch)	HighRadius (31st Batch)
88	Vipin Kumar	17588457659	Cognizant	Cognizant
89	Akash Kumar	17043852190	Jindal Steel & Power Ltd.	Jindal Steel & Power Ltd.
90	Aniket Roy	17044052192	Accenture (4.50)	Accenture (4.50)
91	Anindya Sen	17044152193	Cognizant	Cognizant
92	Ashish Yadav	17044452196	Everest	Everest
93	Avinash Kumar	17044652198	Infosys	Infosys
94	Debangana Samanta	17044852200	HighRadius(Batch-13)	HighRadius(Batch-13)
95	Dhrubajyoti Mondal	17044952201	HighRadius(21st Batch)	HighRadius(21st Batch)
96	Kanhaiya Choudhary	17045152203	HighRadius (33rd Batch)	HighRadius (33rd Batch)
97	M Rishi Raj	17045452206	Verzeo -2	Verzeo -2
98	Abhigyan Saksham Rai	17045652208	Timex Group	Timex Group
99	Mayank Kumar Sharma	17045752209	LIDO Learning	LIDO Learning
100	Md Shayeel Akhtar	17045852210	Cognizant	Cognizant
101	Mrinmoy Roy	17046052212	Amazon- Non Tech	Amazon- Non Tech
102	Nilesh Kumar Tiwari	17046252214	Cognizant -2	Cognizant -2
103	Nishant Kumar Singh	17046452216	BYJU'S-Think and learn(10.00)	BYJU'S-Think and learn(10.00)
104	Rajeev Ranjan Tiwari	17380155557	TCS(Ninja)-2	TCS(Ninja)-2
105	Rishabjan Das	17534657116	Accenture (4.50)	Accenture (4.50)
106	Rishav Dey	17046852220	Cognizant	Cognizant
107	Ritwik Kumar Sinha	17047052222	KPMG	KPMG

108	Saket Shrivastava	17047252224	Chegg India(Allow Other Company)	Chegg India(Allow Other Company)
109	Saumyajit Roy	17047352225	TCS(Ninja)-2	TCS(Ninja)-2
110	Sharique Ahmad	17047552227	Infosys	Infosys
111	Simrat Sinha	17047752229	Verzeo -2	Verzeo -2
112	Sourav Kumar	17047952231	Capgemini (3.8 LPA)	Capgemini (3.8 LPA)
113	Sudarshana Bhusan	17048152233	HUL	HUL
114	Vikram Chaudhary	17048552237	Infosys	Infosys
115	Abhigyan A	17588657661	HighRadius (25th Batch)	HighRadius (25th Batch)
116	Aman Sinha	17048952241	HighRadius(Batch-13)	HighRadius(Batch-13)
117	Amit Panigrahi	17588757662	Infosys-5th	Infosys-5th
118	Arunabha Jana	17049452246	Capgemini (3.8 LPA)	Capgemini (3.8 LPA)
119	Arya Akhouri	17575457524	Infosys-5th	Infosys-5th
120	Ashish Panda	17629658083	Amazon- Non Tech	Amazon- Non Tech
121	Avik Paul	17049752249	Verzeo -2	Verzeo -2
122	Ayaan Ali Hashmat	17667958476	Verzeo -2	Verzeo -2
123	Brijesh Yadav	17648858275	Cognizant	Cognizant
124	Chaitanya J. Parmar	17050152253	Megha Engineering & Infrastructure Ltd.	Megha Engineering & Infrastructure Ltd.
125	Govind Jee Pandey	17575557525	Tudip Technologies(Ninja)	Tudip Technologies(Ninja)
126	Nikhil Punjabi	17050952261	HighRadius (25th Batch)	HighRadius (25th Batch)
127	Niladri Choudhury	17588857663	HighRadius (40th Batch)	HighRadius (40th Batch)
128	Pritish Ajit Nandi	17051152263	Capgemini (3.8 LPA)	Capgemini (3.8 LPA)
129	Aakash Raj	17689958716	Cognizant	Cognizant
130	Riteswar Kashyap	17051552267	HighRadius (49th Batch)	HighRadius (49th Batch)
131	Sagar Singh	17649158278	Cognizant -2	Cognizant -2
132	Sanjit Panigrahi	17051852270	Codevita(Allow)	Codevita(Allow)
133	Saptarshi Das	17051952271	Amazon- Non Tech	Amazon- Non Tech
134	Shah Mudassir Yasin	17052052272	Verzeo -2	Verzeo -2
135	Shaumya	17052252274	Leverage Edu	Leverage Edu

136	Shresth Kashyap	17052352275	Merkle Sokrati	Merkle Sokrati
137	Snigdha Rani	17052452276	DXC	DXC
138	Soubhagya Kumar Shaw	17052552277	Chegg India(Allow Other Company)	Chegg India(Allow Other Company)
139	Soumyadip Maity	17052652278	Infosys	Infosys
140	Sourav Roy	17052852280	HighRadius(Batch-13)	HighRadius(Batch-13)
141	Vikram Hawladar	17053052282	Verzeo -2	Verzeo -2
142	Abhijnan Acharya	17053352285	Amazon- Non Tech(Allow other Company)	Amazon- Non Tech(Allow other Company)
143	Adarsha Kar	17053452286	HighRadius (39th Batch)	HighRadius (39th Batch)
144	Aditya Raj	17053652288	PlanetSpark	PlanetSpark
145	Ankit Singh	17053952291	Cognizant	Cognizant
146	Anurag Chakrabarty	17649058277	BYJU'S-Think and learn(10.00)	BYJU'S-Think and learn(10.00)
147	Apurva Raj	17054152293	Everest	Everest
148	Aryaman Chetia	17534857118	K12 Techno Services	K12 Techno Services
149	Ashwani Singh	17054452296	HighRadius (39th Batch)	HighRadius (39th Batch)
150	Aurodeep Sarkar	17054552297	Cognizant	Cognizant
151	Ayush Singhal	17054652298	HighRadius (40th Batch)	HighRadius (40th Batch)
152	Divyesh Deepak	17054852300	BYJU'S-Think and learn(10.00)	BYJU'S-Think and learn(10.00)
153	Kaustav Kundu	17055252304	Cognizant	Cognizant
154	Mayank Kumar	17055552307	Amazon- Non Tech(Allow other Company)	Amazon- Non Tech(Allow other Company)
155	Mesum Zaidi	17534957119	Amazon- Non Tech	Amazon- Non Tech
156	Satpreet Singh	17056552317	Cognizant	Cognizant
157	Shourya Pratap Singh	17056752319	Accenture (4.50)	Accenture (4.50)
158	Shubham Kumar	17056852320	Megha Engineering & Infrastructure Ltd.	Megha Engineering & Infrastructure Ltd.
159	Shubham Kumar	17056952321	TCS(Ninja)-2	TCS(Ninja)-2
160	Shubham Singh	17057052322	K12 Techno Services	K12 Techno Services
161	Tanveer Singh Waseer	17057552327	Accenture (4.50)	Accenture (4.50)
162	Vivek Sinha	17057952331	Cognizant	Cognizant

163	Yash Kshatriya	17058052332	HighRadius (29th Batch)	HighRadius (29th Batch)
164	Surya Swain	17058152333	Wipro	Wipro
165	Gourav Dey	17058252334	Cognizant	Cognizant
166	Debanuj Phukan	17058352335	K12 Techno Services	K12 Techno Services
167	Ashutosh Kumar	17682158634	Infosys-5th	Infosys-5th
168	Manoranjan Khuntia	17058752339	Amazon- Non Tech(Allow other Company)	Amazon- Non Tech(Allow other Company)
169	Adarsh Pandey	17058952341	Wipro	Wipro
170	Ayan Jana	17059052342	Verzeo -2	Verzeo -2
171	Ayush Sharma	17059152343	Merkle Sokrati	Merkle Sokrati
172	Nishant Kumar	17159753349	Cognizant	Cognizant
173	Soubhagya Ranjan Nayak	17705365901	Amazon- Non Tech(Allow other Company)	Amazon- Non Tech(Allow other Company)
174	Pattanayak Shibanand	18620664998	Trident Group	Trident Group
175	Summit Kumar Panda	18002558802	Verzeo -2	Verzeo -2
176	Kishan Kumar Sahu	18003558812	Verzeo -2	Verzeo -2
177	Sambit Mishra	18617264949	Verzeo -2	Verzeo -2

Assessment Year : 2019-20 (CAYm3)

Sl. No.	Name of the Student Placed	Enrollment no.	Name of the Employer	Appointment letter reference no. with date
1	Abhinav Sinha	16062145576	Accenture (4.50)	Accenture (4.50)
2	Adityaraj Dey	16062245577	LnT Technology Services	LnT Technology Services
3	Akash Deep	16062345578	Thermax	Thermax
4	Alok Priyadarshi	16062545580	Escorts	Escorts
5	Amartya Sarkar	16062645581	Accenture (4.50)	Accenture (4.50)
6	Amitesh Ranjan	16062745582	Prena Manpower Solution LLP	Prena Manpower Solution LLP
7	Ashutosh Kumar	16063345588	Accenture (4.50)	Accenture (4.50)
8	Asish Kumar	16063545590	Escorts	Escorts
9	Ayan Mukherjee	16063645591	Accenture (4.50)	Accenture (4.50)
10	Gyan Prakash	16064045595	Global Archer (2nd Visit)	Global Archer (2nd Visit)
11	Harsh Ketan	16064145596	LnT Technology Services	LnT Technology Services

12	Harsh Vardhan	16557650541	Shapoorji Pallonji	Shapoorji Pallonji
13	Harsha Chanda	16064245597	Accenture (4.50)	Accenture (4.50)
14	Heetesh Maheshwari	16064345598	Accenture(6.50)	Accenture(6.50)
15	Kadi Sai Kaushik	16064545600	Climber	Climber
16	Krishan Kumar	16064645601	TCS	TCS
17	Manish Kumar	16064745602	Elegant Marine	Elegant Marine
18	Mayank Anand	16064845603	Highradius	Highradius
19	Nitish Kumar	16064945604	Global Archer (2nd Visit)	Global Archer (2nd Visit)
20	Oindrila Samanta	16065045605	Wipro	Wipro
21	Pranjal Kumar	16065345608	Cognizant	Cognizant
22	Pratik Chand	16065545610	Accenture (4.50)	Accenture (4.50)
23	Puskar Kumar Pusp	16065645611	LnT Technology Services	LnT Technology Services
24	Radheshyam Singh	16065745612	Samsung Heavy	Samsung Heavy
25	Rahul Gadamssetti	16065845613	Accenture (4.50)	Accenture (4.50)
26	Rajen Das	16065945614	Accenture (4.50)	Accenture (4.50)
27	Rishav Singh	16066045615	Escorts	Escorts
28	Rohan Kaushik	16066145616	Cognizant	Cognizant
29	Sachet Singh	16066245617	Shapoorji Pallonji	Shapoorji Pallonji
30	Sanjit Lakhe	16066345618	Accenture (ICI Role)	Accenture (ICI Role)
31	Saunak Das	16066445619	Accenture (4.50)	Accenture (4.50)
32	Sayan Chatterjee	16066545620	Wipro	Wipro
33	Shashank Sinha	16650951509	Accenture (4.50)	Accenture (4.50)
34	Shekhar Rajpoot	16066645621	Capgemini(3.80)	Capgemini(3.80)
35	Siddharth Roy	16066945624	Accenture (4.50)	Accenture (4.50)
36	Souptik Mukherjee	16067045625	Accenture (ICI Role)	Accenture (ICI Role)
37	Tarun	16067145626	Global Archer (2nd Visit)	Global Archer (2nd Visit)
38	Tathagat Pandey	16067245627	Carrier Midea	Carrier Midea
39	Vadali Santosha Sai Chaitanya	16067345628	Alstom	Alstom
40	Vibhor Sahay	16067445629	Accenture (4.50)	Accenture (4.50)
41	Vivek Kumar	16067645631	Global Archer (2nd Visit)	Global Archer (2nd Visit)
42	Yash Kumar Rai	16067745632	Capgemini(3.80)	Capgemini(3.80)
43	Yogesh Agarwal	16067845633	LnT Technology Services	LnT Technology Services
44	Zeenat Nazmin Ahmed	16067945634	LnT Technology Services	LnT Technology Services
45	Zubin Datta Baruah	16068045635	Wipro	Wipro
46	Abhishek Kumar Dey	16068145636	DXC Technology	DXC Technology

47	Aditya Chauhan	16068245637	Accenture (4.50)	Accenture (4.50)
48	Aditya Prasad Patra	16068345638	DXC Technology	DXC Technology
49	Animesh Gour	16068845643	Accenture (4.50)	Accenture (4.50)
50	Anurag Kumar	16069045645	Tega Industries	Tega Industries
51	Arkaprabha Ghosh	16069245647	Wipro	Wipro
52	Deepmalya Biswas	16069645651	Accenture (ICI Role)	Accenture (ICI Role)
53	Devashish Sinha	16069745652	Accenture (4.50)	Accenture (4.50)
54	Harshit Kumar Jha	16069845653	Edupolitics(Not Join)	Edupolitics(Not Join)
55	Jatin Goyal	16069945654	Thermax	Thermax
56	Kartik Singh	16070045655	Suzuki	Suzuki
57	Mrinal Dhrub	16070245657	Accenture (4.50)	Accenture (4.50)
58	Murari Kumar Singh	16070345658	Global Archer (2nd Visit)	Global Archer (2nd Visit)
59	N Harshvardhan	16070445659	Highradius	Highradius
60	Naveen	16070545660	Wipro	Wipro
61	Nitish kumar	16070745662	Global Archer (2nd Visit)	Global Archer (2nd Visit)
62	Pallab Shit	16070845663	Accenture (ICI Role)	Accenture (ICI Role)
63	Pranay Mittal	16070945664	Wipro	Wipro
64	Pranoy Roy	16071045665	Accenture (4.50)	Accenture (4.50)
65	Prince Prabhat	16071145666	ExtraMarks (4th Visit)	ExtraMarks (4th Visit)
66	Raj Aryan	16071245667	Accenture (4.50)	Accenture (4.50)
67	Rishabh Srivastava	16071345668	Byju's	Byju's
68	Rishav Sinha	16071445669	Carrier Midea	Carrier Midea
69	sachin sharma	16071645671	Highradius	Highradius
70	Sankalp Sahu	16071845673	Capgemini(3.80)	Capgemini(3.80)
71	Sarwar Akhtar	16071945674	IOTL	IOTL
72	Satyajeet Sahoo	16072045675	GR Infraprojects	GR Infraprojects
73	Sayak Bhattacharjee	16577550740	Prena Manpower Solution LLP	Prena Manpower Solution LLP
74	Shubham Kr. Rai	16072245677	Extramarks	Extramarks
75	Siddhant Raj	16072345678	Accenture(4.50)	Accenture(4.50)
76	Soham Chakarborty	16649351490	Accenture (4.50)	Accenture (4.50)
77	Somdatto Sen	16072545680	Accenture (4.50)	Accenture (4.50)
78	Subhranil Saha	16072745682	Elegant Marine	Elegant Marine
79	Swastika Samanta	16073045685	Capgemini(3.80)	Capgemini(3.80)
80	U Santosh Ishwar	16073145686	Accenture (4.50)	Accenture (4.50)
81	Ujjwal Kumar	16073245687	Accenture (4.50)	Accenture (4.50)
82	Yash Pahuja	16073445689	Capgemini(3.80)	Capgemini(3.80)
83	Yogesh Kumar Yadav	16073545690	LnT Technology Services	LnT Technology Services
84	Abhishek Prasad	16073945694	ByJu's(2nd Visit)	ByJu's(2nd Visit)



85	Aditya Pandey	16074145696	gRuhaps.com	gRuhaps.com
86	Akash Gupta	16074245697	ByJu's(2nd Visit)	ByJu's(2nd Visit)
87	AKSHAY	16074345698	Global Archer (2nd Visit)	Global Archer (2nd Visit)
88	Amit Kumar Yadav	16074645701	DXC Technology	DXC Technology
89	Anirban Bose	16074945704	Edupolics	Edupolics
90	Aniruddh Sharma	16075045705	Accenture (4.50)	Accenture (4.50)
91	Anubhab Mandal	16075145706	Accenture (ICI Role)	Accenture (ICI Role)
92	Arkendu Ash	16075345708	DXC Technology	DXC Technology
93	Atul Mishra	16075445709	ExtraMarks (4th Visit)	ExtraMarks (4th Visit)
94	Ayush Budhia	16075645711	Accenture (4.50)	Accenture (4.50)
95	Debarshi Kundu	16075845713	TCS	TCS
96	Disha Nath	16076045715	UpGrad Education	UpGrad Education
97	Diyani Gupta	16076145716	Shapoorji Pallonji	Shapoorji Pallonji
98	Harsh Anand	16076345718	Accenture(6.50)	Accenture(6.50)
99	Harshita Dangarh	16076445719	Bluestar	Bluestar
100	Ishan Bhattacharya	16076645721	Accenture (4.50)	Accenture (4.50)
101	Jyotiraditya Shahi	16076745722	Cognizant	Cognizant
102	Kaustav Samanta	16076845723	DXC Technology	DXC Technology
103	Krishan Kantmishra	16076945724	Cognizant	Cognizant
104	Mayank	16077145726	Wipro	Wipro
105	Nadeem Sarwar	16077345728	Accenture (ICI Role)	Accenture (ICI Role)
106	Parasar Abhishek	16077545730	ByJu's(2nd Visit)	ByJu's(2nd Visit)
107	Pitobas Majumdar	16077645731	Hettich India	Hettich India
108	Pratik Pattanaik	16077845733	Accenture (4.50)	Accenture (4.50)
109	Priya Bharti	16078145736	Fiat Chrysler	Fiat Chrysler
110	Ranil Mukherjee	16659051599	Accenture (ICI Role)	Accenture (ICI Role)
111	Rohit Kumar Sharma	16078545740	LnT Technology Services	LnT Technology Services
112	Shailesh Tripathi	16078945744	Wipro	Wipro
113	Shivam Pandey	16079045745	Global Archer (2nd Visit)	Global Archer (2nd Visit)
114	Shreyam shritik	16079345748	Global Archer (2nd Visit)	Global Archer (2nd Visit)
115	Shubham Verma	16079545750	gRuhaps.com	gRuhaps.com
116	Siddhant Kumar	16079645751	Shapoorji Pallonji	Shapoorji Pallonji
117	Sumit Kumar	16079845753	Prena Manpower Solution LLP	Prena Manpower Solution LLP
118	Tushar Sahu	16080145756	Cognizant	Cognizant
119	Abhishek Rakshit	16080345758	Accenture (4.50)	Accenture (4.50)
120	Aman Kumar Mishra	16080745762	Wipro	Wipro
121	Amartya Roy	16080845763	Capgemini(3.80)	Capgemini(3.80)

122	Amrit Pratik	16080945764	Shapoorji Pallonji	Shapoorji Pallonji
123	Anurag Dubey	16557750542	LnT Technology Services	LnT Technology Services
124	Shane Ahmed Mojibi	16660251614	Accenture (ICI Role)	Accenture (ICI Role)
125	Arpit Kumar	16081145766	Cognizant	Cognizant
126	Shuvanan Banerjee	16081245767	Cognizant	Cognizant
127	Avi Agarwal	16081345768	Accenture (4.50)	Accenture (4.50)
128	Ayan Ray	16081545770	Fiat India Automobile(Internship)	Fiat India Automobile(Internship)
129	Ayush Dwivedi	16081645771	Samsung Heavy	Samsung Heavy
130	Bikramaditya das	16081745772	ITC Agri	ITC Agri
131	Epari Adarsh	16081945774	Accenture (ICI Role)	Accenture (ICI Role)
132	Himanshu Choudhary	16082045775	DXC Technology	DXC Technology
133	Jutika Dowari	16082145776	Accenture (4.50)	Accenture (4.50)
134	Koustubh Mandal	16082245777	Escorts	Escorts
135	Kumar Aayush	16082345778	Elegant Marine	Elegant Marine
136	Maddali Aditya Lalit	16082445779	TVS Motors	TVS Motors
137	Mahender Kumar	16082545780	ITC Infotech	ITC Infotech
138	Megharya Sarkar	16082845783	Collabera Services Ltd.	Collabera Services Ltd.
139	Nabil Adib	16082945784	Cognizant	Cognizant
140	Neelesh Kumar Dubey	16083045785	Accenture (ICI Role)	Accenture (ICI Role)
141	Prajwallit Dixit	16083245787	Edupolices(Not Join)	Edupolices(Not Join)
142	Pranay	16083345788	Capgemini(3.80)	Capgemini(3.80)
143	Pranjul Singh	16083445789	Accenture (4.50)	Accenture (4.50)
144	Pratyush Kumarmuduli	16083545790	Cognizant	Cognizant
145	Rajat Rai	16083845793	Cognizant	Cognizant
146	Rajdeep Banerjee	16083945794	Accenture (4.50)	Accenture (4.50)
147	Rishabh Yadav	16084045795	Escorts	Escorts
148	Rohit Das Gupta	16084145796	ITC Infotech	ITC Infotech
149	S Sudhan	16084245797	Capgemini(3.80)	Capgemini(3.80)
150	Sahil Sinha	16634051320	Accenture (4.50)	Accenture (4.50)
151	Sanjeev Kumar Singh	16084445799	Global Archer	Global Archer
152	Satyam Bal	16084745802	Highradius 23rd Batch	Highradius 23rd Batch
153	Saurav Subodh	16084945804	Accenture (ICI Role)	Accenture (ICI Role)
154	Shiv Kumar	16085045805	GR Infraprojects	GR Infraprojects
155	Shubham Kumar	16085145806	Accenture (4.50)	Accenture (4.50)
156	Shuvam Mahapatra	16085245807	Accenture (4.50)	Accenture (4.50)

157	Sourav Mohanta	16085445809	Accenture (ICI Role)	Accenture (ICI Role)
158	Suman Swaraj Mishra	16085545810	Capgemini(3.80)	Capgemini(3.80)
159	Sweta Priyadarshni	16085645811	CEAT	CEAT
160	Vaibhav Bhardwaj	16085745812	TCS	TCS
161	Vipul Pandey	16637451354	Elegant Marine	Elegant Marine
162	Vivek Dora	16085945814	Accenture (4.50)	Accenture (4.50)
163	Aayush Kumar Sarraf	16086045815	Suzuki	Suzuki
164	Aditya Chakraborty	16086245817	Accenture (4.50)	Accenture (4.50)
165	Akash Katiyar	16676258491	Capgemini(3.80)	Capgemini(3.80)
166	Akash Singh	16086345818	Accenture(4.50)	Accenture(4.50)
167	Amal Anand Jha	16086445819	Hettich India	Hettich India
168	Aman Anand	16086545820	Highradius 21st Batch	Highradius 21st Batch
169	Amaresh Kumar Rai	16608251060	Simplex Infrastructures	Simplex Infrastructures
170	Amit Basu	16586650836	Global Archer (2nd Visit)	Global Archer (2nd Visit)
171	Ankit Mishra	16086645821	Highradius	Highradius
172	Ankita Ghosh	16086745822	Global Archer (2nd Visit)	Global Archer (2nd Visit)
173	Anugam Chakra	16087045825	Capgemini(3.80)	Capgemini(3.80)
174	Anurag Awasthi	16087145826	PPAP Automotive Limited	PPAP Automotive Limited
175	Arka Ganguly	16087245827	Capgemini(3.80)	Capgemini(3.80)
176	Arvind Yadav	16087345828	TCS	TCS
177	Ashutosh Kashyap	16087445829	Accenture (4.50)	Accenture (4.50)
178	Ashutosh Shrirang Sonkusare	16087545830	ITC Agri	ITC Agri
179	Ayush Sen	16087645831	Elegant Marine	Elegant Marine
180	Chinmoy Roy	16087845833	Accenture (4.50)	Accenture (4.50)
181	Debayudh Roy	16088045835	gRuhaps.com	gRuhaps.com
182	Deepak Shukla	16088145836	Escorts	Escorts
183	Gaurav	16088345838	Extramarks 2nd Visit	Extramarks 2nd Visit
184	Harsh Mishra	16088445839	Capgemini(3.80)	Capgemini(3.80)
185	Karan Kumar	16088845843	Accenture(4.50)	Accenture(4.50)
186	Kousik Adak	16088945844	Global Archer (2nd Visit)	Global Archer (2nd Visit)
187	Mayukh Kundu	16634151321	Cognizant	Cognizant
188	Narender Mall	16089345848	DXC Technology	DXC Technology
189	Rajan Singh	16089645851	Suzuki(Dout) Not Join allow Other Company	Suzuki(Dout) Not Join allow Other Company
190	Rohan Dutta	16090045855	DXC Technology	DXC Technology

191	Sahil Singh	16090145856	CEAT	CEAT
192	Samir Pattanayak	16090245857	Accenture (4.50)	Accenture (4.50)
193	Sayantana Sutradhar	16090345858	Accenture (ICI Role)	Accenture (ICI Role)
194	Shubham Singh	16090445859	Capgemini(3.80)	Capgemini(3.80)
195	Siddhartha Ghosh	16090545860	Accenture (4.50)	Accenture (4.50)
196	Sonit Singh	16090745862	LnT Technology Services	LnT Technology Services
197	Soumyadeep Halder	16090845863	Hettich India	Hettich India
198	Sourav Khandagiri	16090945864	Cognizant	Cognizant
199	Srinjoy Saha	16091045865	Hettich India	Hettich India
200	Subrajeet Nayak	16091145866	Accenture(4.50)	Accenture(4.50)
201	Sundaram Bhattacharya	16091345868	Capgemini(3.80)	Capgemini(3.80)
202	Sushant Kumar	16608451062	Global Archer (2nd Visit)	Global Archer (2nd Visit)
203	VISHAL KUMAR	16091745872	Decathlon Full Time(Allow Other Company)	Decathlon Full Time(Allow Other Company)
204	Yashodeep Dutta	16091845873	Capgemini(3.80)	Capgemini(3.80)
205	Abhijeet Mohan	16091945874	LnT Technology Services	LnT Technology Services
206	Abu Waquas Akhtar	16092045875	Cognizant	Cognizant
207	Aditya Singh	16092245877	Accenture (4.50)	Accenture (4.50)
208	Ayush Kumar	16093045885	ITC Infotech	ITC Infotech
209	Devesh Chouhan	16093245887	Cognizant	Cognizant
210	Gauravbhattacharjee	16586850838	Accenture(4.50)	Accenture(4.50)
211	Gourav Singh	16093445889	TCS	TCS
212	Pradeep Kumar Sah	17002751779	Hettich India	Hettich India
213	Probuddha Roy Choudhury	17580657576	Pristyn Care	Pristyn Care
214	Koyal Sinha	17003351785	HighRadius (27th Batch)	HighRadius (27th Batch)
215	Md Sadque Mokamul Haque	17003551787	Climber	Climber

#### 4.5. Professional Activities (20)

##### 4.5.1. Professional societies/chapters and organizing engineering events (5)

###### I. Professional Societies/Chapters

SI No	Professional Society/Chapter	Registration Year
1.	ISTE Students Chapter	2002
2.	Indest Automobile	2005
3.	KIIT Robotic Society	2006
4.	Indest Energy	2007
5.	Institution of Engineers (Students' Chapter)	2010
6.	SAEINDIA Collegiate Club, KIIT University	2011
7.	Aeronotical Society of India, KIIT Chapter	2011
8.	IET Students Chapter	2017
9.	ISHRAE KIIT Student Chapter	2018
10.	KIIT Mechatronics Society	2020

Few glimpse of the work done by the society are shown below:



The school has also organized various technical events for students and faculties as listed below:

<b>Name of Conference/Seminar/Workshop/ Symposium</b>	<b>Date</b>	<b>Topic</b>
ICAMIE-2020 (Int. Conference)	11/12/2020-13/12/2020	International conference on Advances in Mechanical and Industrial Engineering (ICAMIE-2020)
KIIT Thermofluids-2020 (Int. Conference)	23/01/2020-24/01/2020	International Conference on Thermofluids ( KIIT Thermo 2020)
ICAMPD-2019 (Int. Conference)	18/10/2019-20/10/2019	International Conference on Advances in Mechanical Processing and Design
ICAMME-2019 (Int. Conference)	15.03.2019-17.03.2019	International Conference on Advances in Materials & Manufacturing Engineering
Industry Workshop	16-03-2019	Emerging Trends in Innovations in Mechanical Engineering (ETIME): Challenges & Opportunities

Numerous prizes have been won by students at various outside events as listed below:

<b>Event &amp; Place</b>	<b>No. of Students</b>	<b>Achievement</b>
SOLAR BOAT, MSME Trade Fare	25 students	Best Innovative Award
BAJA SAE Competition, Indore	25 students	1st Prize in 3D Modelling
EFFICYCLE, UIET, Chandigarh	10 students	37 AIR
Aero 360 DBF, Hyderabad	14 students	1st Prize in Design
SUPRA SAEINDIA Competition, Chennai	25 students	5th AIR
SAE AERO DESIGN WEST, California	18 students	1st Amongst Indian Teams
ASME HPVC, IIT Delhi	20 students	3rd Prize in Design
SAE AERODESIGN EAST, Cummings, Georgia	18 students	10th Prize in Design
AIAA DBF, Wischita, USA	12 students	47th International Rank
BAJA.STUDENT.INDIA, Jamshedpur	47 students	2nd in Weight Pulling, 10 AIR
ISIE ESVC, Ambala	25 students	2nd in Virtuals
Go-KART, Bhopal	25 students	Best Design & Innovation Award
MICROHUNT, IIT, Kanpur	25 students	3rd Prize
ASME HPVC , VIT, India	08 students	2nd Prize Overall

#### **4.5.2. Publication of technical magazines, newsletters, etc. (5)**

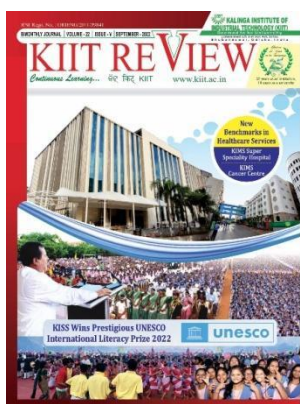
Sl. No	Category	Year	Title	Publisher
1.	e-magazine	2011	Yantra Nxt	KIIT Publication Cell
2.	Magazine	2010	Yantra Nxt	KIIT Publication Cell
3.	e- Magazine	2009	Yantra Nxt	KIIT Publication Cell
4.	News Letter	2011	Automobiles	KIIT Publication Cell
5.	News Letter	2010	Automobiles	KIIT Publication Cell
6.	Magazine	January, March, August, November-2010	KIIT Techno review	KIIT Publication Cell
7.	Magazine	January, March, August, October-2011	KIIT Techno review	KIIT Publication Cell
8.	Magazine	January, March, August, November-2012	KIIT Techno review	KIIT Publication Cell
9.	Student Research Symposium	IJCA editorial	IJCA	KIIT Publication Cell
10.	Journal	2010	KIIT Research Journal, ISSN No-0976-920X	KIIT Publication Cell
11.	Journal	2012-13	Parikalpana, ISSN NO-0974-2808	KIIT Publication Cell
12.	Journal	2012-13	KIIT Rural Business Review, ISSN NO-0975-0762	KIIT Publication Cell

**KIIT UNIVERSITY publishes a Bi-monthly News Letter Journal.**

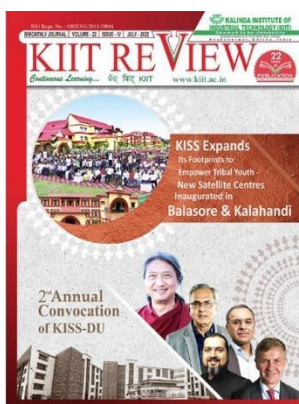
SI No.	Technical Magazine	Editors	Publisher
1	KIIT Review	Editor-in-Chief: Rajesh Verma Editorial Board: R.N. Dash, H. S. Khatua, Adwaita Gadanayak, Sradhanjali Nayak	KIIT Publication Cell

2	KIIT Techno Review	Editor-in-Chief: Pro. A. K. Sen Editorial Board: Dr. S. Singh, Dr. B. Das, Dr. C. K. Panigrahi, Dr. M. N. Das, Dr. G. Satpathy, Dr. B. B. Kar	KIIT Publication Cell
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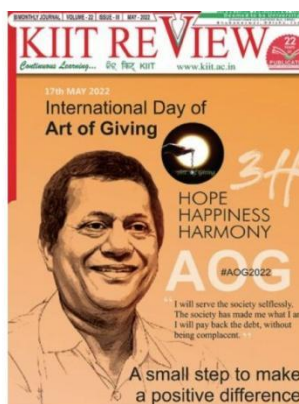
The resource can be accessed in the following Link: <http://news.kiit.ac.in/category/kiit-review/>  
 (<http://news.kiit.ac.in/category/kiit-review/>)



KIIT Review September 2022



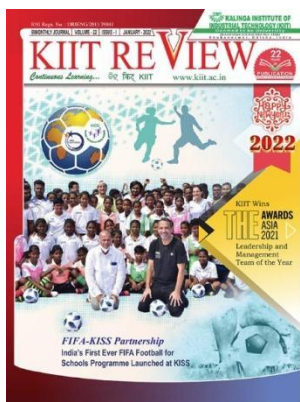
KIIT Review July 2022



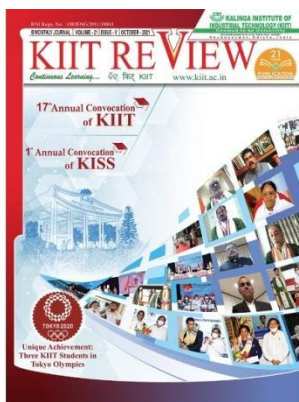
KIIT Review May 2022



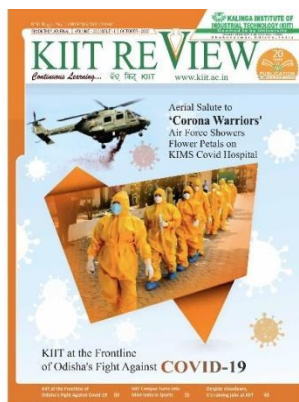
KIIT Review March 2022



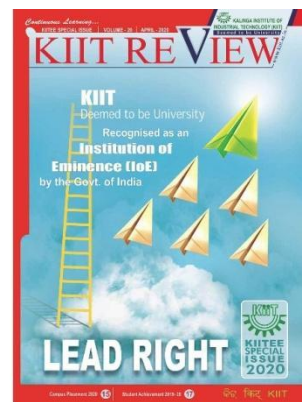
KIIT Review January 2022



KIIT Review October 2021



KIIT Review October 2020



KIIT Review April 2020 (KIITEE Special)

#### 4.5.3 Participation in inter-institute events by students of the program of study (10)

KIIT has various Students Societies and Outreach Programs for the students to showcase, expose and develop their talent and skill. Students are groomed and different platforms provided to showcase their talents and rewarded on their success. Student School Representatives are selected for each school. This program is designed to reach every student and make them aware of the ongoing and upcoming event, workshops and seminars organized in KIIT, and at the same time, students' talent acquisition are also



done.

<b>CRITERION 5</b>	<b>Faculty Information and Contributions</b>	<b>200</b>
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Sl No.	Name	PAN No.	University Degree	Date of Receiving Highest Degree	Area of Specialization	Research Paper Publications (last three years including CAY)	PhD Guidance	PhD Granted during the Assessment year	Current Designation	Date (Designated as Prof / Assoc. Prof.).	Initial Date of Joining	Association Type	At present working with the Institution (Yes / No)	In case of NO, Date of Leaving	IS HOD / Principal ?
1	Abhilas Swain	BOAPS0452P	ME/M. Tech and PhD	27-04-2018	Thermal Engg.	34	2		Assistant Professor	20-06-2017	20-06-2017	Regular	Yes		No
2	Achinta Sarkar	JPUPS6847P	ME/M. Tech and PhD	18-07-2019	Thermal Engg.	9			Assistant Professor	17-06-2019	17-06-2019	Regular	Yes		No
3	Ajay Kumar Behera	ASJPB1318F	ME/M. Tech and PhD	12-06-2012	Design Engg.	2			Assistant Professor	16-07-2012	16-07-2012	Regular	Yes		No
4	Akhilesh Kumar Tiwari	AMSPT3908L	M.E/M.Tech	06-07-2011	CAD/CAM	3			Assistant Professor	05-07-2021	05-07-2021	Regular	Yes		No
5	Akshaya Ku. Rout	AHYPR1179C	ME/M. Tech and PhD	11-07-2011	Thermal Engg.	24	7	1	Professor	01-09-2011	05-08-2010	Regular	Yes		No
6	Ambesh Kumar	BOMP6947R	ME/M. Tech and PhD	08-06-2018	Design Engg.	8	1		Assistant Professor	01-12-2017	01-12-2017	Regular	Yes		No
7	Amlana Panda	AURPP8014G	ME/M. Tech and PhD	27-12-2016	Production Engg.	78	4	1	Assistant Professor	23-01-2017	23-01-2017	Regular	Yes		No
8	Anil Kumar Rout	BOMPR2948F	ME/M. Tech and PhD	15-07-2012	Thermal Engg.	12			Assistant Professor	15-07-2012	24-07-2013	Regular	Yes		No
9	Anish Pandey	BOKPP2972M	ME/M. Tech and PhD	20-07-2016	Design Engg.	52	4		Assistant Professor	27-06-2017	27-06-2017	Regular	Yes		No
10	Ashok Ku. Sahoo	ALRPS2041P	ME/M. Tech and PhD	09-09-2012	Production Engg.	156	14	1	Professor	01-09-2007	15-11-1997	Regular	Yes		No
11	Ashwan i Kumar	CUWPK9684C	ME/M. Tech and PhD	04-07-2018	Mechatronics Engg.	14	1		Assistant Professor	24-06-2019	24-06-2019	Regular	Yes		No

12	Asit Behera	BZRPB5674G	M.E/M.Tech	06-03-2014	Production Engg.	18			Assistant Professor	20-06-2019	20-06-2019	Regular	Yes		No
13	Atal Bihari Harichandan	AGDPH1046E	ME/M.Tech and PhD	23-08-2010	Aerodynamics	26	2	1	Associate Professor	18-06-2018	18-06-2018	Regular	Yes		No
14	B. Surekha	AJGPB8519E	ME/M.Tech and PhD	09-06-2015	Production Engg.	40	4	0	Associate Professor	01-03-2018	03-01-2014	Regular	Yes		No
15	Barun Sharma	FEUPS8452F	M.E/M.Tech	08-06-2004	Design Engg.				Assistant Professor	14-07-2017	14-07-2017	Regular	Yes		No
16	Basant Ku. Nanda	ABSPN1194M	ME/M.Tech and PhD	17/05/2019	Production Engg.	24	3	1	Professor	02-12-2019	31-03-2007	Regular	Yes		No
17	Basanta Kumar Rana	ARGPR5477B	ME/M.Tech and PhD	05-03-2018	Thermal Engg.	31	2	2	Assistant Professor	19-06-2017	19-06-2017	Regular	Yes		No
18	Bharat Ch. Routara	ABYPR0885M	ME/M.Tech and PhD	24-12-2008	Production Engg.	87	12		Professor	02-12-2019	18-03-2009	Regular	Yes		Yes
19	Bijaya Bijeta Nayak	AHLPN2585R	ME/M.Tech and PhD	19-03-2016	Production Engg.	44	2		Assistant Professor	04-07-2016	04-07-2016	Regular	Yes		No
20	Chinmaya Mishra	BFUPM6970B	ME/M.Tech and PhD	10-07-2014	Thermal Engg.				Assistant Professor	18-06-2014	18-06-2014	Regular	Yes		No
21	Debjyoti Sahu	BXSPS2113N	ME/M.Tech and PhD	08-06-2015	Automobile Engg.	19	1	1	Assistant Professor	09-07-2018	09-07-2018	Regular	Yes		No
22	Deepak Singhal	DDXPS0444B	ME/M.Tech and PhD	22-10-2019	Industrial Engg.	18	1	1	Assistant Professor	14-07-2010	14-07-2010	Regular	Yes		No
23	Dipti Kanta Das	ANBPD0690H	ME/M.Tech and PhD	04-11-2015	Production Engg.	69	4		Associate Professor	02-12-2019	25-07-2011	Regular	Yes		No
24	Gyan Sagar Sinha	BYIPS9274F	ME/M.Tech and PhD	21-11-2017	Thermal Engg.	9	1		Assistant Professor	27-06-2018	27-06-2018	Regular	Yes		No
25	Hemalata Jena	ALKPJ1715E	ME/M.Tech and PhD	05-10-2015	Production Engg.	20	1		Assistant Professor	24-11-2014	24-11-2014	Regular	Yes		No

26	Isham Panigrahi	AHYPP5646A	ME/M. Tech and PhD	04-10-2014	Design Engg.	47	8	1	Associate Professor	01-09-2014	04-04-2006	Regular	Yes		No
27	Jitendra Ku. Patel	DXLPP0353Q	ME/M. Tech and PhD	20-06-2018	Thermal Engg.	11	1	1	Assistant Professor	03-07-2017	03-07-2017	Regular	Yes		No
28	Kalyani Mohanta	AHAPM9601Q	ME/M. Tech and PhD	15-09-2007	Material Sc. & Engg.	27	2		Professor	18-06-2021	18-06-2021	Regular	Yes		No
29	Kamal Kishore Joshi	AIUPJ2438F	ME/M. Tech and PhD	23-05-2013	Design Engg.	16			Assistant Professor	19-07-2013	19-07-2013	Regular	Yes		No
30	Kunja Bihari Sahu	AHZPS1481M	ME/M. Tech and PhD	29-07-2009	Thermal Engg.	12	5	1	Professor	15-09-2010	15-09-2010	Regular	Yes		No
31	Lalit Kumar Pothal	AEIPP0201J	ME/M. Tech and PhD	09-11-2019	Industrial Engg.	6		1	Professor	31-01-2014	31-01-2014	Regular	Yes		No
32	Madhu mita Mohanty	BZDPM1485N	M.E/M.Tech	08-11-2016	Design Engg.	4			Assistant Professor	20-06-2016	20-06-2016	Regular	Yes		No
33	Manoj Ukamandal	ABLPU5573C	ME/M. Tech and PhD	04-11-2019	Thermal Engg.	17	3		Assistant Professor	08-12-2015	08-12-2015	Regular	Yes		No
34	Mantra Prasad Satpathy	CEPPS0669E	ME/M. Tech and PhD	10-07-2015	Production Engg.	44	3		Assistant Professor	27-06-2017	27-06-2017	Regular	Yes		No
35	Matruprasad Rout	APQPR7559N	ME/M. Tech and PhD	12-07-2012	Thermal Engg.				Assistant Professor	20-07-2018	20-07-2018	Regular	Yes		No
36	Md. Ehtesham Hasan	AERPH0779N	ME/M. Tech and PhD	02-12-2016	Design Engg.	11	2		Assistant Professor	19-06-2017	19-06-2017	Regular	Yes		No
37	Mohd. Sadique Khan	AJAPK2614H	ME/M. Tech and PhD	07-07-2004	Industrial Engg.	11			Associate Professor	02-12-2013	02-12-2013	Regular	Yes		No
38	Mrutyunjay Jena	ADQPJ1555L	ME/M. Tech and PhD	30-01-1997	Aero Propulsion	1			Professor	01-10-2015	01-10-2015	Regular	Yes		No
39	Nilotpal Bej	APLPB9497E	ME/M. Tech and PhD	12-07-2017	Thermal Engg.	9	1	1	Assistant Professor	18-06-2018	18-06-2018	Regular	Yes		No

40	Nitin Sharma	DEWPS9529P	ME/M. Tech and PhD	16-10-2018	Design Engg.	73	3	1	Associate Professor	02-12-2019	02-07-2010	Regular	Yes		No
41	P.Chandra Sekhar	ALDPP8328C	ME/M. Tech and PhD	15-07-2010	Design Engg.	29	6	1	Professor	01-09-2014	18-10-2001	Regular	Yes		No
42	Pintu Kumar	BVDPK7497J	ME/M. Tech and PhD	02-11-2020	Production Engg.	0			Assistant Professor	02-08-2019	02-08-2019	Regular	Yes		No
43	Pooja Chaubdar	AYXPC8555F	M.E/M. Tech	20-07-2016	Aero Propulsion	6			Assistant Professor	25-06-2018	25-06-2018	Regular	Yes		No
44	Prakash Ghose	ASMPG9284C	ME/M. Tech and PhD	17/05/2017	Thermal Engg.	22	5	1	Assistant Professor	15-07-2008	15-07-2008	Regular	Yes		No
45	Prakash Kumar Sahu	GKNPS5019E	ME/M. Tech and PhD	23-06-2017	Production Engg.	24			Assistant Professor	03-07-2017	03-07-2017	Regular	Yes		No
46	Priyabrat Mohapatra	AVEPM9705D	ME/M. Tech and PhD	15-11-2013	Industrial Engg.	10	1		Assistant Professor	01-08-2013	01-08-2013	Regular	Yes		No
47	Pruthwiraj Sahu	CHPPS4565L	ME/M. Tech and PhD	14-08-2021	Design Engg.	14			Assistant Professor	19-06-2014	19-06-2014	Regular	Yes		No
48	Purna Ch. Mishra	AXIPM9967H	ME/M. Tech and PhD	04-07-2012	Thermal Engg.	140	17	1	Professor	01-09-2017	01-07-2009	Regular	Yes		No
49	Pushkar Jha	AKHPJ9914D	ME/M. Tech and PhD	07-07-2016	Design Engg.	11	2	1	Assistant Professor	24-07-2017	24-07-2017	Regular	Yes		No
50	Radha Kanta Sarangi	ADUPS7565H	ME/M. Tech and PhD	11-06-2016	Thermal Engg.	27	3		Associate Professor	02-08-2017	02-08-2017	Regular	Yes		No
51	Rahul	ANKPR7575A	ME/M. Tech and PhD	19-09-2017	Production Engg.	27	2		Assistant Professor	19-06-2017	19-06-2017	Regular	Yes		No
52	Rajiv Lochan Mohanty	BGSPM4619J	ME/M. Tech and PhD	13-07-2018	Thermal Engg.	14			Assistant Professor	24-06-2019	24-06-2019	Regular	Yes		No
53	Ram Kumar Kesharwani	BTZPK6083Q	ME/M. Tech and PhD	07-08-2017	Production Engg.	4			Assistant Professor	30-06-2017	30-06-2017	Regular	Yes		No

54	Ramanuj Kumar	BPHPK4297J	ME/M. Tech and PhD	05-11-2018	Production Engg.	105	4		Assistant Professor	02-07-2012	02-07-2012	Regular	Yes		No
55	Ranjan Kumar Behera	AUIPB9432H	ME/M. Tech and PhD	28-02-2022	Design Engg	22			Assistant Professor	07-07-2014	07-07-2014	Regular	Yes		No
56	Rasmi Ranjan Behera	AXWPB8432C	ME/M. Tech and PhD	10-06-2019	Production Engg.	11	2		Assistant Professor	26-06-2019	26-06-2019	Regular	Yes		No
57	Rishitosh Ranjan	AXHPR4595H	ME/M. Tech and PhD	01-05-2013	Thermal Engg.	7			Assistant Professor	01-07-2013	01-07-2013	Regular	Yes		No
58	Rita Kumari Sahu	BQLPS2362D	ME/M. Tech and PhD	11-01-2020	Production Engg.	8			Assistant Professor	13-08-2012	13-08-2012	Regular	Yes		No
59	Ruby Mishra	ALDPM5215B	ME/M. Tech and PhD	19-10-1977	Design Engg.	56	8		Associate Professor	01-09-2014	20-10-2010	Regular	Yes		No
60	Sambit Kumar Mohapatra	AVRPM0797J	ME/M. Tech and PhD	27-07-2017	Production Engg.	13	3	1	Assistant Professor	06-07-2017	06-07-2017	Regular	Yes		No
61	Samiran Samanta	DUKPS2524E	ME/M. Tech and PhD	02-04-2015	Thermal Engg.	36	1		Assistant Professor	24-07-2017	24-07-2017	Regular	Yes		No
62	Santosh Ku. Nayak	AEAPN4869G	ME/M. Tech and PhD	31-10-2016	Thermal Engg.	16	2	1	Associate Professor	01-03-2018	10-04-2010	Regular	Yes		No
63	Santosh Kumar Hotta	AEWPH0641E	ME/M. Tech and PhD	01-07-2013	Thermal Engg.	8			Assistant Professor	06-08-2019	06-08-2019	Regular	Yes		No
64	Saranjit Singh	AOMPS8904F	ME/M. Tech and PhD	11-04-2007	Production Engg.	27	6	1	Professor	15-05-2009	15-05-2009	Regular	Yes		No
65	Sasmita Sahu	CZQPS9557K	ME/M. Tech and PhD	20-12-2016	Design Engg.	25	2		Assistant Professor	03-02-2017	03-02-2017	Regular	Yes		No
66	Satya Prakash Kar	AMOPK2795E	ME/M. Tech and PhD	12-09-2015	Thermal Engg.	36	6		Associate Professor	01-09-2014	26-06-2007	Regular	Yes		No
67	Shanta Chakrabarty	AMKPC5617M	ME/M. Tech and PhD	24-02-2016	Material Sc. & Engg.	26	4		Assistant Professor	31-07-2018	31-07-2018	Regular	Yes		No

68	Shivaraman	ARDPT0353P	ME/M. Tech and PhD	03-07-2012	Production Engg.				Assistant Professor	20-07-2017	20-07-2017	Regular	Yes		No
69	Siba Prasad Behera	BUOPB5071M	M.E/M. Tech	27/06/2017	Thermal Engg.	4			Assistant Professor	07-07-2017	07-07-2017	Regular	Yes		No
70	Smaranika Nayak	AFNPN8025J	ME/M. Tech and PhD	20-06-2012	Design Engg.	18			Assistant Professor	06-07-2015	06-07-2015	Regular	Yes		No
71	Smita Rani Panda	CPJPP0372N	M.E/M. Tech	04-07-2018	Production Engg.	11			Assistant Professor	01-07-2019	01-07-2019	Regular	Yes		No
72	Smitirupa Pradhan	ASXPP3835H	ME/M. Tech and PhD	05-12-2018	Design Engg.	15	1		Assistant Professor	02-01-2019	02-01-2019	Regular	Yes		No
73	Sourabh Rajwade	BSFPR8215Q	M.E/M. Tech	05-07-2012	CAD/CAM				Assistant Professor	07-04-2021	07-04-2021	Regular	Yes		No
74	Spandan Guha	AYIPG7424Q	ME/M. Tech and PhD	28-11-2018	Production Engg.	21	1		Assistant Professor	20-07-2018	20-07-2018	Regular	Yes		No
75	Srikant Panigrahi	AKZPP8785A	M.E/M. Tech	20-10-2015	Avionics	2			Assistant Professor	29-01-2020	29-01-2020	Regular	Yes		No
76	Suchismita Satapathy	CEJPS2747M	ME/M. Tech and PhD	09-07-2014	Industrial Engg.	85	8	1	Associate Professor	01-09-2014	04-02-2013	Regular	Yes		No
77	Sudeshna Roy	ABYPR0821P	ME/M. Tech and PhD	27-08-2009	Material Sc. & Engg.	32	8		Associate Professor	24-08-2015	24-08-2015	Regular	Yes		No
78	Sudhansu Dubey	CLTPD7631L	M.E/M. Tech	10-04-2012					Associate Professor	07-10-2021	07-10-2021	Regular	Yes		No
79	Sudhansu Sekhar Patro	BNDPP3433P	M.E/M. Tech	30-08-2014	Design Engg.	8			Assistant Professor	30-06-2015	30-06-2015	Regular	Yes		No
80	Sumanta Choudhuri	AFBPC6436J	ME/M. Tech and PhD	27-08-2019	Thermal Engg.	25	2		Associate Professor	02-12-2019	13-07-2012	Regular	Yes		No
81	Surendra Ku. Ghadei	AMRPG5982C	ME/M. Tech and PhD	03-07-2019	Thermal Engg.	1	1		Assistant Professor	18-07-2012	18-07-2012	Regular	Yes		No
82	Sushant Ku. Tripathy	ABDPT5002B	ME/M. Tech and PhD	22-08-2011	Industrial Engg.	54	9	1	Professor	16-07-2012	16-07-2012	Regular	Yes		No
83	Swarup Kumar Nayak	APGPN8418Q	ME/M. Tech and PhD	10-09-2019	Thermal Engg.	49	5	1	Assistant Professor	24-11-2014	24-11-2014	Regular	Yes		No

84	Swayam Bikash Mishra	BDTPM4417J	ME/M. Tech and PhD	16-07-2015	Production Engg.	25	4		Assistant Professor	05-12-2016	05-12-2016	Regular	Yes		No
85	Tanmoy Mahanty	AHAPM9806F	ME/M. Tech and PhD	19-07-2012	Production Engg.	3	2		Professor	01-03-2018	04-03-1999	Regular	Yes		No
86	Tarak Kumar Sahoo	BKRPS4392H	ME/M. Tech and PhD	07-11-2012	Thermal Engg.	6			Assistant Professor	24-11-2014	24-11-2014	Regular	Yes		No
87	Usharani Rath	BIWPR9015B	ME/M. Tech and PhD	11-07-2007	Production Engg.				Assistant Professor	01-07-2013	01-07-2013	Regular	Yes		No
88	Vijay Kumar Mishra	ARXPM6335L	ME/M. Tech and PhD	08-02-2017	Thermal Engg.	29	2	1	Assistant Professor	20-06-2016	20-06-2016	Regular	Yes		No

### 5.1. Student-Faculty Ratio (SFR) (20)

No. of UG Programs in the Department: 4

BTech in Aerospace Engineering						
	CAY		CAYm1		CAYm2	
	(2022-23)		(2021-22)		(2020-21)	
Year of Study	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students
2nd Year	60	0	60	0	0	0
3rd Year	60	0	0	0	0	0
4th Year	0	0	0	0	0	0
<b>Sub-Total</b>	<b>120</b>	<b>0</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total</b>		<b>120</b>		<b>60</b>		<b>0</b>

BTech in Mechanical (Automobile) Engineering						
	CAY		CAYm1		CAYm2	
	(2022-23)		(2021-22)		(2020-21)	
Year of Study	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students
2nd Year	60	2	60	6	60	12
3rd Year	60	6	60	12	60	12
4th Year	60	12	60	12	60	12
<b>Sub-Total</b>	<b>180</b>	<b>20</b>	<b>180</b>	<b>30</b>	<b>180</b>	<b>36</b>
<b>Total</b>		<b>200</b>		<b>210</b>		<b>216</b>

BTech in Mechanical Engineering						
	CAY		CAYm1		CAYm2	
	(2022-23)		(2021-22)		(2020-21)	
Year of Study	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students
2nd Year	180	18	180	18	180	34
3rd Year	180	18	180	34	180	36
4th Year	180	34	180	36	180	36
<b>Sub-Total</b>	<b>540</b>	<b>70</b>	<b>540</b>	<b>88</b>	<b>540</b>	<b>106</b>
<b>Total</b>		<b>610</b>		<b>628</b>		<b>646</b>

BTech in Mechatronics Engineering						
	CAY		CAYm1		CAYm2	
	(2022-23)		(2021-22)		(2020-21)	
Year of Study	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students
2nd Year	60	10	60	3	0	0
3rd Year	60	3	0	0	0	0
4th Year	0	0	0	0	0	0
<b>Sub-Total</b>	<b>120</b>	<b>13</b>	<b>60</b>	<b>3</b>	<b>0</b>	<b>0</b>
<b>Total</b>		<b>133</b>		<b>63</b>		<b>0</b>
Grand Total	1063		961		862	

**No. of PG Programs in the Department: 1**

MTech in Mechanical Engineering						
	CAY(2022-23)		CAYm1(2021-22)		CAYm2 (2020-21)	
Year of Study	Sanction Intake		Sanction Intake		Sanction Intake	
1st Year	18		18		18	
2nd Year	18		18		18	
<b>Total</b>	<b>36</b>		<b>36</b>		<b>36</b>	
Grand Total	36	36	36	36		

**SFR**

Description	CAY(2022-23)	CAYm1 (2021-22)	CAYm2 (2020-21)
Total No. of Students in the Department(S)	1063 (Sum total of all (UG+PG) students)	997 (Sum total of all (UG+PG) students)	898 (Sum total of all (UG+PG) students)
No. of Faculty in the Department(F)	76 (F1)	88 (F2)	84 (F3)
Student Faculty Ratio(SFR)	13.98 (SFR1=S1/F1)	11.33 (SFR2=S2/F2)	10.98 (SFR3=S3/F3)
Average SFR	11.92 (SFR=(SFR1+SFR2+SFR3)/3)		



F=Total Number of Faculty Members in the Department (excluding first year faculty)		
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**Note:**

All the faculty whether regular or contractual (except Part-Time), will be considered. The contractual faculty (doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Faculty Student Ratio. However, following will be ensured in case of contractual faculty:

1. Shall have the AICTE prescribed qualifications and experience.
2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.
3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit

**5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:**

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY(2022-23)	76	00
CAYm1(2021-22)	88	00
CAYm2(2020-21)	84	00

**Average SFR for three assessment years : 11.92**  
**Assessment SFR : 20**

**5.2. Faculty Cadre Proportion (20)**

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2022-23)	4	14	11	12	25	50
CAYm1(2021-22)	5	13	11	13	33	62
CAYm2(2020-21)	4	12	9	13	29	59
Average Numbers	4.33	13	10.33	12.6	32.33	57

**Cadre Ratio Marks [ (AF1 / RF1) + [(AF2 / RF2) \* 0.6] + [ (AF3 / RF3) \* 0.4] ] \* 10 : 20.00**

**5.3. Faculty Qualification (20)**

	X	Y	F	$FQ = 2.0 \times [(10X + 4Y)/F]$
<b>CAY(2022-23)</b>	67	09	53	26.6
<b>CAYm1(2021-22)</b>	79	09	50	33
<b>CAYm2(2020-21)</b>	74	10	45	34.7
<b>Average Assessment</b>				31.4

**5.4. Faculty Retention (10)**

Description	2021-22 (CAYm1)	2022-23 (CAY)
No of Faculty Retained	82	76
Total No of Faculty	82	76
% of Faculty Retained	100	86.4
Average : 100.00		
Assessment Marks : 10.00		

**5.5. Faculty competencies in correlation to Program Specific Criteria (10)**

Following table explains the Faculty competencies in correlation to Program Specific Criteria:

Name of the Faculty	Subject Specialization	Research Specialization	Research Paper Publications (last 3 years including CAY)	Course Development	Mapping of capabilities to PSO
Abhilas Swain	Thermal Engg.	Heat Transfer, Thermal energy storage, Refrigeration and Airconditioning	34	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Achinta Sarkar	Thermal Engg.	Performance, combustion and emission analysis of diesel engines in dual fuel, RCCI, PCCI and HCCI modes	9	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Ajay Kumar Behera	Design Engg.	High strain material behavior, Cold spray coating, Nozzle design, 3D Printing, CFD and FEM	2	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Akshaya Ku. Rout	Thermal Engg.	Renewable Energy, Biodiesel	24	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Ambesh Kumar	Design Engg.	Structural Vibration Control, Mechanics of Composites, Finite element analysis.	8	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3

Amlana Panda	Production Engg.	Hard Machining, Machining Performances of materials, Performance analysis on coated carbide, and uncoated cutting tool in machining using various working environments	78	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Anil Kumar Rout	Thermal Engg.	Thermal Sensor, Thermo couples, Thin Film, gauges shock & tubeshock tunnel	12	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Anish Pandey	Design Engg.	Wheeled Robot Navigation and Control, Cleaning robot, Soft Computing Techniques, optimization algorithm, micro robots, Human Robots, Aerial Robots	52	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Ashok Ku. Sahoo	Production Engg.	• Machinability of materials: metallic/non-metallic/composite materials • Hard Turning • Composite material fabrication & machining (Al/SiCp reinforced MMC	156	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Ashwani Kumar	Mechatronics Engg.	Tribology, Condition Monitoring, Lubrication and Mechatronics.	14	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Asit Behera	Production Engg.	Superalloy, Laser welding, Optimization Techniques, EDM	18	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Atal Bihari Harichandan	Aerodynamics	Aerodynamics, Chemical Looping Combustion, Sea-Ice Interaction	26	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
B. Surekha	Production Engg.	Advanced casting methods, Functionally graded materials, modelling and simulation of manufacturing systems and soft computing	40	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Basant Ku. Nanda	Production Engg.	Abrasive jet machining, Electrical discharge machining, CNC, EDM, FDM	24	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Basanta Kumar Rana	Thermal Engg.	Computational Fluid Dynamics, Two phase flow, Gas-liquid and liquid-liquid flow, Bubble and drop dynamics, interfacial dynamics, Heat Transfer, Natural and Mixed Convection flows	31	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Bharat Ch. Routara	Production Engg.	Composite materials, Surface morphology, Micro-machining, Cryogenic machining, Multi-criteria decision-making and optimization	87	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Bijaya Bijeta Nayak	Production Engg.	Non-conventional machining processes, process modelling, and quality engineering	44	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Debjyoti Sahu	Automobile Engg.	Renewable Energy Technology, Automobile Engineering, Refrigeration	19	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Deepak Singhal	Industrial Engg.	Decision modelling, Sustainability in Supply chain, Operations management, supply chain management, operation research	18	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Dipti Kanta Das	Production Engg.	Composite fabrication and characterization, machining of composites and hard materials, tribology, multi-criteria decision-making, optimization and simulation	69	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Gyan Sagar Sinha	Thermal Engg.	Electrostatic precipitator, Cold flow in bell, Commercial burners	9	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Hemalata Jena	Production Engg.	Tribology, Composite material, Gear Design, Pressure vessel	20	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3

Isham Panigrahi	Design Engg.	Structural Dynamics, NDT, NVH, FEM Analysis, Composite Materials, Vibration, Noise, Machine Condition Monitoring, Electric & Solar Hybrid vehicles, Automotive Vehicle Dynamics, and Advanced Mobility Engineering	47	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Jitendra Ku. Patel	Thermal Engg.	Computational fluid dynamics, Multiphase/multi-fluid flows, Immersed boundary method, Heat and Mass transfer	11	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Kalyani Mohanta	Material Sc. & Engg	Colloidal processing, ceramic fabrication	27	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Kamal Kishore Joshi	Design Engg.	Advance composites, FEM, Functionally Graded Materials, Vibration, Stability Behaviour	16	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Kunja Bihari Sahu	Thermal Engg.	Heat transfer, Combustion	12	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Lalit Kumar Pothal	Industrial Engg.	Production Operations	6	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Madhumita Mohanty	Design Engg.	Machine Design & Analysis	4	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Manoj Ukamanal	Thermal Engg.	Impingement heat transfer, Nano-particle and nanofluid application in heat transfer, Computational fluid dynamics, Hard Machining, Thermal Systems Design and Optimization and Run-out table in steel rolling mills	17	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Mantra Prasad Satpathy	Production Engg.	Solid state joining and characterization, Hybrid welding processes, simulation and modelling of advanced manufacturing processes, multi-criteria design making and optimization	44	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Md. Ehtesham Hasan	Design Engg.	Machine Design, Power Hydraulics, System Modelling and Simulation	11	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Mrutyunjaya Jena	Aero Propulsion	Gas Turbine Engine For Aero And Land Based Applications	1	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Nilotpala Bej	Thermal Engg.	Thermal Engineering	9	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Nitin Sharma	Design Engg.	Vibro-acoustic Analysis of Composite Structures: I have worked on sound radiation from flat and curved shell panels Laminated/Sandwich composite structures/Curved structures with/without delamination	73	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
P.Chandra Sekhar	Design Engg.	High-Temperature Materials, CAD/CAM and CAE, 3DPLM, CIM, Materials Processing, Advanced Materials, Plasticity, Metal Forming, Powder Technology, Friction-Stir Welding, Response Surface Methodology, Metal Matrix Composites, Polymer Composites	29	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Pooja Chaudhar	Aero Propulsion	Aerodynamics, Gas dynamics	6	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Prakash Ghosh	Thermal Engg.	Heat and mass transfer, Combustion	22	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Priyabrata Mohapatra	Industrial Engg.	Supply Chain Management • Process Planning and Scheduling • Industrial Engineering • Robotic and Automation • Project Management • Optimization Methods • Manufacturing System • Operations Research	10	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3

Pruthwiraj Sahu	Design Engg.	Composite materials design and characterization	14	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Purna Ch. Mishra	Thermal Engg.	Multicomponent Droplet & Spray Combustion Bio and Nano Heat Transfer Dynamics and Control of Heat Transfer and Combustion Systems Jet and Spray Impingement Heat Transfer	140	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Pushkar Jha	Design Engg.	Materials Development, Tribology, Composite Materials	11	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Radha Kanta Sarangi	Thermal Engg.	Thermal and Fluid Engineering	27	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Rahul	Production Engg.	Micro and nano-machining processes, Conventional & non-conventional manufacturing processes, Laser machining/welding and surface modification, Cryogenics, Quality Optimization	27	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Rajiv Lochan Mohanty	Thermal Engg.	Nuclear Power Engineering, Single-Phase Heat Transfer, Boiling Heat Transfer, Computational Fluid Dynamics, Refrigeration & Air Conditioning, Microchannel and Droplet Dynamics	14	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Ram Kumar Kesharwani	Production Engg.	Friction Stir Welding, Sheet Metal Forming	4	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Ramanuj Kumar	Production Engg.	Hard Machining, High Speed Machining, Near Dry Machining, Nanofluid, Non Conventional Machining	105	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Ranjan Kumar Behera	Design Engg.	Mechanical Vibration, Artificial Intelligence Technique, Fault Detection, Fracture Mechanics, Adhesive Bonded Joints Analysis, Composite materials, and FGM.	22	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Rasmi Ranjan Behera	Production Engg.	Bio-ceramic coating, micro-machining, surface modification including surface texturing, surface coating and cladding, laser processing for biomedical applications	11	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Rishitosh Ranjan	Thermal Engg.	Vortex Induced Vibration, Semi Solid Metal Processing, Cooling Slope Casting, Computational Fluid Dynamics (Ansys Fluent)	7	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Rita Kumari Sahu	Production Engg.	Metal forming	8	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Ruby Mishra	Design Engg.	Machine Design, Machines and Mechanism, Kinematics of Robotics, FEM, Biomedical signal and image processing, Structural Analysis	56	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Sambit Kumar Mohapatra	Production Engg.	Metal Forming, Metal Matrix Composite, Severe Plastic Deformation	13	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Santosh Ku. Nayak	Thermal Engg.	Impingement Heat transfer, RAC, ICE>, Nano Particle, CFD and Nanofluid Applications, Heat exchanger design and analysis	16	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Santosh Kumar Hotta	Thermal Engg.	Fuel Based Engine Design and Modification, Gaseous fueled Internal Combustion Engine, Bio-fueled SI and CI Engine, Waste Heat Recovery, Drying Technology, Computational Fluid Dynamics and Thermo-Economic Analysis of Engineering Systems	8	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Saranjit Singh	Production Engg.	Tool wear, Aerospace components, erosion, fabrication process of metal-matrix composite	27	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3

Sasmita Sahu	Design Engg.	Artificial Intelligence, Structural Damage Detection, Vibration Engineering, Machine Design	25	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Satya Prakash Kar	Thermal Engg.	Phase Change Heat Transfer, CFD, Laser material Processing	36	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Shanta Chakrabarty	Material Sc. & Engg.	Multiscale Modeling of Materials, Nano-material Characterization, Strain-Gradient Plasticity and Size Effect, Microstructural Engineering, Crystallographic Texture, Dislocation Dynamics, Metal-forming, Thermo-mechanical Processing	26	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Siba Prasad Behera	Thermal Engg.	Aerodynamics and Propulsion	4	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Smaranika Nayak	Design Engg.	Vibration, Composite materials, Nano-composites	18	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Smita Rani Panda	Production Engg.	Bio-materials design, systems engineering, optimization techniques, composites manufacturing and characterization.	11	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Smitirupa Pradhan	Design Engg.	Dynamics in Railway vehicles, Multibody Systems, Contact Mechanics, Tribology and Natural fiber.	15	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Spandan Guha	Production Engg.	Thin Film Coating, Traditional & Non Traditional Machining	21	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Srikant Panigrahi	Avionics	Avionics	2	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Suchismita Satapathy	Industrial Engg	Industrial and production researches,	85	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Sudesna Roy	Material Sc. & Engg.	Materials Engineering, Metallurgy, Thin film	32	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Sudhansu Sekhar Patro	Design Engg.	Thin Coatings, Fatigue and Fracture, Structural Vibration	8	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Sumanta Choudhuri	Thermal Engg.	Non-Newtonian fluid flow and heat transfer, magnetohydrodynamics, thin film flow, perturbation methods.	25	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Surendra Ku. Ghadei	Thermal Engg.	Fluid Flow and Thermal Engineering, Process and Product Simulation	1	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Sushant Ku. Tripathy	Industrial Engg.	Decision modelling, Sustainability in Supply chain, Operations management, supply chain management, operations research	54	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Swarup Kumar Nayak	Thermal Engg	Biomass and Bioenergy; Alternative fuels; Combustion behavior; Fuels and emissions	49	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Swayam Bikash Mishra	Production Engg.	Rapid Prototyping, Fused Deposition Modeling, Rapid Tooling, Intelligent Manufacturing, Rapid manufacturing and Artificial Intelligence	25	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Tanmay Mohanty	Production Engg.	Hard Machining, High Speed Machining, Near Dry Machining, Nanofluid, Non Conventional Machining	3	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
Tarak Kumar Sahoo	Thermal Engg.	Fluid Science and Material Science	6	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3

Vijay Kumar Mishra	Thermal Engg.	Fluid and Thermal, Inverse Analysis, Conduction Radiation Heat Transfer in Porous Medium, Combustion	29	Course Handouts/Lecture, Notes/Videos	PSO1, PSO2 & PSO3
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*(List the program specific criteria and the competencies (specialization, research publications, course developments etc.,) of faculty to correlate the program specific criteria and competencies.)*

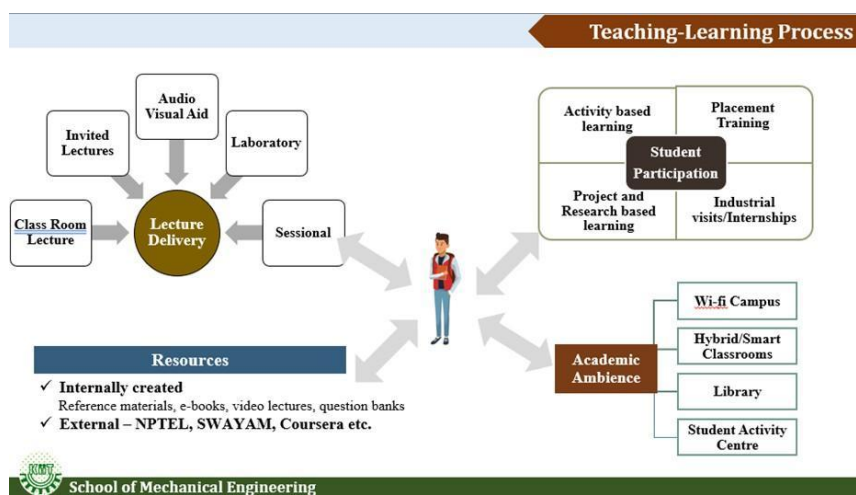
### 5.6. Innovations by the Faculty in Teaching and Learning (10)

Some of the innovations by the faculties in teaching & learning process:

- Mode of teaching is an amalgamation of the modern technology (e.g. power point presentation, audio-visual teaching etc.) with the traditional marker-duster method of teaching.
- The course handouts (lesson plan) are distributed among students by the subject teacher before the commencement of the classes.
- Study materials are shared to students via e-mail, websites, handouts etc.
- Students are encouraged to visit NPTEL lectures, browse different internet sites to increase their knowledge base about the subject. Moreover, through these activities students acquire relevant knowledge, which is beyond the prescribed university syllabus.
- Students are endowed with various online video lectures related to their curriculum, which is developed by faculty members of the school.
- The faculty members encourage students to participate in different technical competitions.
- Open-ended experiments are a part of the laboratory curriculum where the students apply the knowledge gained to during laboratory sessions to solve real life problems.
- The Tech-Fest and other technical events are organized by the school to create opportunities for students' self-development based on the gained technological knowledge.
- The school of Humanities regularly organizes soft skill classes for various schools, based on availability and requirement, to enhance the students' communication skills, grooming and body language to equip them for the professional world.
- Social network groups (e.g. WhatsApp) has been formed between the students and faculties in order to handle the queries of the students and provide the solutions 24x7.
- The school organizes a number of workshops/ conferences/ project contests/ symposium throughout the year for dissemination of knowledge on recent technologies.
- The school has established a number of centre of excellence in collaboration with external academic and research units for enhancing the skills of the students.
- Activity based learning has been introduced to analyze the abilities of students under different orientations based on problem solving, critical thinking focus, creation, interactivity focus, quiz,

reflection etc.

- The biggest resource for self-learning is the school library which not only possesses ample of books to meet the students’ syllabus-oriented needs, but it also houses numerous books by eminent national and international authors on a variety of topics which students may regularly access to sharpen and broaden their knowledge. The library also possesses a number of magazines and periodicals related to different branches of science and technology, which the students may readily access.
- The library subscribes to a host of online and printed journals, which are made readily available to the students.



**5.7. Faculty as participants in Faculty development/training activities/STTPs (15)**

Name of the faculty	Max 5 Per Faculty		
	2021-22 (CAYm1)	2020-21 (CAYm2)	2019-20 (CAYm3)
Abhilas Swain	5	5	5
Achinta Sarkar	5	5	5
Ajay Kumar Behera	5	5	5
Akshaya Ku. Rout	5	5	5
Ambesh Kumar	5	5	5
Amlana Panda	5	5	5
Anish Pandey	5	5	5
Atal Bihari Harichandan	5	5	5
B. Surekha	5	5	5
Basanta Kumar Rana	5	5	5



Bharat Ch. Routara	5	5	5
Bijaya Bijeta Nayak	5	5	5
Debjyoti Sahu	5	5	5
Deepak Singhal	5	5	5
Dipti Kanta Das	5	5	5
Gyan Sagar Sinha	5	5	5
Hemalata Jena	5	5	5
Isham Panigrahi	5	5	5
Manoj Ukamanal	5	5	5
Md. Ehtesham Hasan	5	5	5
Mrutyunjay Jena	5	5	5
Nitin Sharma	5	5	5
Pintu Kumar	5	5	5
Prakash Kumar Sahu	5	5	5
Priyabrata Mohapatra	5	5	5
Pruthwiraj Sahu	5	5	5
Radha Kanta Sarangi	5	5	5
Rahul	5	5	5
Ram Kumar Kesharwani	5	0	5
Ramanuj Kumar	5	5	5
Ranjan Kumar Behera	5	5	5
Rishitosh Ranjan	5	5	5
Rita Kumari Sahu	5	5	5
Ruby Mishra	5	5	5
Sambit Kumar Mohapatra	5	5	5
Santosh Kumar Nayak	5	5	5
Santosh Kumar Hotta	5	5	5
Satya Prakash Kar	5	5	5
Shanta Chakrabarty	5	5	5
Smaranika Nayak	5	5	5
Smitirupa Pradhan	5	5	5
Spandan Guha	5	5	5
Srikant Panigrahi	5	5	5
Ashok Ku. Sahoo	5	5	5
Asit Behera	5	5	5
Basant Ku. Nanda	5	5	5
Prakash Ghosh	5	5	5
Siba Prasad Behera	5	5	5

Anil Kumar Rout	5	5	5
Ashwani Kumar	5	5	5
Mantra Prasad Satpathy	5	5	5
Matruprasad Rout	5	5	5
Mohd. Sadique Khan	0	5	5
Nilotpala Bej	5	5	5
P.Chandra Sekhar	5	5	5
Pooja Chaubdar	5	5	5
Purna Ch. Mishra	5	5	5
Pushkar Jha	5	5	5
Rajiv Lochan Mohanty	5	5	5
Samiran Samanta	0	5	5
Saranjit Singh	5	5	5
Smita Rani Panda	5	5	5
Swayam Bikash Mishra	5	5	5
Tanmoy Mahanty	5	5	5
Jitendra Ku. Patel	5	5	5
Kalyani Mohanta	5	5	5
Kamal Kishore Joshi	5	5	5
Kunja Bihari Sahu	5	5	5
Lalit Kumar Pothal	5	5	5
Madhumita Mohanty	5	5	5
Suchismita Satapathy	5	5	5
Sudesna Roy	5	5	5
Sudhansu Sekhar Patro	5	5	5
Sumanta Choudhuri	5	5	5
Surendra Ku. Ghadei	5	5	5
Sushant Ku. Tripathy	5	5	5
Swarup Kumar Nayak	5	5	5
Vijay Kumar Mishra	5	5	5
Tarak Kumar Sahoo	5	5	5
Rasmi Ranjan Behera	5	5	5
Sasmita Sahu	5	5	5
<b>SUM</b>	<b>395</b>	<b>400</b>	<b>405</b>
<b>RF = Number of Faculty required to comply with 20:1 Student Faculty Ratio as per 5.1</b>	<b>43</b>	<b>49</b>	<b>42</b>

Assessment [3*(Sum / 0.5RF)]	55.12	48.98	57.86
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## 5.8. Research and Development (75)

### 5.8.1. Academic Research (20)

The following faculty members contribute to the schools standard academic research:

Name	Research Paper Publications (last three years including CAY)	PhD Guidance	PhD Granted during the Assessment year
Abhilas Swain	34	2	
Achinta Sarkar	9		
Ajay Kumar Behera	2		
Akshaya Ku. Rout	24	7	1
Ambesh Kumar	8	1	
Amlana Panda	78	4	1
Anil Kumar Rout	12		
Anish Pandey	52	4	
Ashok Ku. Sahoo	156	14	1
Ashwani Kumar	14	1	
Asit Behera	18		
Atal Bihari Harichandan	26	2	1
B. Surekha	40	4	0
Basant Ku. Nanda	24	3	1
Basanta Kumar Rana	31	2	2
Bharat Ch. Routara	87	12	
Bijaya Bijeta Nayak	44	2	
Debjyoti Sahu	19	1	1
Deepak Singhal	18	1	1
Dipti Kanta Das	69	4	
Gyan Sagar Sinha	9	1	
Hemalata Jena	20	1	
Isham Panigrahi	47	8	1
Jitendra Ku. Patel	11	1	1
Kalyani Mohanta	27	2	
Kamal Kishore Joshi	16		
Kunja Bihari Sahu	12	5	1
Lalit Kumar Pothal	6		1

Madhumita Mohanty	4		
Manoj Ukamanal	17	3	
Mantra Prasad Satpathy	44	3	
Md. Ehtesham Hasan	11	2	
Mrutyunjay Jena	1		
Nilotpala Bej	9	1	1
Nitin Sharma	73	3	1
P.Chandra Sekhar	29	6	1
Pooja Chaubdar	6		
Prakash Ghosh	22	5	1
Priyabrata Mohapatra	10	1	
Pruthwiraj Sahu	14		
Purna Ch. Mishra	140	17	1
Pushkar Jha	11	2	1
Radha Kanta Sarangi	27	3	
Rahul	27	2	
Rajiv Lochan Mohanty	14		
Ram Kumar Kesharwani	4		
Ramanuj Kumar	105	4	
Ranjan Kumar Behera	22		
Rasmi Ranjan Behera	11	2	
Rishitosh Ranjan	7		
Rita Kumari Sahu	8		
Ruby Mishra	56	8	
Sambit Kumar Mohapatra	13	3	1
Santosh Ku. Nayak	16	2	1
Santosh Kumar Hotta	8		
Saranjit Singh	27	6	1
Sasmita Sahu	25	2	
Satya Prakash Kar	36	6	
Shanta Chakrabarty	26	4	
Siba Prasad Behera	4		
Smaranika Nayak	18		
Smita Rani Panda	11		
Smitirupa Pradhan	15	1	
Spandan Guha	21	1	
Srikant Panigrahi	2		
Suchismita Satapathy	85	8	1
Sudesna Roy	32	8	
Sudhansu Sekhar Patro	8		
Sumanta Choudhuri	25	2	
Surendra Ku. Ghadei	1	1	
Sushant Ku. Tripathy	54	9	1
Swarup Kumar Nayak	49	5	1

Swayam Bikash Mishra	25	4	
Tanmay Mohanty	3	2	
Tarak Kumar Sahoo	6		
Vijay Kumar Mishra	29	2	1

**A number of faculty members have published their research papers in journals with high impact factors, as shown in the following table:**

Sl. No.	Title	Journal	Quartile	Impact Factor
1	Remanufacturing for the circular economy: Study and evaluation of critical factors	Conservation & Recycling Journal	Q1	13.716
2	Influence of injection timing on performance and combustion characteristics of compression ignition engine working on quaternary blends of diesel fuel, mixed biodiesel, and t-butyl peroxide	Journal of Cleaner Production	Q1	11.7
3	Achieving high performance and low emission in a dual fuel operated engine with varied injection parameters and combustion chamber shapes	Energy Conversion and Management	Q1	11.533
4	Influence of curing condition on thermo-mechanical properties of fly ash reinforced epoxy composite	Composites Part B: Engineering	Q1	11.322
5	Improvement of mechanical properties of hybrid composites through interply rearrangement of glass and carbon woven fabrics for marine application	Composites Part B: Engineering	Q1	11.322
6	Effect of using fibre reinforced epoxy adhesive on the strength of the adhesively bonded Single Lap Joints	Composites Part B: Engineering	Q1	11.322
7	Techno-economic and environmental analyses of a biomass based system employing solid oxide fuel cell, externally fired gas turbine and organic Rankine cycle	Journal of Cleaner Production	Q1	11.072
8	Acoustic responses of natural fibre reinforced nanocomposite structure using multiphysics approach and experimental validation	Advances in Nano Research	Q1	9.539
9	Effect of nano glass cenosphere filler on hybrid composite eigenfrequency responses-An FEM approach and experimental verification	Advances in Nano Research	Q1	9.539
10	Sustainability through remanufacturing of e-waste: Examination of critical factors in the Indian context	Sustainable Production and Consumption	Q1	8.921

11	Pre-and post-mixed hybrid biodiesel blends as alternative energy fuels-an experimental case study on turbo-charged direct injection diesel engine	Energy	Q1	8.857
12	Combustion characteristics, performances and emissions of a biodiesel-producer gas dual fuel engine with varied combustor geometry	Energy	Q1	8.857
13	Simultaneous reduction of nitric oxide and smoke opacity in TDI dual fuel engine fuelled with calophyllum-diesel blends and waste wood chip gas for modified inlet valve and injector nozzle geometry	Energy	Q1	8.857
14	Factors influencing the purchase intention of consumers towards remanufactured products: a systematic review and meta-analysis	International Journal of Production Research	Q1	8.568
15	Biomass-derived 2,5-dimethylfuran as a promising alternative fuel: An application review on the compression and spark ignition engine	Fuel Processing and Technology	Q1	8.21
16	Biomass-derived 2,5-dimethylfuran as a promising alternative fuel: An application review on the compression and spark ignition engine	Fuel Processing and Technology	Q1	8.21
17	The performance of turbocharged diesel engine with injected calophyllum inophyllum methyl ester blends and inducted babul wood gaseous fuels	Fuel	Q1	8.035
18	Effects of advanced injection timing and inducted gaseous fuel on performance, combustion and emission characteristics of a diesel engine operated in dual-fuel mode	Fuel	Q1	8.035
19	Influence of fish oil and waste cooking oil as post mixed binary biodiesel blends on performance improvement and emission reduction in diesel engine	Fuel	Q1	8.035
20	Influence of calophyllum inophyllum and Jojoba oil methyl ester blended with n-pentanol additive upon overall performance, combustion and emission characteristics of a TDI engine operated in natural aspirated mode	Fuel	Q1	8.035
21	Optimal deflection and stacking sequence prediction of curved composite structure using hybrid (FEM and soft computing) technique	Engineering with Computers	Q1	7.963
22	Effects of temperature and load on the creep performance of CNT reinforced laminated glass fiber/epoxy composites	International Journal of Mechanical Sciences	Q1	6.772
23	Thermo-economic performance analysis of Al <sub>2</sub> O <sub>3</sub> -water nanofluids — An experimental investigation	Journal of Molecular Liquids	Q1	6.633

24	Evaluation of vibroacoustic responses of laminated composite sandwich structure using higher-order finite-boundary element model	Composite Structure	Q1	6.603
25	Numerical frequency and SERR response of damaged (crack/delamination) multilayered composite under themomechanical loading: An experimental verification	Composite Structure	Q1	6.603
26	Nonlinear deflection responses of layered composite structure using uncertain fuzzified elastic properties	Composite Structure	Q1	6.603
27	Numerical prediction and experimental validation of free vibration responses of hybrid composite (Glass/Carbon/Kevlar) curved panel structure	Composite Structure	Q1	6.603
28	Effect of grading pattern and porosity on the eigen characteristics of porous functionally graded structure	Composite Structure	Q1	6.603
29	Strengthening mechanisms and modelling of mechanical properties of submicron-TiB <sub>2</sub> particulate reinforced Al 7075 metal matrix composites	Materials Science and Engineering: A	Q1	6.044
30	Measurement and machinability study under environmentally conscious spray impingement cooling assisted machining	Measurement: Journal of the International Measurement Confederation	Q1	5.131
31	Competition of roller rotation and horizontal crossflow to control the free surface cusp-induced air entrainment	Physics of Fluids	Q1	4.98
32	Numerical observation and analytical formulation of droplet impact and spreading around the thin vertical cylinder	Physics of Fluids	Q1	4.98
33	Rotational flux influenced cusp entrainment in a viscous pool	Physics of Fluids	Q1	4.98
34	Towards the understanding of bubble-bubble interaction upon formation at submerged orifices: A numerical approach	Chemical Engineering Science	Q1	4.889
35	Study of interaction pattern between bubbles at three inline orifices in a submerged pool	Chemical Engineering Science	Q1	4.889
36	Acceptance of remanufactured products in the circular economy: an empirical study in India	Management Decision	Q1	4.95
37	Exploration of bonding phenomenon and microstructural characterization during high-power ultrasonic spot welding of aluminum to steel sheets with copper interlayer	Ain Shams Engineering Journal	Q1	4.79

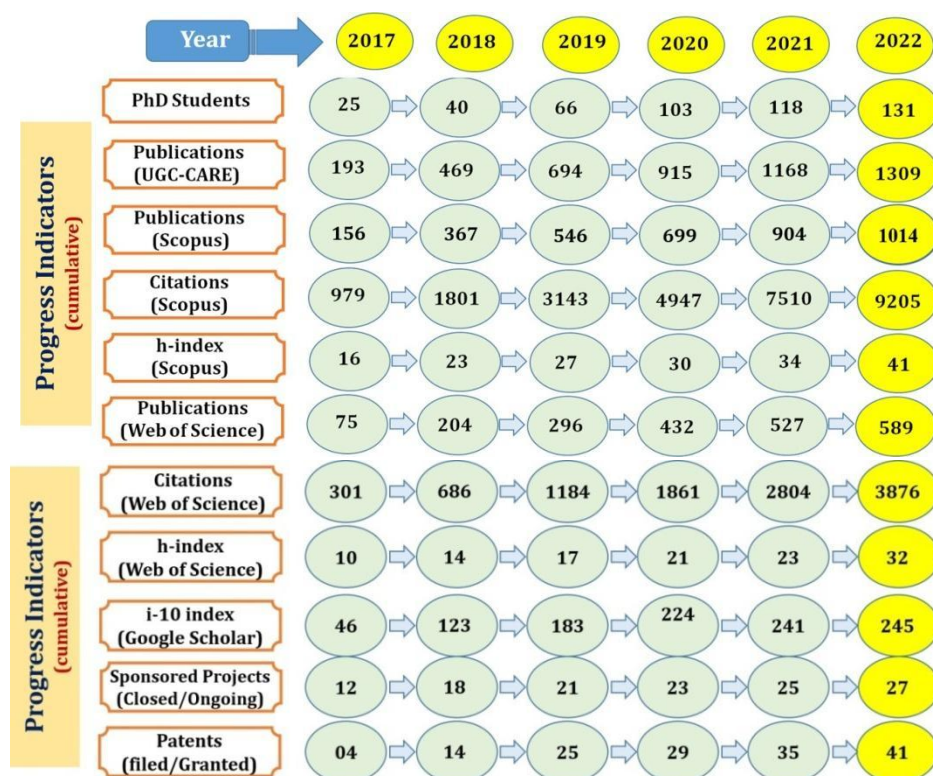
38	Effects of different electrical arrangements and Thomson effect on the system performance as well as the optimum allocation of thermocouples in a self-driven two-stage TEC & TEG	Thermal Science and Engineering Progress	Q1	4.56
39	Vibroacoustic analysis of thermo-elastic laminated composite sandwich curved panel: a higher-order FEM-BEM approach	International Journal of Mechanics and Materials in Design	Q1	4.011
40	Thermo-economic assessment of biomass gasification-based power generation system consists of solid oxide fuel cell, supercritical carbon dioxide cycle and indirectly heated air turbine	Clean Technologies and Environmental Policy	Q2	3.636
41	Competition of roller rotation and horizontal crossflow to control the free surface cusp-induced air entrainment	Physics of Fluids	Q1	3.521
42	Creep performance of CNT reinforced glass fiber/epoxy composites: Roles of temperature and stress	Journal of Applied Polymer Science	Q2	3.125
43	Finite element solution of stress and flexural strength of functionally graded doubly curved sandwich shell panel	Earthquake and Structures	Q2	2.02
44	Entropy generation analysis and cooling time estimation for a rotating vertical hollow tube in the air medium	ASME Journal of Heat Transfer	Q2	1.95
45	Thermo-Fluid Characteristics On Natural and Mixed Convection Heat Transfer From a Vertical Rotating Hollow Cylinder Immersed in Air: A Numerical Exercise	ASME Journal of Heat Transfer	Q2	1.95
46	Free Convection Heat Transfer From a Spherical Shaped Open Cavity	ASME Journal of Heat Transfer	Q2	1.95
47	Behavior of Gas Entrainment Inside Viscous Pool Due to Combined Influence of Symmetric Rotational Field and Freestream Flow of Air	ASME Journal of Fluids Engineering	Q2	1.99
48	Gaseous Entrainment Dynamics in a Viscous Pool Due to Combined Influence of Asymmetric Rotational Field and Crossflow of Air	ASME Journal of Fluids Engineering	Q2	1.99
49	Mixed convection heat transfer from swirling open spherical cavity	ASME Journal of Heat Transfer	Q2	1.95
50	Natural convection from an isothermally heated hollow vertical cylinder submerged in quiescent power-law fluids	ASME Journal of Thermal Science and Engineering Applications	Q2	1.89

**School of mechanical engineering has maintained an increasing trends in Academic Research as shown in the following figures:**

Progress Indicators							
Year	2017	2018	2019	2020	2021	2022	2023 (Cont..)
PhD Students	25	40	66	103	118	131	146



<b>Publications(UGC-CARE )</b>	193	469	694	915	1168	1392	1420
<b>Publications (Scopus)</b>	237	433	641	802	956	1148	1165
<b>Scopus Citations</b>	979	1801	3143	4947	7510	11452	11991
<b>Scopus h-index</b>	16	23	27	30	34	44	46
<b>Publications (WoS)</b>	109	312	431	644	762	904	920
<b>WoS Citations</b>	301	686	1184	2449	4574	8516	8632
<b>WoS h-index</b>	10	14	17	24	32	38	40
<b>Sponsored Projects (Cont./ Ongoing)</b>	12	18	21	23	25	28	31
<b>Patents (Filed/Granted)</b>	4	14	25	29	35	41	46



### 5.8.2. Sponsored Research (20)

<b>CAYm1 2021-2022</b>			
<b>Project Title</b>	<b>Duration</b>	<b>Funding Agency</b>	<b>Amount (in Rupees)</b>
An extensive investigation of microstructure evolution during heat treatments & hot forging of high strength $\beta$ -Ti alloy	2022-2025	AR&DB (DRDO)	16,65,686
High Temperature Materials Processing Unit	2022-2025	DST (FIST)	146,00,000
Machinability of Titanium alloy 5553 during Electro-Discharge Machining: Emphasis on Surface Integrity and Metallurgical Characteristics	2022-2025	SERB (TARE)	18,30,000
<b>CAYm2 2020-2021</b>			
<b>Project Title</b>	<b>Duration</b>	<b>Funding Agency</b>	<b>Amount (in Rupees)</b>
Experimental investigation on vibroacoustic performance of acoustic metamaterial structures using multiphysics approach	2020-2023	SERB (TARE)	18,30,000
Evaluation of inretleaving and matrix modification techniques on interlaminar fracture toughness and fatigue behaviour of carbon fiber/ epoxy composites	2020-2023	SERB (TARE)	18,30,000
Machinability assessment of graphene oxide and zirconium oxide enriched nano-cutting fluid assisted multi-nozzle injection MQL machining of hardened AISI D2 Steel	2020-23	AICTE-Research Promotion Scheme	16,65,686

CAYm3 2019-2020			
Project Title	Duration	Funding Agency	Amount (in Rupees)
Enhancement of mixing and entrainment in two layer shear flow by employing rotary rollers	2019-2022	SERB	16,70,900
Mechanical and tribological characterization of Wire arc additive manufactured Al-Si product.		AR&DB	14,50,000

CAYm4 2018-2019			
Project Title	Duration	Funding Agency	Amount (in Rupees)
Development of continuous gradient Functionally Graded Materials (FGMs) by using gravity die casting	2018-2021	DST-TARE Scheme	15,00,000

### 5.8.3. Development activities (15)

Faculty and students in the school of mechanical engineering carried out a variety of product development activities. Below is a list of selected products/processes/ideas for which a national or international patent has been filed by the school.

Year of Application	Name of the Faculty	Full name of Co-inventors	Title of the patent	Patent filed application no	Date of application	Full name of the Organization to whom applied	Published/Granted
CAY	Dr. Bijaya Bijeta Nayak,	Dr. Rita Sahu, Dr. Hema Jena, Dr. Sasmita Sahu	Design And Development Of Underground Pipe Installation And Restoration Technique	202231039764	11.07.2022	Intellectual Property India	Published 29.07.2022
	Swayam Bikas Mishra	Basant Kumar Nanda, Santosh Kumar Nayak, Bharat Chandra Routara, Dipabrata Banerjee, Satyabrata Barik, Madala Ajay Kumar, Anksh Pandey	Concept Patent (Device and Method For Scanning Objects In Threedimensions)	202231002940	19.01.2022	Intellectual Property India	Published
	Swayam Bikas Mishra	Basant Kumar Nanda, Santosh Kumar Nayak, Bharat Chandra Routara, Dipabrata Banerjee, Satyabrata Barik, Madala Ajay Kumar, Anksh Pandey	Design Patent (Device and Method For Scanning Objects In Threedimensions)	356949-001	19.01.2022	Intellectual Property India	Failed
CAYm1	Suchismita Satapathy	Hullash Chauhan, Ashok Kumar Sahoo	System And Method For Measuring Stress Level	202131000955	08.01.2021	Intellectual Property India	Published 18.03.2022

Swayam Bikas Mishra	None	Design Patent (Hand Sanitizer)	345047-001	19.06.2021	Intellectual Property India	Filed
Swayam Bikas Mishra	None	Volatile Components Collection Unit With Incineration Of Crude Plant Materials	2021103575	-	IP Australia: AusPat	Granted 23.6.2021
Debjyoti Sahu	None	Usage Of Cow Urine As An Additive With The Unusable Cooking Oil For The Emission Reduction From Diesel Engine Exhaust	2021101233	10.03.2021	Australian Government, IP Australia	Granted 28.4.2021
Basanta Kumar Nanda	None	Fluidized Hot Chamber For Abrasive Jet Machining	202031053304	08.12.2020	Intellectual Property India	Published 05.02.2021
Suchismita Satapathy	Hullash Chauhan, Ashok Kumar Sahoo	Multifunctional Headgear	202031000820	08-01-2020	Intellectual Property India	Granted 18.08.2022
Rajiva Lochan Mohanty	Mihir Kumar Das	Light Weight And Low Cost Tube Cross Section For Improved Thermal Performance Of Two-Phase Heat Exchanger	201931039188	16.09.2020	Intellectual Property India	Published 02.04.2021
Dr. Anish Pandey	Surjeet Singh, Vikas Singh Panwar, Rajiva Lochan Mohanty, Dr. Ashok Kumar Sahoo, Dr. Ramanuj Kumar	Object Having Stair Climbing And Descending System, With A Suspension Mechanism	202031020037	12.05.2020	Intellectual Property India	Published 19.11.2021
Dr. Ruby Mishra	Suman Dey, Manoranjan Mahapatra, Mallapi Debasree Gayatri Reddy, Abhisekh Kumar Dubey	Microcatheter Device	202031001863	15.01.2020	Intellectual Property India	Published 16.07.2021
Dr. Ramanuj Kumar	SHRESTHA, Dr. Anish Pandey, PRATIK SHASHWAT, ABHIJEET MOHAN, Ashok Kumar Sahoo	Unmanned Aerial Vehicle With Ground Traversing Capability	201931048949	28.11.2019	Intellectual Property India	Published 13.08.2021
Dr. Swayam Bikas Mishra	None	Motorized Day Bed Control Interfaced With An Ingrained System By Simple Physical Movements	201941031332	02.08.2019	Intellectual Property India	Published 06.09.2019
Dr. Bharat Chandra Routara	Biranchi Prasad Mishra, Santosh Kumar	High Performance Vegetable Oil Based Bio-	PCT/IB2019/056470	30.07.2019	World Intellectual Property	Published 13.02.2020

		Nayak	Dielectric Fluid For Electrical Discharge Machining			Organization	
	Dr. Swayam Bikash Mishra	None	A Smart Suit With Inbuilt Pesticide Sprayer For Agricultural Applications	201941011731	26.03.2019	Intellectual Property India	Published 26.04.2019

### Research laboratories:

<b>Production Research Lab:</b>
· Pre and Post Machining Characterization (surface roughness test, tool tip temperature measurement, tool wear measurement, micro-structural study etc.)
· Electro-Discharge Machining setup
· 3D printing & Rapid prototyping setup
<b>Thermal Research Lab:</b>
· Bio fuel production and testing facility
· Jet/Spray Impingement heat transfer setup
· Porous media combustion
<b>Composites development and characterization Lab:</b>
· Fabrication of polymer composites
· Characterization (erosion wear, INSTRON UTM, hardness and impact strength)
<b>Machining Research Lab:</b>
· Machining of metals and composites
· High speed lathe and CNC lathe
· Machining environments (Spray & MQL setup)
<b>Green Engine Technology Centre:</b>
· Multi fuel combustion analysis,
· Emission analysis,
· Engine modification and Alternative fuels
<b>Advanced Reliability Center (in Collaboration with SKF Bearings Ltd.)</b>
· Machine condition monitoring
· Bearing technology
· Alignment
· Asset management and reliability
<b>NI Innovation Centre (in Collaboration with NI Systems Ltd.)</b>
· LABView programming
· Data acquisition

· My-Rio signal processing
· Mechatronics

**Working Models:**

Students have created a variety of working models that have been displayed at numerous national and international forums and at the university level Project Expo. List of few such projects are shown below:



**"Supermileage Vehicle" Showcased at Shell Eco Marathon Asia, Sepang International Circuit, Kuala Lumpur, Malaysia**



**Team "KIIT AERO" participated in SAE Aero Design@ West and won NASA System Engineering Award**



**Solar Rickshaw**

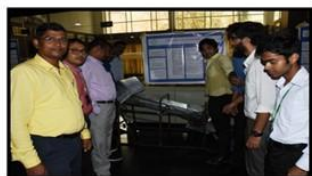


**"Solar Electric Boat" owned Best Innovative Award in MSME Trade Fare, held at BBSR, India**



**Overall 2nd Prize in ASME HPVC, VIT, India**

**Project Based Learning – B. Tech. Project Expo**



## KIIT Innovation Award



**Best B. Tech. Project - 2018**  
**Rover Dream Lander**

**Best B. Tech. Project - 2019**  
**Nano Satellite Structured,  
Thermal & Micro Pulsed Plasma  
Thruster**



### 5.8.4. Consultancy (from Industry) (20)

2021-22 (CAYm1)			
Project Title	Duration	Funding Agency	Amount(in Rupees)
Tracking of 'C' Weld	2021-2022	Corrosion Protection	152520
An automated Welding Track	2021-2022	Corrosion Protection	116424
Summer Courses by Faculty	2021-2022	KIIT University	176000
Design, Development	2021-2022	AKON Group of Company	53234
			Total Amount(X): 498178

2020-21 (CAYm2)			
Project Title	Duration	Funding Agency	Amount(in Rupees)
ICAMIE Confer	2020-2021	ICAMIE Confer	260000
ICTF Conference	2020-2021	ICTF Conference	229000
			Total Amount(Y): 489000

**2019-20 (CAYm3)**

Project Title	Duration	Funding Agency	Amount(in Rupees)
ICAMME Conference	2019-2020	ICAMME Conference	350000
ICAMPD Conference	2019-2020	ICAMPD Conference	150000
			Total Amount(Z): 500000

**5.9. Faculty Performance Appraisal and Development System (FPADS) (10)**

KIIT Deemed to be University has a well-defined system for performance based appraisal system (PBAS) for faculty members for all the assessment years. Performance appraisal ensures documenting and evaluating an employee performance with a view to enhancing work quality, output and efficiency of the staff members.

**Process of Implementation**

1. A data capturing system has been implemented through the SAP Integrated Management System to record faculty contributions in diverse areas including:

- Pedagogical activities
- Research publications (journal papers, conference papers, book chapters, books)
- Patents
- Sponsored research projects
- Consultancies
- PG/PhD Guidance
- Awards, recognition's and fellowships
- Collaborations and interactions with the outside world
- Contribution to research community through innovations, reviews, social outreach and extension activities
- Tutor-mentoring
- Administrative engagements and contributions
- Overall feedback and value additions.

**Analysis of PBAS**

- The performance assessment of the faculty member is done through an expert committee formed by IQAC.
- All the captured qualitative and quantitative data submitted by faculty members are analyzed and converted to Academic Performance Indicator Score (API Score) bases on the approved marking scheme.



## Awards and Rewards

- Faculty members are encouraged, appreciated and recognized for their academic, research, administrative and outreach activities performance by University Management.
- Faculty members with significant contributions are awarded as Best staff, Best Researcher, Best faculty.
- Faculty members who upgrade their research work through quality publications honored by management and institute through research incentive every year.
- The Institute has a well-defined policy for promotion of faculty members. API score and the significant contribution of the faculty member is considered as one of the major criteria in the promotion of faculty members.

## Effectiveness

- The performance based appraisal system has proven to be very effective in enhancing the quality of contribution of faculty members in teaching, research and other activities.
- There has been consistent increase in the number of research publications, funded projects, patents and faculty with PhD degree.

### Sample format for Faculty Self- Assessment

### Personal Information

Any changes in Personal Information from employee master record has to be done by HR cell

#### GENERAL INFORMATION

Name:	Bis	<input type="text"/>
Employee ID:	00	<input type="text"/>
Current Designation:	De	<input type="text"/>
Contact number:	94	<input type="text"/>
Official Email ID:		<input type="text"/>
Alternate Email ID:	DR	<input type="text"/>
Correspondence Address:		<input type="text"/>
Father's name:	Ra	<input type="text"/>
Mother's name:	Sh	<input type="text"/>
PAN card Number:	AN	<input type="text"/>
Aadhaar card number:		<input type="text"/>
Upload scan copy of Aadhaar:	<input type="button" value="Choose File"/> No file chosen	(Uploaded File name):
Passport number:		<input type="text"/>
Upload scan copy of Passport:	<input type="button" value="Choose File"/> No file chosen	(Uploaded File name):
Date of Birth:	19.06.1988	
Date of joining the teaching profession:	<input type="text"/>	
Date of Joining in KIIT-DU:	17.10.2016	
School under KIIT-DU:	Quality Assurance Cell	
Promotion from Assistant Professor to Associate Professor:	<input type="button" value="No"/>	
Promotion from Associate Professor to Professor:	<input type="button" value="No"/>	
Promotion from Professor to Senior Professor:	<input type="button" value="No"/>	

#### Publication ID details

* SCOPUS ID:	<input type="text"/>
* ORCID:	<input type="text"/>

**Details of Academic qualification**

**Undergraduate study details:**

Name of the Institute:

Name of the University:

Name of the Department:

Name of the Program:

Month of graduation:

Year of graduation:

**Post graduate study details**

Name of the Institute:

Name of the University:

Name of the Department:

Name of the Program:

Specialization (if any):

Month of post-graduation:

Year of post-graduation:

Area of research work conducted (if any):

**Doctoral study details**

Status of PhD:

**Post doctoral details**

Multiple entries are allowed

Post doctoral research pursued:

NET qualified:

GATE qualified:

**Professional memberships**

Multiple entries are allowed

Name of the Professional Body:

Membership number:

Professional membership history

**Experience**

Date of leaving (Study Leave):

Date of rejoining:

Research experience in months:

Industry experience in months:

Teaching experience in months:

**Pedagogical Activities:-**

### Theory Course Details

Multiple entries are allowed :-

Do you want to enter theory course details:

\* Academic year:

\* Level of the Course:

\* Course code:

\* Course name:

\* Semester:

\* Course credits:

\* Number of hours assigned for the course in the semester:

\* Total Number of contact hours in the entire semester:

\* Number of learning activities conducted:

Upload a single PDF document comprising descriptions/questions for different learning activities, mapping with COs and their detailed evaluation schemes  
 No file chosen

\* Total number of students in this course under your tutelage:

\* Number of students under your tutelage who have successfully completed the course:

\* Number of hours spent in the entire evaluation process for this course:

\* Number of Question papers set:

\* Number of Question papers moderated:

\* Total hours of invigilation duty:

**Attainment of COs**

CO1-Mention CO1 statement-Mention the attainment of CO1 in your group:

CO2-Mention CO2 statement-Mention the attainment of CO2 in your group:

CO3-Mention CO3 statement-Mention the attainment of CO3 in your group:

CO4-Mention CO4 statement-Mention the attainment of CO4 in your group:

CO5-Mention CO5 statement-Mention the attainment of CO5 in your group:

CO6-Mention CO6 statement-Mention the attainment of CO6 in your group:

### Practical Course Details

Multiple entries are allowed :-

Do you want to enter theory course details:

\* Academic year:

\* Level of the Course:

\* Course code:

\* Course name:

\* Semester:

\* Course credits:

\* Number of hours assigned for the course in the semester:

\* Total Number of contact hours in the entire semester:

\* Number of learning activities conducted:

Upload a single PDF document comprising descriptions/questions for different learning activities, mapping with COs and their detailed evaluation schemes  
 No file chosen

\* Total number of students in this course under your tutelage:

\* Number of students under your tutelage who have successfully completed the course:

\* Number of hours spent in the entire evaluation process for this course:

**Attainment of COs**

CO1-Mention CO1 statement-Mention the attainment of CO1 in your group:

CO2-Mention CO2 statement-Mention the attainment of CO2 in your group:

CO3-Mention CO3 statement-Mention the attainment of CO3 in your group:

CO4-Mention CO4 statement-Mention the attainment of CO4 in your group:

CO5-Mention CO5 statement-Mention the attainment of CO5 in your group:

CO6-Mention CO6 statement-Mention the attainment of CO6 in your group:

## Project/Thesis Details

Multiple entries are allowed :-

Do you want to enter theory course details:

\* Academic year:

\* Project Type:

\* Level of the Course:

\* Course code:

\* Course name:

\* Semester:

\* Course credits:

\* Student roll numbers:

\* Title of the Project:

\* Abstract:

\* Number of hours assigned for the course in the semester:

\* Total Number of contact hours in the entire semester:

\* Number of students who have successfully completed the course:

\* Number of hours spent in the entire evaluation process for this course:

\* List of publications:

\* Impact /Outcome of the project/thesis:

## Sessional Course Details

Multiple entries are allowed :-

Do you want to enter theory course details:

\* Academic year:

\* Level of the Course:

\* Course code:

\* Course name:

\* Semester:

\* Course credits:

\* Number of hours assigned for the course in the semester:

\* Total Number of contact hours in the entire semester:

Upload a single PDF document comprising descriptions/questions for:  
different learning activities, mapping with COs and their detailed evaluation  
schemes

No file chosen

\* Total number of students in this course under your tutelage:

\* Number of students who have successfully completed the course:

\* Number of hours spent in the entire evaluation process for this course:

### Attainment of COs

CO1-Mention CO1 statement-Mention the attainment of CO1 in your group:

CO2-Mention CO2 statement-Mention the attainment of CO2 in your group:

CO3-Mention CO3 statement-Mention the attainment of CO3 in your group:

CO4-Mention CO4 statement-Mention the attainment of CO4 in your group:

CO5-Mention CO5 statement-Mention the attainment of CO5 in your group:

CO6-Mention CO6 statement-Mention the attainment of CO6 in your group:

### Co-ordinator - Theory Course Details

Multiple entries are allowed :-

Do you want to enter theory course details:

\* Academic year:

\* Level of the Course:

\* Course code:

\* Course name:

\* Semester:

\* Course credits:

\* Number of hours assigned for the course in the semester:

\* Total Number of contact hours in the entire semester:

#### Attainment of COs

CO1-Mention CO1 statement-Mention the attainment of CO1 in your group:

CO2-Mention CO2 statement-Mention the attainment of CO2 in your group:

CO3-Mention CO3 statement-Mention the attainment of CO3 in your group:

CO4-Mention CO4 statement-Mention the attainment of CO4 in your group:

CO5-Mention CO5 statement-Mention the attainment of CO5 in your group:

CO6-Mention CO6 statement-Mention the attainment of CO6 in your group:

### Co-ordinator - Practical Course Details

Multiple entries are allowed :-

Do you want to enter theory course details:

\* Academic year:

\* Level of the Course:

\* Course code:

\* Course name:

\* Semester:

\* Course credits:

\* Number of hours assigned for the course in the semester:

\* Total Number of contact hours in the entire semester:

#### Attainment of COs

CO1-Mention CO1 statement-Mention the attainment of CO1 in your group:

CO2-Mention CO2 statement-Mention the attainment of CO2 in your group:

CO3-Mention CO3 statement-Mention the attainment of CO3 in your group:

CO4-Mention CO4 statement-Mention the attainment of CO4 in your group:

CO5-Mention CO5 statement-Mention the attainment of CO5 in your group:

CO6-Mention CO6 statement-Mention the attainment of CO6 in your group:

### Co-ordinator - Sessional / Project Course Details

Multiple entries are allowed :-

Do you want to enter theory course details:

\* Academic year:

\* Level of the Course:

\* Course code:

\* Course name:

\* Semester:

\* Course credits:

\* Number of hours assigned for the course in the semester:

\* Total Number of contact hours in the entire semester:

#### Attainment of COs

CO1-Mention CO1 statement-Mention the attainment of CO1 in your group:

CO2-Mention CO2 statement-Mention the attainment of CO2 in your group:

CO3-Mention CO3 statement-Mention the attainment of CO3 in your group:

CO4-Mention CO4 statement-Mention the attainment of CO4 in your group:

CO5-Mention CO5 statement-Mention the attainment of CO5 in your group:

CO6-Mention CO6 statement-Mention the attainment of CO6 in your group:

## Publication Details-Journals

## Publication Details - Journals

Multiple entries are allowed :-

Do you want to enter publication details:

\* Whether referred/peer reviewed:

\* Title of paper:

\* Full name of the Journal:

\* Publisher name:

\* Volume number of the journal:

\* Issue Number:

\* Page No:

\* Publication Month:

\* Publication Year:

Whether it is a joint publication:

\* ISSN/ISBN no:

\* Digital Object Identifier:

\* Indexing information

\* Web of Science:

\* SCOPUS:

\* UGC approved:

\* PUBMED:

Others:

\* URL of the journal webpage:

Is it an impact factor journal publication:

## Publication Details-Conferences

### Publication Details - Conferences

Multiple entries are allowed :-

Do you want to enter publication details:

\* Whether referred/peer reviewed:

\* Title of paper:

\* Full name of the conference:

\* Location:

\* Publisher name:

Page No:

\* Month the conference was held:

\* Year the conference was held:

Whether it is a joint publication:

\* ISSN/ISBN no:

\* Digital Object Identifier:

\* Indexing information

\* Web of Science:

\* SCOPUS:

\* UGC approved:

PUBMED:

Others:

\* URL of the conference webpage:

## Publication Details-Books

### Publication Details - Books

Multiple entries are allowed :-

Do you want to enter publication details:

\* Title of the Book:

\* Edition:

\* Page No:

\* Role of faculty:

\* Type of Publication:

\* Whether it is a joint publication:

\* ISSN/ISBN number:

\* Full name of the Publisher:

\* Full address of the Publisher:

\* Publisher category:

\* Month of Publication:

\* Year of Publication:

\* Whether translational work in Indian/foreign Language:

Upload the first few pages of the book, as a single PDF file clearly showing the name of the book, name of the author and their affiliation, name of the publisher, addition number and year of printing/publication.

No file chosen

## Learning Pedagogy

### ICT Mediated Teaching Learning Pedagogy, MOOCs and E-content

Multiple entries are allowed :-

Do you want to enter details:

\* Category:

\* Brief description:

\* Organization for which it was developed:

\* Platform used:

\* Whether open access:

\* Level:

\* URL Link:

\* Date since when the URL is active:

\* Whether it is a joint effort:

## Patents

Patents Policy Documentation

Multiple entries are allowed :-

Do you want to enter details:

\* Patent Title:

\* Patent Application number/ Patent number:

\* Patent type:

\* patent (National/International):

\* Organization to whom applied:

\* URL Link:

\* Status:

\* Whether it is a joint work:

\* Licensee fee (in INR):

\* Whether the technology has been transferred:

\* Whether commercialized:

\* Potential use of patent:

\* Earning from the patent during this period(optional):

Upload document in support of patent: publish/Granted clearly indicating the title, innovators/contributors/owner and their affiliation and the name of the publisher/Granting authority

No file chosen

Multiple entries are allowed :-

Do you want to enter details:  Yes

\* Title of the policy document:

\* Organization to whom the document is submitted:

\* Date of submission:

\* Level:

## Project/Consultancy

### SPONSORED PROJECT/CONSULTANCY

Multiple entries are allowed :-

Do you want to enter details:  Yes

\* Nature of the Project:

\* Title of the project:

\* Funding agency:

\* Name of the scheme/project/endowment/chairs:

\* Duration of project (in months):

\* Status:

\* Sanctioned date of project:

\* Sanctioned letter number/Ref no:

\* Date of Commencement:

\* Grants received/mobilized in INR:

\* Whether PI:

\* Whether it is a joint work:

\* Please upload supporting documents:  No file chosen

## Publication Statistics

### Publication Statistics Details

Multiple entries are not allowed :-

\* h-index of the faculty member as in Scopus:

\* h-index of the faculty member (based on publications in last five years):

\* Citations for the faculty member till date (as in Scopus):

\* Citations for the faculty corresponding to publications in last five years (as in Scopus):

## P.G Guidance

### P.G Guidance:-

Multiple entries are allowed :-

Have any of the postgraduate /dual degree students whom you have provided guidance in thesis been awarded degree during this per:  Yes

\* Student name:

\* Roll number:

Role with student:

\* Institute:

\* Title of the thesis:

\* Name of the Post-graduate program:

\* Does student have publication:

\* Upload Supporting Documents:  No file chosen

## Ph.d Guidance

### Ph.D Guidance:-

Multiple entries are allowed :-

Have any of the doctoral students whom you have provided guidance in thesis been awarded degree during this period:  Yes

\* Student name:

\* Roll number:

\* Role with student:

\* Institute:

\* Title of the thesis:

Scholar Publication:

Sponsored Project:

\* Upload Supporting documents:  No file chosen



## Awards and Fellowships

### Awards and Fellowships Details

☑ Multiple entries are allowed :-

Do you want to enter details: **Yes** ▼

\* Full Name of the Award/Fellowship:

\* Level:

\* Received from:

\* Full name of the awarding agency/body:

\* Address of the awarding agency:

\* Contact details of the awarding agency:

\* Date of receiving the award:

\* Upload Certificate/Supporting Document:  No file chosen

## Interaction with Outside World

Outreach Activity as Resource Person   Event Organised in the School   Faculty Improvement Program

### Invited Lectures / Resource Person / Paper Presentation in Seminars / Conferences

☑ Multiple entries are allowed :-

Do you want to enter details: **Yes** ▼

\* Role:

\* Title of invited lecture/topic/paper presented:

\* Title of the programme/conference/seminar:

\* Full name of the organizer:

\* Date of the event:

\* Level:

\* Location:

\* Upload Certificate:  No file chosen

\* Please Upload Supporting Documents:  No file chosen

Outreach Activity as Resource Person   Event Organised in the School   Faculty Improvement Program

### Event Organised in the School

☑ Multiple entries are allowed :-

Do you want to enter details: **Yes** ▼

\* Role:

\* No. of Resource Person:

\* Resource Person Detail:

\* No. of Attendees:

\* Title of the Event:

\* Outcome of the Event:

\* Level:

\* Date of Event:

\* Collaborating Agency if any / Technological Co-sponsored:

\* Revenue Generated from Event:

\* Please Upload Supporting Documents:  No file chosen

Outreach Activity as Resource Person   Event Organised in the School   Faculty Improvement Program

### Faculty development programs/ Certification programs or courses/ Workshops/ Online conferences/ Webinars attended

☑ Multiple entries are allowed :-

Do you want to enter details: **Yes** ▼

\* Choose program type:

\* Full name of the program/course/workshop/online conference/webinar:

\* Choose Category:

\* Organization/coordinator:

\* Location:

\* Start date:

\* End date:

\* Course Credits provided:

\* Course exam conducted:

\* Please upload supporting documents:  No file chosen

## Social Outreach

## Social outreach and Community engagement activities Details

Multiple entries are allowed :-

Do you want to enter details:

\* Title of the Activity:

\* Type / Category of Activity:

\* Name of the Society (under KIIT-DU through which activity has been conducted):

\* Brief description of the social outreach and community engagement activity:

\* Location of the activity (village, district, state):

\* Date of Event:

\* Organized by:

\* Outcome of the Event:

\* Upload Activity Photo:

\* Upload Appreciation Letter/Supporting Documents:

## Tutor Mentoring

### Tutor Mentoring Activities Detail

Multiple entries are allowed :-

\* Agenda of the meeting:

\* Date of the meeting:

\* Students present in the meeting:

\* Number of one to one interactions held:

\* Number of communications to the mentees:

\* Number of communications made to parents:

\* Mode of communication used:

\* Measures taken to solve the difficulties of the Mentees (Academic):

\* Measures taken to solve the difficulties of the Mentees (Non-Academic):

\* Number of meetings with parents with specific problem of mentees academically:

## Academic Administration

### Academic Administration Details

Multiple entries are allowed :-

Are you a member of any Central or School Committee/Council/Body:

\* Committee/council/body of:

\* Aspect / Domain:

\* Specific name of the committee/Council/Body:

\* Designation:

Role during this period(Contribution / Value Addition / Justification to the assigned job)Describe in 100 words:

\* Have you developed any course material / open ended experiments / industry connect etc. during this period:

\* Do you want to mention any significant contributions during this period:

\* Please upload supporting documents:

## Faculty Feedback

**Faculty Feedback Section**

Employee Number : 00 [Redacted]  
 Name of the Faculty : Dr. [Redacted]  
 Designation : De [Redacted]  
 Name of the School : Cu [Redacted]  
 Academic year : 20 [Redacted]  
 Date of Submission : 29.05.2022

Please select the radio button on the basis of your observations and experience

Project / Thesis on recent emerging multidisciplinary area  5  4  3  2  1

Teaching Pedagogy  5  4  3  2  1

Student Participation in Different learning activities  5  4  3  2  1

Guest Lecture / Expert Talk by industry people  5  4  3  2  1

Industry Visit  5  4  3  2  1

Innovative Teaching practices and the ICT platforms used (link) [Redacted]

Value addition, Institutional Building and Branding [Redacted]

Comments/Suggestion (if any) [Redacted]

### 5.10. Visiting/Adjunct/Emeritus Faculty etc. (10)

KIIT Deemed to be University has the provision of inviting visiting /adjunct and Emeritus faculty or industry experts to deliver lectures for the core courses. In addition to this, technical symposiums, and lecture series are also organized at the school level, where experts from industry and academia are invited to address the students on real-world life experiences. A detailed list of visiting /adjuncts/emergitus faculty are given below for three assessment years.

Sl. No.	Name	Institution or University or Retired Professor	Subject	Hours of interaction with visiting faculty	Year
1	Prof. M.M. Awad	Associate Professor, Mansoura University, Mansoura, Egypt	Water-Energy Nexus: Case Studies in Egypt	3	CAY
2	Dr. Mukul Gupta	Scientist - G, UGC-DAE Consortium for Scientific Research, Indore	Synthesis and advanced characterization of hard metal-nitride coatings	4	CAY
3	Mr. Sakti Parida	Vice President - Supply Chain & CPO at Crompton Greaves Consumer Electricals Ltd.	Role of Supply Chain Management in Crompton Greaves Ltd	3	CAY
4	Dr. Mamilla Ravi Sankar	Associate Professor, Department of Mechanical Engineering, Indian Institute of Technology Tirupati, Andhra Pradesh	Finishing of Complex Features using Polymer Rheological Abrasive Fluids	4	CAY

5	Dr. Ranjan kumar Mishra	The Challenge for Sustainability and Zero Emission	Scientist & Regional Director, Regional Centre for Military Airworthiness, DRDO, Bangalore	4	CAY
6	Er. Dasharathi. Routray	B.Tech(Hons), M.Tech (Mechanical), Chartered Engineer, Retd. Chief Manager (Engineering) Larsen & Toubro Ltd	Mechanical System Design With Application	4	CAY
7	Dr. M.V. Reddy	IRHQ Can	Materials for Energy Technology	4	CAY
8	Prof. Amaresh Kumar	NIT-J	Disruptive technology influence on education and manufacturing	3	CAY
9	Dr. Kaushik Kumar	BIT-Mesra	Virtual Manufacturing	3	CAY
10	Dr. Avijit Ghosh	Honorary Secretary, IIChe	Research beyond laboratories: An IIChe perspective	4	CAY
11	Prof. Shripad Revankar	Purdue Univ. USA	Passive condenser system for Nuclear Reactor Applications	3	CAY
12	Prof. Swarnendu Sen	JU, Kolkata	Development of LBO detection technique	4	CAY
13	Dr. Nagaraja SR	Amrita, Bengaluru	Shock Wave applications	4	CAY
14	Dr. MM Awad	Egypt	Energy Water Nexus	4	CAY
15	Mr. Sujit Acharya,	Senior Consultant Supply Chain, Blueyonder (Panasonic),	SC Risk Management	4	CAYm1
16	Mr. Vineet Pandey,	Chief Operating Officer, XaasTag	Agile SC: Logistics & Customer Fulfillment	4	CAYm1
17	Mr. Karthikeyan S,	Founding Member, Thoucentric	e-Commerce & Supply Chain	4	CAYm1
18	Mr. Michael Feindt,	founder and strategic advisor, Blue Yonder	Growing Shift towards Automation in SC	4	CAYm1
19	Mr. Surya Kanta Dash,	Head of Planning Distribution Logistics, Samsung Electronics India	SC Strategy & Analytics	4	CAYm1
20	Mr. Rohan Sinha,	Sr. Project Mnager, Larsen and Toubro	Sustainability SC Models	4	CAYm1

21	Mr. Subhamay Das,	Regional Transport IT Director EMEA, DHL Supply Chain	Transport Management	4	CAYm1
22	Prof. Prabaha Sikder	Cleveland State University, Ohio, USA	Multifunctional Orthopedic Biomaterials	5	CAYm1
23	Dr. R. K. Mishra	Scientist/ Associate Director Regional Center for Military Airworthiness , Bangalore, India	Development of Combustion System for Modern Aero Engines: A Challenge	4	CAYm1
24	Ritabrata Saha	Dept. of Mechanical Engg., Jadavpur University, Kolkata	Effect of loop geometry on the flow dynamics of a single-phase natural circulation loop	4	CAYm1
25	Suman Chakraborty	IIT KGP	Microfluidics with paper and pencil	5	CAYm1
26	Sukanta Roy	Curtin University, Malayasia	Computational Analysis on the vertical axis wind turbines for cooling tower energy recovery applications	4	CAYm1
27	Dr. A. Sen	IIT Chennai	Microfluidics based interfacial phenomena and Lab on chip diagnostics	3	CAYm2
28	Mr. C R Pattanayak	Regional Coordinator, EDII, BBSR	Emerging Trends in Innovations in Mechanical Engineering (ETIME): Challenges & Opportunities	3	CAYm2
29	Mr. Murali Bala Subramaniam	Asia Pacific Innovation Head, Fiat Chrysler Automobiles	Emerging Trends in Innovations in Mechanical Engineering (ETIME): Challenges & Opportunities	3	CAYm2
30	Dr. Wayne Chen	Director of Research, Managing Director of Asia Pacific Operation, Dynamic Systems, Inc., USA	Application of Gleeble Thermo Mechanical Simulator in Research and Study of thermo-mechanical behaviour and properties of Materials	3	CAYm2
31	Mr Vishal Kapur	Managing Director MEHO-HCP Air-System	Variable Refrigerant Flow Systems	3	CAYm2
32	Prof. Terrence Perera	Sheffield Hallam University, United Kingdom	Supply Chain Management	4	CAYm2
33	Mr. Rajesh Handuja	Chief-Engineer, QUEST Global, Bangalore, India	Aeronautical Engineering - Industry Growth and Contribution from India	3	CAYm2

34	Dr. R.K. Mishra	Scientist-G/Associate Director, RCMA (Engines), DRDO, Bangalore, India	Development of Engine for Fighter Aircraft: Challenges for Mechanical and Aeronautical engineers	4	CAYm2
35	Dr. Sastry Y. Kandukuri	Head of DNV GL Global Additive Manufacturing Innovation Centre of Excellence (AM CoE) in Singapore	Recent advances in innovative technologies for digital manufacturing - opportunities for innovation and R&D in 3D printing	4	CAYm2
36	Prof. Anmol A. Gokhale	IIT Bombay	Opportunities for research and commercialisation of high energy rare earth permanent magnets	3	CAYm2
37	Dr. Amiya Ranjan Mohanty	Shyamal Ghosh and Sunanda Ghosh Chair & Professor Department of Mechanical Engineering Indian Institute of Technology Kharagpur	Past, Present and Future of Machinery condition monitoring	3	CAYm2
38	Dr. Sudharshan Phani	Scientist at Center for Engineered Coatings (CEC), ARCI	Novel High speed nanomechanical testing techniques	4	CAYm2
39	Dr. Manas Paliwal	Senior Lead Scientist, Sandvik, Pune	Alloy example of two phase dissolution along with concurrent solute homogenization	3	CAYm2
40	Prof. K. P. Sinhamahapatra	IIT KGP	Flow over two side-by-side cylinders	3	CAYm2
41	Dr. Wayne Chen	Director of Research, Managing Director of Asia Pacific Operation, Dynamic Systems, Inc., USA	Development of physical simulation technology in materials research	4	CAYm2

<b>CRITERION 6</b>	<b>Facilities and Technical Support</b>	<b>80</b>
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**6.1 Adequate and well equipped laboratories, and technical manpower (40)**

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the technical staff	Designation	Qualification
1	Material Testing Lab	20	Universal Testing Machine (tensile, compression, flexural), Izod/Charpy Impact testing, Torsion Tester, Vickers and Rockwell Microhardness tester, Abrasion grinding wheel, Metallurgical Microscope, Abrasive Cut off Machines, Twin Belt Grinder, Mounting Press, Polishing Machine	25 hrs/week	Mr. Hemanta Kumar Dhal	Technical Assistant	Diploma in Mechanical Engg.
2	Internal Combustion Engine (I.C.Engine) Lab	20	1-cylinder 4-stroke DI diesel engine, 1-cylinder 4-stroke SI engine, 1-cylinder 2-stroke SI engine, 3-cylinder 4-stroke SI engine (Morse test), 1-Cylinder 4-stroke Multi fuel (diesel, petrol, gaseous) fuel engine, 1-cylinder 4-stroke bifuel(petrol+alcohol) SI engine, 1-cylinder 4-stroke bifuel(diesel+biodiesel) DI diesel engine, 1-cylinder 4-stroke variable compression ratio (VCR) SI engine	34 hrs/week	Mr. Chinmaya Satapathy	Senior Technical Assistant	PhD Cont.
3	Refrigeration and Air conditioning Lab	20	Computerised Refrigeration Test Rig, Computerised Air-Conditioning Test Rig, Cascade Refrigeration system, Air-to Air Heat Pump, Air Washer, Automotive Air Conditioner, Ice Plant Unit, Charging and Evacuation Setup, Leak Detection Setup	30 hrs/week	Mr. Siba Padarbinda Behera	Technical Assistant	Diploma in Mechanical Engg.
4	Fluid Mechanics Lab	20	Bernoulli's apparatus, Reynold's experiment, Flow meters, Pitot tube, Nozzle meter ( data log in facility), Free and forced vortex apparatus, Losses due to friction in pipe ( data log in facility), Darcy's law apparatus ( data log in facility), Minor losses in pipe, Electrical analogy apparatus, V-notch apparatus, Metacentric height measurement apparatus, Measurement of hydraulic coefficients of an orifice	24 hrs/week	Mr. Pradeep Ku. Biswal	Technical Assistant	Diploma in Mechanical Engg.
5	Hydraulic Machines Lab	20	Computerized Centrifugal Pump test rig, Computerized Series and parallel pump test rig, Computerized Reciprocating pump test rig, Computerized vane & Gear Pump Combined test rig, Computerized Submersible pump test rig, Computerized jet pump test rig, Computerized pelton wheel turbine, Computerized Francis turbine, Computerized Kaplan turbine, Computerized Vacuum pump test rig, Centrifugal pump test rig (3 phase),	24 hrs/week	Mr. Pradeep Ku. Biswal	Technical Assistant	Diploma in Mechanical Engg.

			Centrifugal pum test rig, Receproccating pump test rig, Pelton wheel turbine, Francis turbine, Kaplan turbine, Hydraulic Ram, Impact of jet				
6	Heat Transfer Lab	20	Linear heat conduction unit, Radial heat conduction unit, Extended Surface heat transfer, Conductivity of liquid and Gases, Free and Forced Convection unit, Forced convection unit, Radiant Heat Transfer Unit, Concentric tube Heat Exchanger, Plate Heat Exchanger, Shell and Tube Heat Exchanger, Heat Exchanger Service Module, Filmwise and dropwise Condensation and Boiling Unit	16 hrs/week	Mr.Ananta Kumar Khatua	Technical Superintendent	Diploma in Mechanical Engg.
7	Metrology & Instrumentation Lab	20	CNC Cordinate Measuring Machine(CMM)CRYSTA APEX-S 544, Roundness & Cylindricity Measurement Inst(ROUNDTTEST,RA 1600), Contour Measuring Inst(CONTRACER, CV2100M4), Roundness Tester(SURFTEST, SV 2100M4), Measuring Microscope(MF-B 2017D), Profile Projector(PJ-A3010F200), 2D Height Gauge(LH 600 EG), Digimatic Callipers, Digital Dial Indicator, Digital Thickness Gauge, Digital Height Gauge, Digital Micrometers, Digital Screw Thread Micrometer, Digital Tube Thickness Calliper	44 hrs/week	Mr.Bichitra Kumar Sahoo	Technical Superintendent	PhD Cont.
8	Machine Kinematics and Dynamics Lab	20	Friction Apparatus, Screw Jack, Cam analysis, Universal governor, Mechanical power transmission system, Fly wheel, Vibration test rig	07 hrs/week	Mr. Dilip Kumar Sahoo	Technical Assistant	B.Tech in Mechanical Engg.
9	Advanced Manufacturing Processes Lab	20	Vibration Isolation Machine,Storbo Scope,Non-Contact Type Vibration Pick-Ups,Electrodynamic Vibration Test System,Torsion Apparatus Vertical Type,Noise &Vibration Analyser	55 hrs/week	Mr. Pradeep Ku. Mohanty	Technical Assistant	B.Tech in Mechanical Engg.
10	Computer Aided Engineering Lab	20	Automatic Storage and Retrieval System (ASRS), Automate Guided Vehicle (AGV), CNC Lathe (MTAB), Loading and Unloading Arm, Aristo 6-axis Robot (MTAB) 2No's., CNC Mill (MTAB), Assembly Station, Vision Inspection System, Pneumatic KIT, Hydraulic KIT, Pneumatic Compressor, LIST OF SOFTWARES, Automation Studio, Workspace Robot Simulation Software, Espirit CAM (DP Technology), CNC TRAIN (Fanuc OT and Fanuc OM), VRCIM	72 hrs/week	Mr.Ashok Kumar Dhal	Technical Assistant	PhD Cont.
11	Mechanical Engineering Lab	20	EDM Smart ZNC Machine, FDM 250 Machine, ON LINE UPS (APC SRC 3KV X 13 KVA)	20 hrs/week	Mr. Siba Padarbinda Behera	Technical Assistant	Diploma in Mechanical Engg.
12	Computational Techniques Lab	20	MSC Bundle ( Adams, Nastran, Patran, Dytran, SINDA, Mark, Easy), MSC FEA Bundle and MSC Motion Bundle, ANSYS, ANSYS Research, Altair Hyperworks, FEMAP, Cd Adap co STAR CD, ADAMS Car	70 hrs/week	Mr. Dipti Pra. Mohanty	Technical Assistant	Diploma in Mechanical Engg.
13	NI Innovation centre	20	myDAQ, myRIO, cDAQ, cRIO, myVTOL, LabVIEW Software, ANSYS Software	54 hrs/week	Mr. Siba Padarbinda Behera	Technical Assistant	Diploma in Mechanical Engg.



14	Central Workshop	20	All Geared Lathe, Capstan Lathe, Universal Milling Machine, Shaper Machine, Slotting Machine, Planer Machine, Surface Grinding Machine, Tool and Cutter Grinding Machine, Bench Grinding Machine, Pedestal Grinding Machine, Sensitive Drill Machine, Pillar Drill Machine, Power Hacksaw, SMAW (Rectifier Type ) Machine, GTAW Machine, GMAW Machine, SMAW (Transformer Type) Machine, GMAW Tractor, Oxy-Acetylene Welding System, Oxy-Acetylene Cutting System, Oxy-Acetylene Pre-heating System, Gas Manifold System, Machine Vice, Bench Vice, Shear Machine, Tilting Furnace, Muffle Furnace, Circular Furnace	48 hrs/week	Mr.Rashmi Ranjan Mishra	Technical Superintendent	PhD Cont.
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*Table B.6.1*

## 6.2. Laboratories maintenance and overall ambience (10)

**Laboratory maintenance and other such activities takes place on a regular basis in the School of Mechanical Engineering as described below:**

Sl. No	Task	Frequency Daily/Weekly/Monthly/yearly	Performed By
1	Laboratory cleaning	Daily	House Keeping
2	Cleaning of machineries and equipment's	Weakly	Lab Attendant
3	Self-calibration	Half Yearly	Lab In-charge
4	Manual calibration of all testing and measuring equipment's	Half Yearly	Lab In-charge
5	Painting of hydraulic equipment's	yearly	Painter
6	Water line checking	Weakly	Lab In-charge
7	Cleaning of water sump	Weakly	Lab Attendant
8	Power transmission system checking (Belt,Chain,Gears,Coupling)	Monthly	Lab In-charge
9	Inspection of Thermo-couples	Half Yearly	Lab In-charge
10	Overhauling and major maintenance of engines	Yearly	Automobile mechanic.
11	Preventive maintenance of (carburettor , spark plug engine, oil quality, fuel line cleaning )	Weakly	Lab In-charge
12	Battery charging	Weakly	Lab In-charge
13	Axis Alignment and positioning of Robot.	Weekly	Lab In-charge
14	Sensor calibration for Robot to achieve higher accuracy, speed and perfection.	Monthly	Lab In-charge
15	Soldering of various cables	As per Requirement	Lab In-charge
16	Replacement of pneumatic pipes	Six Month	Lab In-charge
17	CNC spindle calibration	Weakly	Lab In-charge
18	ATC positioning calibration for CNC MILL	Weakly	Lab In-charge

19	Corrective maintenance of CNC, CMM Machine.	Monthly	Lab In-charge
20	Preventive maintenance to Achieve proper pressure limit for CNC Machine, CMM Machine	Monthly	Lab In-charge
21	Renewal of Software licence	As per Requirement	ICT Cell
22	Replacement of Lithium Coin Cell Batteries	Half Yearly	ICT Cell
23	Changing of lubricant oil.	Half Yearly	Lab In-charge
24	Checking of Electrical equipment's	Half Yearly	Electrical maintenance
25	UPS Maintenance	Monthly	ICT Cell
26	Desktop table and accessories repairing	Monthly	Development wing
27	Testing and repairing of Computer accessories	Quarterly	ICT Cell
28	Projectors and other ICT facility maintenance	Monthly	ICT Cell
29	Testing of Earthling and Loose wiring	Quarterly	Electrical maintenance

**Overall ambience:**

In KIIT Deemed to be University Cleanliness and good academic ambience is the main focus since its inception. All laboratories are centralized AC (except machine related lab where ventilation is a prime concern). Any laboratory has several equipment's specific to its own domain. Each of such equipment's is well maintained in the due course of time. Any deficit of equipment/ test kit is noted at the beginning of the semester and efforts are taken to procure the same. These items need to be purchased periodically as when need arises. Annually each laboratory is monitored for their assets and a status report is prepared. Some components which are obsolete are disposed from time to time.

**The officer and staff deployment for maintenance repair and services are given below:**

Sl.No	Items	Officers concerned for development, maintenance and repair
1	Electrical Maintenance	Development Officer, Chief Maintenance Electrical Engineer, Support Staff
2	AC maintenance	Development Officer, Head AC Maintenance and Support Staff
3	Computer	Head ICT Cell, System Engineers and Technical Support Staff
4	Laboratory Equipment's	HOD, Faculty-in-charge, Store & purchase Officer, Administrator and Technical Support Staff
5	Other Resource Management	Resource Management Officer and Support Staff

**6.3. Safety measures in laboratories (10)**

Sr. No	Laboratory Name	Safety Measures
1	Fluid Mechanics Lab	Do's and Don'ts boards are installed at appropriate locations. All the equipment's of the laboratories are grounded. Over-voltage and short-circuit protection are provided for all electrical equipment using MCBs. Lab is provided with good lighting, ventilation, 1 or 3 phase power supplies (24 hours a day), UPS backup, LAN/WiFi connectivity. Personal Protective Equipment are provided to the students. At all appropriate locations, fire extinguishers are installed. Maintenance is performed as and when necessary.

2	Metrology & Instrumentation Lab	"Do's and Don'ts boards are installed at appropriate locations. All the equipment's of the laboratories are grounded. Over-voltage and short-circuit protection are provided for all electrical equipment using MCBs. Lab is provided with good lighting, ventilation, 1 or 3 phase power supplies (24 hours a day), UPS backup, LAN/WiFi connectivity. Personal Protective Equipment are provided to the students. At all appropriate locations, fire extinguishers are installed. Maintenance is performed as and when necessary."
3	Heat Transfer Lab	"Do's and Don'ts boards are installed at appropriate locations. All the equipment's of the laboratories are grounded. Over-voltage and short-circuit protection are provided for all electrical equipment using MCBs. Lab is provided with good lighting, ventilation, 1 or 3 phase power supplies (24 hours a day), UPS backup, LAN/WiFi connectivity. Personal Protective Equipment are provided to the students. At all appropriate locations, fire extinguishers are installed. Maintenance is performed as and when necessary."
4	Mechanical Engineering (ME) Lab	"Do's and Don'ts boards are installed at appropriate locations. All the equipment's of the laboratories are grounded. Over-voltage and short-circuit protection are provided for all electrical equipment using MCBs. Lab is provided with good lighting, ventilation, 1 or 3 phase power supplies (24 hours a day), UPS backup, LAN/WiFi connectivity. Personal Protective Equipment are provided to the students. At all appropriate locations, fire extinguishers are installed. Maintenance is performed as and when necessary."
5	Machine Kinematics and Dynamics Lab	"Do's and Don'ts boards are installed at appropriate locations. All the equipment's of the laboratories are grounded. Over-voltage and short-circuit protection are provided for all electrical equipment using MCBs. Lab is provided with good lighting, ventilation, 1 or 3 phase power supplies (24 hours a day), UPS backup, LAN/WiFi connectivity. Personal Protective Equipment are provided to the students. At all appropriate locations, fire extinguishers are installed. Maintenance is performed as and when necessary."
6	Materials Testing Lab	"Do's and Don'ts boards are installed at appropriate locations. All the equipment's of the laboratories are grounded. Over-voltage and short-circuit protection are provided for all electrical equipment using MCBs. Lab is provided with good lighting, ventilation, 1 or 3 phase power supplies (24 hours a day), UPS backup, LAN/WiFi connectivity. Personal Protective Equipment are provided to the students. At all appropriate locations, fire extinguishers are installed. Maintenance is performed as and when necessary."
7	Internal Combustion Engine (I.C.Engine)	"Do's and Don'ts boards are installed at appropriate locations. All the equipment's of the laboratories are grounded. Over-voltage and short-circuit protection are provided for all electrical equipment using MCBs. Lab is provided with good lighting, ventilation, 1 or 3 phase power supplies (24 hours a day), UPS backup, LAN/WiFi connectivity. Personal Protective Equipment are provided to the students. At all appropriate locations, fire extinguishers are installed. Maintenance is performed as and when necessary."
8	Refrigeration & Air Conditioning Lab	"Do's and Don'ts boards are installed at appropriate locations. All the equipment's of the laboratories are grounded. Over-voltage and short-circuit protection are provided for all electrical equipment using MCBs. Lab is provided with good lighting, ventilation, 1 or 3 phase power supplies (24 hours a day), UPS backup, LAN/WiFi connectivity. Personal Protective Equipment are provided to the students. At all appropriate locations, fire extinguishers are installed. Maintenance is performed as and when necessary."
9	Hydraulic Machines Lab	"Do's and Don'ts boards are installed at appropriate locations. All the equipment's of the laboratories are grounded. Over-voltage and short-circuit protection are provided for all electrical equipment using MCBs. Lab is provided with good lighting, ventilation, 1 or 3 phase power supplies (24 hours a day), UPS backup, LAN/WiFi connectivity. Personal Protective Equipment are provided to the

		students. At all appropriate locations, fire extinguishers are installed. Maintenance is performed as and when necessary."
10	Advanced Manufacturing Processes Lab	"Do's and Don'ts boards are installed at appropriate locations. All the equipment's of the laboratories are grounded. Over-voltage and short-circuit protection are provided for all electrical equipment using MCBs. Lab is provided with good lighting, ventilation, 1 or 3 phase power supplies (24 hours a day), UPS backup, LAN/WiFi connectivity. Personal Protective Equipment are provided to the students. At all appropriate locations, fire extinguishers are installed. Maintenance is performed as and when necessary."
11	Computer Aided Engineering Lab	"Specific Safety Rules like Do's and Don'ts are displayed and instructed for all students. First aid box and fire extinguishers are kept in each laboratory. Well trained technical supporting staff monitor the labs at all times. Damaged equipment's are identified and serviced at the earliest. Periodical system checks and upgradation are carried out. A clean and organized laboratories are maintained The use of cell phones is prohibited. Appropriate storage areas are available. PC systems with needed software are readily available for students' usage. Fire extinguishers are fitted near each laboratory. Proper earthing is provided to all electrical devices. All the laboratories are equipped with indoor cameras."
12	Computational Techniques Lab	"Specific Safety Rules like Do's and Don'ts are displayed and instructed for all students. First aid box and fire extinguishers are kept in each laboratory. Well trained technical supporting staff monitor the labs at all times. Damaged equipment's are identified and serviced at the earliest. Periodical system checks and upgradation are carried out. A clean and organized laboratories are maintained The use of cell phones is prohibited. Appropriate storage areas are available. PC systems with needed software are readily available for students' usage. Fire extinguishers are fitted near each laboratory. Proper earthing is provided to all electrical devices. All the laboratories are equipped with indoor cameras."
13	Central Workshop	Everyone working in the workshop should ensure their and others' safety and it is everybody's responsibility. The following measures and protocols are followed in that respect: <ul style="list-style-type: none"> <li>• The workshop-in- charge should instruct or inform everyone working in there regarding different protective equipment's, gears and protocols for different instruments and machineries and ensure that these are followed.</li> <li>• It must be ensured that machines have effective and properly working guards that are always in place where machines are operating.</li> <li>• No one should attempt to oil, clean, adjust or repair any machine while it is running, stop the machine and lock the power switch in the off position.</li> <li>• The working area should be properly lighted.</li> <li>• All chemicals (e.g. glues and paints) must be checked and verified by the workshop-in –charge.</li> <li>• It must be ensured that the floor is free of oil, grease or any other liquid, aisles should be clear, at all time to avoid tripping of other accident.</li> <li>• Materials should be stored in such a way that they do not become tripping hazards.</li> <li>• One should immediately inform the workshop-in-charge of any faulty or broken equipment</li> <li>• One should ensure that the work piece they are going to work with is fixed securely before work is commenced.</li> <li>• One should ensure that the floor area is clean of metal chips or curls and waste pieces; they should be put in appropriate containers for the purpose.</li> <li>• One should keep themselves at a safe distance from any person operating tools and machinery, and form the machine itself. (bumping an operator or get tangled in the lead could cause serious injury)</li> <li>• One should not divert the attention of anyone operating any machinery.</li> <li>• One should maintain the work area as neat as possible.</li> <li>• One should report any spills in the work area immediately.</li> <li>• Even after the power is off, no one should leave the machine until it has stopped running.</li> <li>• Nobody should attempt to stop any machine with hand or body.</li> <li>• Nobody should rest against the machine.</li> <li>• One should wash hands properly with water, soap, disinfectants after</li> </ul>

		using equipment and materials • One should not leave tools or work on the table of a machine even if the machine is not turning. Tools or work may fall off and cause the fact of injury. • While exiting the workshop, one should ensure that any tools they have been using have been put away in the appropriate spots; the work area has been cleaned up and notified the workshop staff. • Safety glasses/ face shields must be worn at all times when in the workshop. Students that wear glasses should be aware these are not safety glasses; they are only impact resistant and may shatter. • Loose clothing (e.g. shirts hanging out) if any must be tucked in. • Safety boots or enclosed shoes must be worn in the workshop and this must be strictly followed. • Rings and loose jewellery must be removed before operating machinery since they can become a hazard. • Dangerous and heavy machineries like Lathes, big saws, trimmers etc. are not to be used directly by the student; under certain cases, they are allowed only under strict supervision, presence and with permission of personnel-in-charge.
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**Table B.6.3**

#### 6.4. Project laboratory (20)

Sl. No	Name of the Laboratory	Name of the Equipment/Software	Utilization	Faculty Incharge	Qualification
1	Advanced Reliability Center	Vibration Analysers, Vibration meter, Endoscopes, Oil analyzer, Laser shafts Alignment, Laser belts alignment, Bearing mountings, dismounting tools and equipment	B.Tech, M.Tech & PhD	Dr. Isham Panigrahi	PhD
2	Green Engine Technology Centre	Assembly Engine test rig, Eddy Current Dynamometer, Exhaust Gas Analyzer	B.Tech, M.Tech & PhD	Dr. A.K. Rout	PhD
3	NI Centre of Excellence	NI MyDAQ, NI MyRIO, NI-9213 Thermocouple Input Module, NI Embedded Kit, NI-9081 C-Rio controller, NI mechatronics kit, NI Image and signal processing kit, My Vtol, NI- 9250 Analogue module, NI- 9502 Brushless servo motor module, NI- 9411 Digital input module, NI- 9263 AO Series module, Brushless servo motor – 1 Nos., Custom built 3D printer (Open source platform) with LABView control system, SOLID WORKS, MasterCAM, Imold, Robot Master	B.Tech, M.Tech & PhD	Dr. Purna Chandra Mishra	PhD
4	PLM LAB	Desktops	B.Tech, M.Tech & PhD	Dr. P Chandra sekhar	PhD
5	IOT Centre of Excellence	Desktops	B.Tech, M.Tech & PhD	Dr. P Chandra sekhar	PhD
6	Thermal Research Lab	Bio-diesel reactor, Spray Impingement Cooling setup, Interferometer, Pool boiling setup, Flow boiling setup, Ultra-sonicator, Calorimeter	B.Tech, M.Tech & PhD	Dr. Purna Chandra Mishra	PhD
7	Production Research Lab	Measuring Optical Microscope, Inverted Microscope, Surface Roughness Tester, Hydraulic Mounting Press, Single Disc Polishing Machine	B.Tech, M.Tech & PhD	Dr. Ashok Kumar Sahoo	PhD

8	Design Research Lab	ANSYS, PLM, MATLAB, ADAMS, CATIA, SOLID WORKS	B.Tech, M.Tech & PhD	Dr. Ruby Mishra	PhD
9	Advanced Manufacturing Processes Lab (Machining Research)	CNC Lathe , CNC Vertical Milling, Air Compressor, HMT, NH22 Lathe, MQL Set-up, Electro Discharge Machining (EDM) System, Ultrasonic Machining System	B.Tech, M.Tech & PhD	Dr. B K Nanda	PhD
10	Composites Development & Characterization Lab	Universal Testing Machine (Instron), Dry Abrasion Tester, Air Jet Erosion Tester, Handheld Barcol Hardness tester, Laboratory Oven (RT to 250 Degree Centigrade) , Weighing Balance (Accuracy 0.1 mg), Magnetic Stirrer (RT to 250 °C with maximum 1200 RPM), Bath Sonicator (RT to 70 °C with time control), Hand lay-up laminate fabrication tools	B.Tech, M.Tech & PhD	Dr. Nitin Sharma & Dr. Kalyani Mahanta	PhD
11	Metal Processing Lab	Electric Furnace, Aging oven, Precision balance	B.Tech, M.Tech & PhD	Dr. B. Surekha	PhD
12	Thin Films and Coatings Laboratory	Electrophoretic deposition, Low pressure cold spraying set-up, Muffle furnace, Air compressor	B.Tech, M.Tech & PhD	Dr. Sudesna Roy	PhD

<b>Criteria 7</b>	<b>Continuous Improvement</b>	<b>75</b>
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**7.1. Actions taken based on the results of evaluation of each of the COs, POs & PSOs (30)**

**POs & PSOs Attainment Levels and Actions for improvement – (2018 Admitted Batch)**

<b>POs</b>	<b>Target Level</b>	<b>Attainment Level</b>	<b>Observations</b>
<b>PO1: Engineering Knowledge</b>			
<b>PO1</b>	2.5	2.53	Target Attained
Action 1: Attainment level commendable, still steps should be taken to give more emphasis to improve engineering knowledge. More focus on the fundamentals of basic sciences and basic engineering courses and providing of laboratory experiences to students to be given with entertaining, challenging and inspiring gesture.			
<b>PO2: Problem Analysis</b>			
<b>PO2</b>	2.5	2.52	Target Attained
Action 1: Attainment level is commendable at the same time more numerical intensive exercises must be conducted to enhance the skills of students to do comprehensive problem analysis related to Science and Engineering field of study.			
Action 2: More focus on fundamentals of basic sciences and basic engineering. Requires practicing of existing designs and problem analysis methods for continuous improvement.			
<b>PO3: Design &amp; development of Solutions</b>			
<b>PO3</b>	2.5	2.54	Target Attained
Action 1: The design problems or numericals related to social, environmental, safety and economic factors will be emphasized. In the activities students are instructed to focus on the aforesaid realistic approach.			
Action 2: The school has been emphasizing professional societies/chapters like, ISTE Students Chapter, Indest Automobile, KIIT Robotic Society, Indest Energy, Institution of Engineers (Students' Chapter), SAEINDIA Collegiate Club, KIIT University, Aeronautical Society of India, KIIT Chapter, Indian Science Congress, IET Students Chapter and ISHRAE which will enhance the problem identification and solution interests.			
<b>PO4: Conduct investigations of complex problems</b>			
<b>PO4</b>	2.5	2.54	Target Attained
Action 1: Attainment level is satisfactory due to excellent laboratory infrastructure comprising state-of-the-art equipment.			
Action 2: Students need to be facilitated or encouraged to do open ended experiments at the labs.			
<b>PO5: Modern Tool usage</b>			
<b>PO5</b>	2.5	2.57	Target Attained

Action 1: The students are exposed to professional software and modern tools like Solidworks, ANSYS, ABAQUS, etc. to fulfil the requirement in engineering applications in the new industrial era.			
Action 2: Students are facilitated visit to different industries for practical exposure to various on-site laboratories.			
<b>PO6 : Engineer and Society</b>			
<b>PO6</b>	2.5	2.58	Target Attained
Action 1: The faculties were suggested to link the course / activities to societal issues like safety, sustainability, profitability etc.			
Action 2: The numerical problems of the course are to be more focused towards societal issues like safety, sustainability, profitability etc.			
<b>PO7: Environment &amp; sustainability</b>			
<b>PO7</b>	2.5	2.6	Target Attained
Action 1: All the Engineering theory as well as laboratory courses directly or indirectly sensitise students to be develop engineering solutions and applications for being environmentally friendly.			
Action 2: To increase the awareness about environment and sustainability from the basic level, Environmental Science and Yoga and Human Consciousness has been introduced in the first year B.Tech. program.			
<b>PO8: Ethics</b>			
<b>PO8</b>	2.5	2.59	Target Attained
Action 1: To develop ethical gesture in students, it has been stressed to keep the similarity index as low as possible in case of all assignments and report submissions. The Deemed University uses ‘Turnitin’ to assess the similarity index and take decisions on the project reports submitted.			
Action 2: The courses i.e. ‘Professional ethics and code of conduct’ and ‘Legal issues and requirement in engineering’ was more stressed to develop the ability to take practical decisions ethically.			
<b>PO9 : Individual &amp; Team</b>			
<b>PO9</b>	2.5	2.51	Target Attained
Action 1: The attainment level is achieved still emphasis will be given on the courses like seminars, projects, and different activities in courses, where students need to work as a team.			
Action 2: The assignment, group wise experiments are conducted in laboratory sessions to expose students to different working scenarios and deliver their best as an individual or a team member of a group. 6th semester onwards, students are divided into groups for preparing their final academic projects.			
<b>PO10 : Cummunication</b>			
<b>PO10</b>	2.5	2.58	Target Attained : Communication
Action 1: The attainment level is achieved still it is necessary to maintain / improve the outcome. Apart from explicit course on Professional Communication, Business Communications, CAT-I and II some exercises like Presentation in class, Seminar, Grand Viva, group experiment sessions in laboratory are the curricular components which help students to become a effective communicator, which is highly required for their			



professional career ahead.			
<b>PO11 : Project Management &amp; Finance</b>			
<b>PO11</b>	2.5	2.63	Target Attained
<p>Action 1: Most of the design problems, manufacturing numerical and thermal analysis are related to social, environmental, safety and economic factors.</p> <p>Action 3: The students are very active in Project management related courses. The Minor Project, Project preparation &amp; Project expose students to enhance their skills of Project Management &amp; Finance planning.</p> <p>Action 2: The students' do the projects as a group and submit their individual contribution report for the assessment. In the report the students need to specifically mention their role and contribution in the group. Additionally, the project supervisor also notes the role and contribution of each student and marks them accordingly which is later used to assess the attainment of outcomes.</p>			
<b>PO12 : Lifelong Learning</b>			
<b>PO12</b>	2.5	2.56	Target Attained
<p>Action 1: Regular Alumni talks, speak and search lectures and mechanical colloquium series are conducted for imparting life-long learning to students.</p> <p>Action 2: Independent tasks and learning activities are given to the students as mentioned in an earlier section where students need to engage in self-learning. This is also required while implementing final year project.</p>			

**PSOs Attainment Levels and Actions for Improvement- (2018 Admitted Batch)**

<b>PSOs</b>	<b>Target Level</b>	<b>Attainment Level</b>	<b>Observations</b>
<b>PSO1: Continuously advance themselves by expanding their technical and professional skills through formal means as well as through informal self-study.</b>			
<b>PSO1</b>	2.5	2.54	Target Attained
<p>Action 1: The concerned subjects such as Principles of electronic engineering, Electronics engineering Lab, are provided with higher emphasis for achieving higher attainments.</p> <p>Action 2: To enhance the technical skill, students are encouraged to do Robotics projects, projects related to automation etc. in higher semester.</p>			
<b>PSO2: Join a technical workforce as successful professionals in a wide range of mechanical engineering and related domains.</b>			
<b>PSO2</b>	2.5	2.54	Target Attained

Action 1: The students' are instructed to go through current research articles on the specific topic and present in the class as an activity. The open ended experiments, high end research equipments, access to different and specific publishers will generate the interest of research among students.			
Action 2: Laboratories and libraries were made available to students in off hours also to design and develop their project ideas.			
Action 3: department is emphasizing interdisciplinary projects.			
<b>PSO3: Pursue advanced degrees in engineering, business, or other professional fields.</b>			
<b>PSO3</b>	2.5	2.61	Target Attained
Actions 1: The attained attainment level is more than target level and is satisfactory. Students are participating in various competitive exams and putting their interest for higher studies in different field of study such as engineering, business and other professional fields.			
Actions 2: The real-life design problems, open ended experiments and activities equipped with various Labs and theory classes help student to strengthen their understanding of real world issues and draw appropriate conclusions.			

## 7.2. Academic Audit and actions taken thereof during the period of Assessment (15)

### Handbook, and academic audit report, compliance report

(Academic Audit system/process and its implementation in relation to Continuous Improvement)

Academic Audit is conducted by school every year to accomplish the following objectives.

- To promote self reflection among units / schools being audited.
- To promote self improvement measures among units / schools being audited.
- To conduct quality checks on different activities undertaken by units/ schools to meet expected outcomes.
- To promote adoption of best practices.

The scope of the academic audit is as follows.

- All Schools of University: The schools are expected to have developed a strong outcome based approach in teaching-learning. The audit team will assess the activities involved in developing learning outcomes, design and development activities in curriculum, teaching-learning process, student learning assessment process and student engagement programs. The audit team will also assess the quality and quantity of research outcomes during last three years. The audit team will also assess the quality of resources and general ambience from perspective of meeting the learning outcome.
- Examination Section: The audit team will assess the process of conduct and document archival in the examination section.
- Student Support Centre: The audit team will assess the process of conduct, document archival and promotion of student support activities and services.

The Academic audit team will comprise of members who are usually nominated by Dean of School or Competent authority of the University. Secondly, the members must be of equivalent rank of Associate Professor or above.

The Audit process shall proceed as follows.

- Each School / unit will prepare a self-study report.
- The Audit team will visit and conduct onsite evaluation through check of documents and interaction with stakeholders.
- The audit report will be prepared citing commendation, affirmation and recommendation for each school/unit.
- The report will be shared.

Action Taken Report of School of Mechanical Engineering on the basis of recommendations suggested by the Audit team.

Academic Audit 2020-2021

Sl. No	Recommendations	Action Plan by School	Compliance Status (2020-21)
1	Every compulsory course should have practice component-which will engage the students in solving questions. In this regards help of ME,PhD students should be taken. Tutorial for every course will involve students in solving questions and its concepts.	More involvement of ME and PhD students in lab / sessional classes of undergraduate students will be taken care of.	In our four credit subjects, one tutorial class is existing in which students are involved to practice the problems. Dedicated tutorial classes are meant for doubt clearing and solving conceptual problems on the subject. Furthermore, Doubt clearing session, activity based learning are also provided to the students. 1. PhD students are assigned with Lab and Sessional classes of Undergraduate students.
2	In this era of education , students should be asked to solve real life engineering problems looking at the books. The academic programs should emphasize open book evaluation. To start with the students should appeared 10% open book so that question quality improves.	Introduction of open book system partially in the examination to be discussed at University level for maintaining uniformity in all disciplines.	In the activity based learning, real life case studies are provided to the students to solve it. Introduction of open book system partially in the examination is under process at University level for maintaining uniformity in all disciplines. Students are solving Assignment problems of every subjects (a part of Learning Activity) through open book system.
3	Question papers should be reviewed by internal experts and external experts. So that bookish question and the questions which force students to think is asked. Every question paper should ensure	Questions are being prepared as per Bloom's taxonomy. However, more focus will be given on scrutinisation of questions by internal and external experts.	University asks for questions from both internal and external experts as a regular practice. Questions are being prepared following Blooms Texonomy. Scrutinization of Questions are being conducted by internal expert committee.

	that the blooms taxonomy aspect is taken care.		
4	In Lab experiments students should be asked to write answers of questions related to the experiment. They should not simply copy from the old report. This shear wastage of time and effort.	Process will be modified to include question/answer pattern in Lab experiment examination.	Students are writing the answers in Lab manual. At the end of each experiment some questions are provided to the students, and the answers are being collected and evaluated.

### 7.3. Improvement in Placement, Higher Studies and Entrepreneurship (10)

Placement: number, quality placement, core industry, pay packages etc.

Year	Percentage of Students placed	Average Package (Lakhs)	Maximum Package (Lakhs)	Major core industry recruiters
CAYm1 (2021-2022)	93.13	6	31	TVS Motor Company Ltd, Tata Advanced Systems Ltd., Escorts Limited,JSW Energy Ltd., Voltas Ltd.
CAYm2 (2020-2021)	81.9	6.82	15	Escorts Ltd., Jindal Steel and Power Ltd., Tata Advanced Systems Ltd., Fiat Chrysler,
CAYm3 (2019-2020)	99.5	5.8	18	Essar Power, Adani Ports, Tata Technologies, L&T Technology Services, Escorts

Higher studies: performance in GATE, GRE, GMAT, CAT etc., and admissions in premier institutions

Year	Number of Students Qualified		
	GATE	GRE/GMAT	CAT
CAYm1 (2021-2022)			
CAYm2 (2020-2021)	2	2	1
CAYm3 (2019-2020)	1		

Entrepreneurs

Graduation Year	Name of Entrepreneur	Name of Company
CAYm2(2020-21)	Surjeet Singh Gour	IVEYS

**7.4. Improvement in the quality of students admitted to the program (20)**

<b>Item</b>		<b>CAY</b>	<b>CAYm1</b>	<b>CAYm2</b>
<b>National Level Entrance Examination (Name of the Entrance Examination)</b>	<b>No. of Students admitted</b>	7	3	2
	<b>Opening Score/Rank</b>	28534	34630	203237
	<b>Closing Score/Rank</b>	660655	911395	1118500
<b>State/Institute/Level Entrance Examination/Others (Name of the Entrance Examination)</b>	<b>No. of Students admitted</b>	173	177	178
	<b>Opening Score/Rank</b>	11	1929	656
	<b>Closing Score/Rank</b>	31761	25861	25704
<b>Name of the Entrance Examination for Lateral Entry or lateral entry details</b>	<b>No. of Students admitted</b>	18	18	25
	<b>Opening Score/Rank</b>	2	2	201
	<b>Closing Score/Rank</b>	70034	1536	1471
<b>Average CBSE/Any other Board Result of admitted students (Physics, Chemistry &amp; Mathematics)</b>		78.6	77.6	74.5

<b>CRITERION 8</b>	<b>First Year Academics</b>	<b>50</b>
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### 8.1. First Year Student-Faculty Ratio (FYSFR) (5)

Name of the faculty member	PAN No.	Qualification	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining	Teaching load (%)			Currently Associated (Yes/No)	Nature Of Association (Regular/Contract)	Date Of leaving(In case Currently Associated is 'No')
							CAY	CAYm1	CAYm2			
Mrutyunjay Das	AGXPD2175J	M.Sc. and PhD	21/03/2014	Computational Fluid Dynamics	Associate Professor	10/07/1999	50	50	75	Yes	Regular	
Narmada Behera	AOOPB9968G	M.Sc. and PhD	19/05/2008	Applied Functional Analysis and Optimization	Assistant Professor	22/07/2013	75	75	75	Yes	Regular	
Rajashree Mishra	AKQPM5504R	M.Sc. and PhD	29/11/2014	Optimization Technique	Associate Professor	01/07/2006	75	75	75	Yes	Regular	
Utkal Keshari Dutta	BPJPD2233M	M.Sc. and PhD	31/12/2021	Number Theory	Assistant Professor	27/07/2021	75	75	0	Yes	Regular	
SATYA KUMAR MISHRA	AHCPM5374Q	M.Sc. and PhD	06/11/2014	Reliability	Associate Professor	10/10/1995	75	75	75	Yes	Regular	
Jashashree Ray	AWMPR6499N	M.Sc. and PhD	27/07/2015	Experimental Condensed Matter Physics	Assistant Professor	25/01/2020	80	80	80	Yes	Regular	
Suvasis Nayak	AZIPN6060A	M.Sc. and PhD	04/12/2020	Optimization Techniques	Assistant Professor	20/06/2018	80	80	80	Yes	Regular	
Lalendu Biswal	AFXPB6640K	M.Sc. and PhD	22/07/2014	Experimental Condensed Matter Physics	Assistant Professor	29/07/2010	86	86	88	Yes	Regular	
Ranjan Kumar Nayak	AQJPN1118M	M.Sc. and PhD	13/11/2017	Machine Learning	Assistant Professor	02/07/2018	70	70	70	Yes	Regular	
Jyoti Prakash Maity	CKYPM2127A	M.Sc. and PhD	22/11/2006	Environmental Science	Professor	02/08/2021	100	100	0	Yes	Regular	
S. Praharaj	BFIPP3118L	ME/M. Tech and PhD	11/11/2017	Material Science	Associate Professor	03/08/2009	82	82	82	Yes	Regular	
B. P. Padhy	ARPPP2365K	M.Sc. and PhD	13/09/2011	Summability Theory	Assistant Professor	01/08/2015	67	67	50	Yes	Regular	

Sapan Kumar Samal	ALFPS0789 L	M.Sc. and PhD	28/02/1993	Theoretical Seismology	Professor	15/04/2009	40	40	40	Yes	Regular	
Maya Devi	ATOPD5752 D	M.Sc. and PhD	18/03/2017	Condensed Matter Physics	Assistant Professor	15/07/2008	80	80	80	Yes	Regular	
Tapas Ranjan Sahoo	CTPPS4937 N	M.Sc. and PhD	06/01/2011	Materials Chemistry	Associate Professor	14/09/2011	86	86	88	Yes	Regular	
Saumya Ranjan Jena	AFMPJ7622 L	M.Sc. and PhD	12/04/2012	Numerical Integration	Associate Professor	22/10/2013	70	70	70	Yes	Regular	
Manas Ranjan Mohapatra	BMCPM287 2F	M.Sc. and PhD	04/11/2017	Geometric Function Theory	Assistant Professor	27/07/2021	29	29	0	Yes	Regular	
Madhusmita Sahoo	BQSPS8790 N	M.Sc. and PhD	24/02/2014	Operator Theory	Associate Professor	26/07/2010	44	44	43	Yes	Regular	
Rakesh Mohan Das	BCUPD051 8B	M.Sc. and PhD	25/03/2019	Quantum Optics	Assistant Professor	17/01/2022	73	73	0	Yes	Regular	
Sutanu Mangal	BMEPM016 2O	M.Sc. and PhD	12/09/2012	Semiconductor Physics and Devices	Assistant Professor	05/09/2011	80	80	80	Yes	Regular	
Gopal K Pradhan	AYKPP0718 N	M.Sc. and PhD	30/09/2010	Experimental Condensed Matter Physics	Assistant Professor	06/07/2018	80	80	80	Yes	Regular	
Shuvendu Singha	CGSPY403 4C	M.Sc. and PhD	09/05/2016	Protein purification Biophysical Study of Protein	Associate Professor	07/08/2017	76	76	76	Yes	Regular	
Madhusudan Bera	BREP33984 N	M.Sc. and PhD	12/06/2019	Complex Analysis	Assistant Professor	08/07/2019	48	48	69	Yes	Regular	
Biranchi Kumar Mahala	AKCPM957 2H	M.Sc. and PhD	30/01/2016	Weather Research and Forecasting	Assistant Professor	01/08/2015	85	85	75	Yes	Regular	
Mitali Madhumita Acharya	CHRPS2627 P	M.Sc. and PhD	26/12/2011	Numerical Functional Analysis and Operations Research	Assistant Professor	10/07/2011	85	85	75	Yes	Regular	
Srikumar Acharya	APIPA5483 R	M.Sc. and PhD	06/06/2011	Operations Research	Associate Professor	05/01/2011	85	85	75	Yes	Regular	
Nikita Mahapatra	BGEPM409 5A	M.Sc. and PhD	27/07/2016	Regenerative medicine	Assistant Professor	12/07/2018	100	100	100	Yes	Regular	
RAJIB MIA	BXFPM619 4Q	M.Sc. and PhD	10/08/2017	Celestial Mechanics	Assistant Professor	24/08/2017	31	31	77	Yes	Regular	

Bhavya Bhushan	AULPB7870L	M.Sc. and PhD	20/12/2011	Experimental Condensed Matter Physics and Nanotechnology	Associate Professor	08/10/2012	100	100	100	Yes	Regular	
Prakash Kumar Sahu	FDZPS9689J	M.Sc. and PhD	21/01/2017	Numerical Analysis	Assistant Professor	13/12/2016	75	75	75	Yes	Regular	
Joydeb Pal	CCDPP8635B	M.Sc. and PhD	04/03/2020	Algebraic Coding Theory	Assistant Professor	24/06/2019	85	85	85	Yes	Regular	
B. B. Mishra	AKEPM3945J	M.Sc. and PhD	05/03/2003	Delay Differential Equation	Professor	10/10/1995	60	60	60	Yes	Regular	
Dibyaranjan Rout	BGMPR2390M	M.Sc. and PhD	28/07/2006	Materials Science	Associate Professor	15/07/2011	100	100	100	Yes	Regular	
Sudipta K. Ghosh	BRZPG2280D	M.Sc. and PhD	01/09/2022	Functional Analysis Operator Theory	Assistant Professor	30/07/2021	73	73	0	Yes	Regular	
Dr. Sanjoy Kumar Maji	BQAPM5765K	M.Sc. and PhD	25/07/2008	Environmental Chemistry	Assistant Professor	01/12/2014	90	90	90	Yes	Regular	
Prasanta Kumar Das	AMRPD5329G	M.A and Ph.D	16/12/2006	Nonlinear Functional Analysis	Assistant Professor	30/07/2011	50	50	50	Yes	Regular	
Rojalin Sahu	DFZPS4684K	M.Sc. and PhD	25/05/2012	Inorganic Chemistry	Associate Professor	10/08/2011	90	90	90	Yes	Regular	
Jatin K Sinha	EAPPS5142L	M.Sc. and PhD	05/03/2008	Electrochemistry	Associate Professor	08/02/2018	87	87	82	Yes	Regular	
Jasaswini Tripathy	AHEPT6306P	M.Sc. and PhD	12/08/2008	Ring Theory	Associate Professor	02/07/2013	88	88	87	Yes	Regular	
Anirudha Jena	APJPJ4032K	M.Sc. and PhD	03/12/2013	Inorganic Chemistry	Assistant Professor	10/06/2022	0	0	0	Yes	Regular	
ARUN KUMAR GUPTA	ATBPG7245D	M.Sc. and PhD	21/01/2017	Numerical Analysis	Assistant Professor	13/12/2016	16	16	48	Yes	Regular	
Bibhu Prasad Sahoo	CADPS1562E	M.Sc. and PhD	11/05/2013	Polymer Nanocomposites	Associate Professor	18/02/2013	90	90	90	Yes	Regular	
Supriya Roy	BUWPR0305L	M.Sc. and PhD	19/12/2013	Computational Physics	Assistant Professor	12/12/2014	80	80	0	Yes	Regular	
Bijan Kumar Patel	DMOPP6959L	M.Sc. and PhD	31/10/2018	Number Theory	Assistant Professor	01/08/2019	49	49	64	Yes	Regular	
Anita Pati	BTVPP7664J	M.Sc. and PhD	30/08/2010	Organic Chemistry	Associate Professor	18/11/2013	90	90	90	Yes	Regular	
Amulya Ratna Swain	BHNPS6383K	ME/M. Tech and PhD	25/07/2013	Wireless sensor network	Associate Professor	01/02/2013	20	20	20	Yes	Regular	



Krishna Chakravarty	AESPC1901J	MS	27/05/2020	Software Engineering	Assistant Professor	19/06/2017	40	40	40	Yes	Regular	
Kunal Anand	APLPA4667H	M.E/M.Tech	15/12/2014	Software Engineering	Assistant Professor	01/06/2018	40	40	40	Yes	Regular	
Rajdeep Chatterjee	AJTPC5965C	ME/M.Tech and PhD	21/11/2020	Brain Computer Interface	Associate Professor	18/06/2012	40	40	40	Yes	Regular	
Satyranjan Dash	AFTPD9526Q	ME/M.Tech and PhD	20/01/2015	Natural Language Processing	Associate Professor	29/07/2004	20	20	20	Yes	Regular	
Santwana Sagnika	DFTPS8524C	M.E/M.Tech	26/05/2014	Artificial Intelligence	Assistant Professor	10/07/2014	40	40	40	Yes	Regular	
Saurabh Bilgaiyan	BBWPB8398G	ME/M.Tech and PhD	10/11/2018	Software Engineering	Assistant Professor	01/07/2015	40	40	40	Yes	Regular	
Bindu Agarwalla	AVIPA0815G	M.E/M.Tech	15/06/2010	Computer Architecture	Assistant Professor	13/09/2010	20	20	20	Yes	Regular	
Chinmaya Misra	AWVPM9536C	ME/M.Tech and PhD	08/11/2014	Cloud Computing	Associate Professor	21/07/2008	20	20	20	Yes	Regular	
Amiya Kumar Dash	AUKPD2214M	M.E/M.Tech	15/06/2015	Machine Learning	Assistant Professor	18/08/2015	40	40	40	Yes	Regular	
Banchhanidhi Dash	ATEPD0184B	ME/M.Tech and PhD	05/10/2017	Machine Learning	Assistant Professor	22/07/2019	20	20	20	Yes	Regular	
Bibhuti Bhusan Dash	AHWPB8581A	M.E/M.Tech	05/06/2009	Wireless Sensor Network	Assistant Professor	11/12/2003	40	40	40	Yes	Regular	
Kamakhya Narain Singh	BYGPS5645J	M.E/M.Tech	10/02/2015	Software Engineering	Assistant Professor	01/04/2013	40	40	40	Yes	Regular	
Kumar Devadutta	AHSPD1514D	M.E/M.Tech	22/06/2006	Software Engineering	Assistant Professor	01/09/2006	40	40	40	Yes	Regular	
Manas Kumar Rath	ALKPR6407R	M.E/M.Tech	12/06/2010	Machine Learning	Assistant Professor	06/08/2007	40	40	40	Yes	Regular	
Partha Sarathi Pattnayak	AVYPP7061K	ME/M.Tech and PhD	27/08/2018	Machine Learning	Assistant Professor	20/06/2011	40	40	40	Yes	Regular	
Prachi Vijayeeta	AFIPV1002N	M.E/M.Tech	27/05/2022	Software Engineering	Assistant Professor	05/02/2007	40	40	40	Yes	Regular	
Sadhna Sudershana	BVFPS9528E	ME/M.Tech and PhD	28/06/2022	OB	Assistant Professor	07/02/2012	40	40	40	Yes	Regular	
Shaswati Patra	CPPPP1118E	M.E/M.Tech	30/05/2014	Software Engineering	Assistant Professor	18/08/2015	40	40	40	Yes	Regular	

Sudhanshu Shekhar Patra	AGBPP708 1P	ME/M. Tech and PhD	12/03/2013	Cloud Computing	Professor	26/07/2004	40	40	40	Yes	Regular	
Utpal Chandra De	AHIPD9448 A	M.E/M.Tech	12/05/2009	Artificial Intelligence	Assistant Professor	07/09/2009	40	40	40	Yes	Regular	
Pradeep Kandula	CPAPK3386 Q	M.E/M.Tech	01/06/2012	Wireless Sensor Network	Assistant Professor	16/06/2016	40	40	40	Yes	Regular	
Deepanjali Mishra	ARCPM725 8B	M.A and Ph.D	14/06/2015	Culture Studies Linguistics and Feminism	Associate Professor	06/09/2012	90	90	90	Yes	Regular	
Arpita Goswami	BEBPG477 8R	M.A and Ph.D	11/07/2022	Applied linguistics sociolinguistics and folklore	Assistant Professor	01/06/2019	90	90	90	Yes	Regular	
Khushboo Kuddus	BVXPK871 4J	M.A and Ph.D	16/07/2016	ELT and Linguistics	Assistant Professor	01/12/2016	90	90	90	Yes	Regular	
Seema K. Ladsaria	AIRPL3777 A	M.A and Ph.D	14/01/2017	Semiotics	Associate Professor	19/06/2017	90	90	90	Yes	Regular	
S. D. Chaudhuri	ARCPD070 5E	M.A and Ph.D	04/09/2013	Speculative Fiction Mythology Translation Studies and Hindustani Classical Music	Assistant Professor	17/07/2017	90	90	90	Yes	Regular	
Pallavi Kiran	BIQPK1154 G	M.A and Ph.D	24/08/2020	Indian English Literature Poetry Studies and Translation Studies	Assistant Professor	02/01/2018	90	90	90	Yes	Regular	
Abhilas Swain	BOAPS045 2P	ME/M. Tech and PhD	27/04/2018	Thermal Engineering	Assistant Professor	20/06/2017	20	20	20	Yes	Regular	
Achinta Sarkar	JPUPS6847 P	ME/M. Tech and PhD	18/07/2019	Thermal Engineering	Assistant Professor	17/06/2019	20	20	20	Yes	Regular	
Ajay Kumar Behera	ASJPB1318 F	ME/M. Tech and PhD	12/06/2012	Design Engineering	Assistant Professor	16/07/2012	20	20	20	Yes	Regular	
Akhilesh Kumar Tiwari	AMSPT390 8L	M.E/M.Tech	12/07/2017	CAD or CAM	Assistant Professor	05/07/2021	30	30	20	Yes	Regular	
Ambesh Kumar	BOMP694 7R	ME/M. Tech and PhD	08/06/2018	Design Engineering	Assistant Professor	01/12/2017	20	20	20	Yes	Regular	

Amlana Panda	AURPP8014G	ME/M. Tech and PhD	27/12/2016	Production Engineering	Assistant Professor	23/01/2017	20	20	20	Yes	Regular	
Anil Kumar Rout	BOMPR2948F	ME/M. Tech and PhD	24/12/2013	Thermal Engineering	Assistant Professor	24/07/2013	20	20	0	Yes	Regular	
Anish Pandey	BOKPP2972M	ME/M. Tech and PhD	20/07/2016	Design Engineering	Assistant Professor	27/06/2017	20	20	0	Yes	Regular	
Ashwani Kumar	CUWPK9684C	ME/M. Tech and PhD	03/10/2019	Mechatronics Engineering	Assistant Professor	24/06/2019	0	0	20	Yes	Regular	
Asit Behera	BZRPB5674G	M.E/M. Tech	15/06/2018	Production Engineering	Assistant Professor	20/06/2019	30	30	20	Yes	Regular	
Barun Sharma	FEUPS8452F	M.E/M. Tech	12/06/2017	Design Engineering	Assistant Professor	14/07/2017	20	20	20	Yes	Regular	
Basanta Kumar Rana	ARGPR5477B	ME/M. Tech and PhD	05/03/2018	Thermal Engineering	Assistant Professor	19/06/2017	20	20	20	Yes	Regular	
Bijaya Bijeta Nayak	AHLPN2585R	ME/M. Tech and PhD	19/03/2016	Production Engineering	Assistant Professor	04/07/2016	20	20	20	Yes	Regular	
Chinmaya Mishra	BFUPM6970B	ME/M. Tech and PhD	13/11/2021	Thermal Engineering	Assistant Professor	18/06/2014	20	20	0	Yes	Regular	
Debjoyoti Sahu	BXSPS2113N	ME/M. Tech and PhD	08/06/2015	Automobile Engineering	Assistant Professor	09/07/2018	20	20	20	Yes	Regular	
Deepak Singhal	DDXPS0444B	ME/M. Tech and PhD	22/10/2019	Industrial Engineering	Assistant Professor	14/07/2010	20	20	20	Yes	Regular	
Gyan Sagar Sinha	BYIPS9274F	ME/M. Tech and PhD	21/11/2017	Thermal Engineering	Assistant Professor	27/06/2018	20	20	20	Yes	Regular	
Hemalata Jena	ALKPJ1715E	ME/M. Tech and PhD	05/10/2015	Production Engineering	Assistant Professor	24/11/2014	20	20	30	Yes	Regular	
Jitendra Ku. Patel	DXLPP0353Q	ME/M. Tech and PhD	20/06/2018	Thermal Engineering	Assistant Professor	03/07/2017	20	20	20	Yes	Regular	
Kamal Kishore Joshi	AIUPJ2438F	ME/M. Tech and PhD	23/05/2013	Design Engineering	Assistant Professor	19/07/2013	20	20	30	Yes	Regular	
Madhumita Mohanty	BZDPM1485N	M.E/M. Tech	08/11/2016	Design Engineering	Assistant Professor	20/06/2016	40	40	20	Yes	Regular	
Manoj Ukamanal	ABLP5573C	ME/M. Tech and PhD	04/11/2019	Thermal Engineering	Assistant Professor	08/12/2015	20	20	0	Yes	Regular	

Mantra Prasad Satpathy	CEPPS0669 E	ME/M. Tech and PhD	05/04/2017	Production Engineering	Assistant Professor	27/06/2017	0	0	20	Yes	Regular	
Matruprasad Rout	APQPR755 9N	ME/M. Tech and PhD	12/10/2018	Thermal Engineering	Assistant Professor	20/07/2018	20	20	0	Yes	Regular	
Md. Ehtesham Hasan	AERPH077 9N	ME/M. Tech and PhD	02/12/2016	Design Engineering	Assistant Professor	19/06/2017	20	20	20	Yes	Regular	
Nilotpala Bej	APLPB9497 E	ME/M. Tech and PhD	30/03/2016	Thermal Engineering	Assistant Professor	18/06/2018	20	20	20	Yes	Regular	
Pintu Kumar	BVDPK749 7J	ME/M. Tech and PhD	02/11/2020	Production Engineering	Assistant Professor	02/08/2019	20	20	20	Yes	Regular	
Pooja Chaubdar	AYXPC855 5F	M.E/M.Tech	18/06/2018	Aero Propulsion	Assistant Professor	25/06/2018	0	0	0	Yes	Regular	
Prakash Ghosh	ASMPG928 4C	ME/M. Tech and PhD	07/07/2006	Thermal Engineering	Assistant Professor	15/07/2008	20	20	20	Yes	Regular	
Prakash Kumar Sahu	GKNPS501 9E	ME/M. Tech and PhD	23/06/2017	Production Engineering	Assistant Professor	03/07/2017	0	0	0	Yes	Regular	
Priyabrata Mohapatra	AVEPM970 5D	ME/M. Tech and PhD	15/11/2013	Industrial Engineering	Assistant Professor	01/08/2013	20	20	20	Yes	Regular	
Pruthwiraj Sahu	CHPPS4565 L	ME/M. Tech and PhD	14/08/2021	Design Engineering	Assistant Professor	19/06/2014	20	20	20	Yes	Regular	
Pushkar Jha	AKHPJ9914 D	ME/M. Tech and PhD	05/10/2017	Design Engineering	Assistant Professor	24/07/2017	30	30	50	Yes	Regular	
Rahul	ANKPR757 5A	ME/M. Tech and PhD	19/09/2017	Production Engineering	Assistant Professor	19/06/2017	0	0	20	Yes	Regular	
Rajiv Lochan Mohanty	BGSPM461 9J	ME/M. Tech and PhD	15/05/2013	Thermal Engineering	Assistant Professor	24/06/2019	20	20	30	Yes	Regular	
Ram Kumar Kesharwani	BTZPK6083 Q	ME/M. Tech and PhD	07/08/2017	Production Engineering	Assistant Professor	30/06/2017	0	0	0	Yes	Regular	
Ramanuj Kumar	BPHPK429 7J	ME/M. Tech and PhD	05/11/2018	Production Engineering	Assistant Professor	02/07/2012	0	0	20	Yes	Regular	
Ranjan Kumar Behera	AUIPB9432 H	ME/M. Tech and PhD	28/02/2022	Design Engineering	Assistant Professor	07/07/2014	0	0	20	Yes	Regular	
Rasmi Ranjan Behera	AXWPB843 2C	ME/M. Tech and PhD	10/06/2019	Production Engineering	Assistant Professor	26/06/2019	20	20	20	Yes	Regular	

Rishitosh Ranjan	AXHPR459 5H	ME/M. Tech and PhD	01/05/2013	Thermal Engineering	Assistant Professor	01/07/2013	20	20	0	Yes	Regular	
Rita Kumari Sahu	BQLPS2362 D	ME/M. Tech and PhD	11/01/2020	Production Engineering	Assistant Professor	13/08/2012	20	20	20	Yes	Regular	
Sambit Kumar Mohapatra	AVRPM079 7J	ME/M. Tech and PhD	27/07/2017	Production Engineering	Assistant Professor	06/07/2017	20	20	20	Yes	Regular	
Samiran Samanta	DUKPS252 4E	ME/M. Tech and PhD	04/03/2018	Thermal Engineering	Assistant Professor	24/07/2017	20	20	0	Yes	Regular	
Santosh Kumar Hotta	AEWPH064 1E	ME/M. Tech and PhD	01/07/2013	Thermal Engineering	Assistant Professor	06/08/2019	20	20	20	Yes	Regular	
Sasmita Sahu	CZQPS9557 K	ME/M. Tech and PhD	20/12/2016	Design Engineering	Assistant Professor	03/02/2017	0	0	0	Yes	Regular	
Shanta Chakrabarty	AMKPC561 7M	ME/M. Tech and PhD	24/02/2016	Material Science and Engineering	Assistant Professor	31/07/2018	20	20	20	Yes	Regular	
Shivaraman	ARDPT035 3P	ME/M. Tech and PhD	13/07/2017	Production Engineering	Assistant Professor	20/07/2017	20	20	20	Yes	Regular	
Siba Prasad Behera	BUOPB507 1M	M.E/M. Tech	15/07/2015	Thermal Engineering	Assistant Professor	07/07/2017	20	20	40	Yes	Regular	
Smaranika Nayak	AFNPN802 5J	ME/M. Tech and PhD	20/06/2022	Design Engineering	Assistant Professor	06/07/2015	20	20	20	Yes	Regular	
Smita Rani Panda	CPJPP0372 N	M.E/M. Tech	24/12/2012	Production Engineering	Assistant Professor	01/07/2019	40	40	40	Yes	Regular	
Smitirupa Pradhan	ASXPP3835 H	ME/M. Tech and PhD	05/12/2018	Design Engineering	Assistant Professor	02/01/2019	20	20	20	Yes	Regular	
Spandan Guha	AYIPG7424 Q	ME/M. Tech and PhD	28/11/2018	Production Engineering	Assistant Professor	20/07/2018	20	20	20	Yes	Regular	
Srikant Panigrahi	AKZPP8785 A	M.E/M. Tech	20/10/2015	Avionics	Assistant Professor	29/01/2020	40	40	0	Yes	Regular	
Sudhansu Sekhar Patro	BNDPP343 3P	M.E/M. Tech	30/08/2014	Design Engineering	Assistant Professor	30/06/2015	20	20	20	Yes	Regular	
Surendra Ku. Ghadei	AMRPG598 2C	ME/M. Tech and PhD	03/07/2019	Thermal Engineering	Assistant Professor	18/07/2012	20	20	0	Yes	Regular	
Swarup Kumar Nayak	APGPN841 8Q	ME/M. Tech and PhD	10/09/2019	Thermal Engineering	Assistant Professor	24/11/2014	20	20	20	Yes	Regular	

Swayam Bikash Mishra	BDTPM4417J	ME/M. Tech and PhD	05/10/2016	Production Engineering	Assistant Professor	05/12/2016	20	20	20	Yes	Regular	
Tarak Kumar Sahoo	BKRPS4392H	ME/M. Tech and PhD	07/08/2010	Thermal Engineering	Assistant Professor	24/11/2014	20	20	20	Yes	Regular	
Usharani Rath	BIWPR9015B	ME/M. Tech and PhD	15/10/2021	Production Engineering	Assistant Professor	01/07/2013	20	20	20	Yes	Regular	
Vijay Kumar Mishra	ARXPM6335L	ME/M. Tech and PhD	08/02/2017	Thermal Engineering	Assistant Professor	20/06/2016	20	20	20	Yes	Regular	
Atal Bihari Harichandann	AGDPH1046E	ME/M. Tech and PhD	23/08/2010	Aerodynamics	Associate Professor	18/06/2018	20	20	20	Yes	Regular	
B. Surekha	AJGPB8519E	ME/M. Tech and PhD	09/06/2015	Production Engineering	Associate Professor	03/01/2014	20	20	20	Yes	Regular	
Dipti Kanta Das	ANBPD0690H	ME/M. Tech and PhD	04/11/2015	Production Engineering	Associate Professor	25/07/2011	20	20	20	Yes	Regular	
Isham Panigrahi	AHYPP5646A	ME/M. Tech and PhD	04/10/2014	Design Engineering	Associate Professor	04/04/2006	0	0	20	Yes	Regular	
Mohd. Sadique Khan	AJAPK2614H	ME/M. Tech and PhD	12/10/2018	Industrial Engineering	Associate Professor	02/12/2013	20	20	20	Yes	Regular	
Nitin Sharma	DEWPS9529P	ME/M. Tech and PhD	16/10/2018	Design Engineering	Associate Professor	02/07/2010	0	0	20	Yes	Regular	
Radha Kanta Sarangi	ADUPS7565H	ME/M. Tech and PhD	11/06/2016	Thermal Engineering	Associate Professor	02/08/2017	20	20	20	Yes	Regular	
Ruby Mishra	ALDPM5215B	ME/M. Tech and PhD	19/10/1977	Design Engineering	Associate Professor	20/10/2010	0	0	0	Yes	Regular	
Santosh Ku. Nayak	AEAPN4869G	ME/M. Tech and PhD	31/10/2016	Thermal Engineering	Associate Professor	10/04/2010	20	20	20	Yes	Regular	
Satya Prakash Kar	AMOPK2795E	ME/M. Tech and PhD	12/09/2015	Thermal Engineering	Associate Professor	26/06/2007	20	20	20	Yes	Regular	
Suchismita Satapathy	CEJPS2747M	ME/M. Tech and PhD	09/07/2014	Industrial Engineering	Associate Professor	04/02/2013	20	20	20	Yes	Regular	
Sudesna Roy	ABYPR0821P	ME/M. Tech and PhD	27/08/2009	Material Science and Engineering	Associate Professor	24/08/2015	20	20	20	Yes	Regular	
Sumanta Choudhuri	AFBPC6436J	ME/M. Tech and PhD	27/08/2019	Thermal Engineering	Associate Professor	13/07/2012	20	20	20	Yes	Regular	

Akshaya Ku. Rout	AHYPR1179C	ME/M. Tech and PhD	11/07/2011	Thermal Engineering	Professor	05/08/2010	20	20	0	Yes	Regular	
Ashok Ku. Sahoo	ALRPS2041P	ME/M. Tech and PhD	03/11/2010	Production Engineering	Professor	15/11/1997	0	0	0	Yes	Regular	
Basant Ku. Nanda	ABSPN1194M	ME/M. Tech and PhD	07/07/2006	Production Engineering	Professor	31/03/2007	20	20	20	Yes	Regular	
Bharat Ch. Routara	ABYPR0885M	ME/M. Tech and PhD	24/12/2008	Production Engineering	Professor	18/03/2009	0	0	0	Yes	Regular	
Kunja Bihari Sahu	AHZPS1481M	ME/M. Tech and PhD	29/07/2009	Thermal Engineering	Professor	15/09/2010	0	0	0	Yes	Regular	
Lalit Kumar Pothal	AEIPP0201J	ME/M. Tech and PhD	09/11/2019	Industrial Engineering	Professor	31/01/2014	0	0	20	Yes	Regular	
Mrutyunjay Jena	ADQPJ1555L	ME/M. Tech and PhD	30/01/1997	Aero Propulsion	Professor	01/10/2015	20	20	20	Yes	Regular	
P.Chandra Sekhar	ALDPP8328C	ME/M. Tech and PhD	13/10/2006	Design Engineering	Professor	18/10/2001	0	0	0	Yes	Regular	
Purna Ch. Mishra	AXIPM9967H	ME/M. Tech and PhD	24/12/2011	Thermal Engineering	Professor	01/07/2009	0	0	0	Yes	Regular	
Saranjit Singh	AOMPS8904F	ME/M. Tech and PhD	04/09/2007	Production Engineering	Professor	15/05/2009	0	0	0	Yes	Regular	
Sushant Ku. Tripathy	ABDPT5002B	ME/M. Tech and PhD	22/08/2011	Industrial Engineering	Professor	16/07/2012	0	0	20	Yes	Regular	
Tanmoy Mahanty	AHAPM9806F	ME/M. Tech and PhD	19/07/2012	Production Engineering	Professor	04/03/1999	0	0	0	Yes	Regular	
Aparupa Pani	BFIPP3393B	ME/M. Tech and PhD	09/07/2019	Geotech Engineering	Assistant Professor	02/08/2010	20	20	20	Yes	Regular	
Asish Kumar Pani	AUAPP2236R	ME/M. Tech and PhD	02/09/2021	Structural Engineering	Associate Professor	17/04/2007	20	20	20	Yes	Regular	
Bandita Paikaray	APVPP9756L	ME/M. Tech and PhD	09/11/2019	Geotech Engineering	Associate Professor	31/07/2008	20	20	20	Yes	Regular	
Amit Kumar Das	AUHPD9235D	ME/M. Tech and PhD	07/03/2022	Transportation Engineering	Assistant Professor	03/12/2018	20	20	20	Yes	Regular	
Bhagyashree Panda	BKEPP7201F	M.E/M. Tech	18/01/2014	Transportation Engineering	Assistant Professor	06/07/2013	0	0	20	Yes	Regular	

Brundaban Beriha	BELPB0104 G	ME/M. Tech and PhD	20/10/2020	Transportation Engineering	Assistant Professor	27/06/2019	30	30	20	Yes	Regular	
Dipti Ranjan Biswal	ANWPB665 2Q	ME/M. Tech and PhD	18/05/2018	Transportation Engineering	Associate Professor	18/06/2018	20	20	20	Yes	Regular	
Dudam Bharath Kumar	BCMPB132 2F	ME/M. Tech and PhD	07/08/2017	Environmental Engineering	Assistant Professor	01/07/2017	20	20	20	Yes	Regular	
Gaurav Udgata	AEZPU339 7R	M.E/M.Tech	31/05/2016	Structural Engineering	Assistant Professor	23/06/2016	20	20	20	Yes	Regular	
Ipsita Mohanty	AVCPM074 2J	M.E/M.Tech	05/02/2016	Structural Engineering	Assistant Professor	23/06/2017	20	20	20	Yes	Regular	
Ipsita Panda	CWSPP915 0L	M.E/M.Tech	16/01/2016	Geotech Engineering	Assistant Professor	04/07/2017	20	20	20	Yes	Regular	
Kalpna Sahoo	ESMPS2701 A	M.E/M.Tech	07/03/2022	Transportation Engineering	Assistant Professor	27/06/2017	20	20	20	Yes	Regular	
Kirtikanta Sahoo	DELPS8005 F	ME/M. Tech and PhD	07/01/2017	Structural Engineering	Assistant Professor	18/06/2012	20	20	20	Yes	Regular	
Kshyana Prava Samal	BNNPK659 7B	ME/M. Tech and PhD	14/11/2009	Water Resources Engineering	Associate Professor	17/06/2016	20	20	20	Yes	Regular	
Kundan Samal	DQDPS788 8L	ME/M. Tech and PhD	10/01/2020	Environmental Engineering	Assistant Professor	02/07/2018	20	20	20	Yes	Regular	
Madhulisha Pattanaik	BHZPP4836 J	ME/M. Tech and PhD	04/06/2019	Transportation Engineering	Assistant Professor	19/07/2019	20	20	0	Yes	Regular	
Malaya Mohanty	BRUPM475 6R	ME/M. Tech and PhD	20/03/2020	Transportation Engineering	Assistant Professor	02/07/2018	20	20	20	Yes	Regular	
Mohibullah	AYAPM251 5J	M.E/M.Tech	30/06/2012	Construction Management	Assistant Professor	09/01/2017	30	30	20	Yes	Regular	
Paromita Chakraborty	AJHPC1855 F	ME/M. Tech and PhD	30/10/2010	Water Resources Engineering	Assistant Professor	13/07/2012	20	20	20	Yes	Regular	
Prateeksha Mahamallik	BJWPM484 3D	ME/M. Tech and PhD	27/07/2013	Environmental Engineering	Assistant Professor	31/07/2017	20	20	20	Yes	Regular	
Preetynanda Nanda	AMRPN087 6E	M.E/M.Tech	09/06/2014	Geotech Engineering	Assistant Professor	23/07/2014	20	20	20	Yes	Regular	
Rachita Panda	BSUPP6733 J	M.E/M.Tech	08/11/2016	Transportation Engineering	Assistant Professor	19/06/2017	20	20	20	Yes	Regular	
Rana Chattaraj	AIPPC4084 P	ME/M. Tech and PhD	27/02/2017	Geotech Engineering	Assistant Professor	03/01/2017	20	20	20	Yes	Regular	
Sananda Sarkar	BZWPS884 3P	M.E/M.Tech	02/02/2015	Environmental Engineering	Assistant Professor	16/06/2016	20	20	20	Yes	Regular	



Satya Ranjan Samal	EEHPS2603 E	M.E/M.Tech	15/07/2014	Transportation Engineering	Assistant Professor	23/07/2014	20	20	20	Yes	Regular	
Satyajeet Nanda	ADYPN674 4M	ME/M. Tech and PhD	11/03/2013	Geotech Engineering	Associate Professor	20/02/2017	20	20	0	Yes	Regular	
Sunny Jaiswal	EANPS0722 L	M.E/M.Tech	22/07/2017	Structural Engineering	Assistant Professor	19/06/2017	20	20	20	Yes	Regular	
Sushree Sangita Panda	ANOPP689 7K	M.E/M.Tech	24/07/2015	Structural Engineering	Assistant Professor	19/06/2017	0	0	20	Yes	Regular	
Chinmoy Kumar Panigrahi	AIJPP7246 G	ME/M. Tech and PhD	11/07/2003	Power System	Professor	30/04/2009	30	30	30	Yes	Regular	
Sarat Chandra Swain	AYAPS5862 N	ME/M. Tech and PhD	24/10/2010	Power System	Professor	11/01/1996	30	30	30	Yes	Regular	
Babita Panda	APWPP571 1J	ME/M. Tech and PhD	14/03/2017	Power Electronics and Drives	Associate Professor	16/08/2012	30	30	30	Yes	Regular	
Chitralkha Jena	ADXPJ5640 B	ME/M. Tech and PhD	01/07/2017	Power and Energy System	Associate Professor	01/12/2012	30	30	30	Yes	Regular	
Lipika Nanda	AHEPN246 9D	ME/M. Tech and PhD	09/11/2019	Power Electronics and Drives	Associate Professor	19/06/2007	30	30	30	Yes	Regular	
Pampa Sinha	BZHPS5476 F	ME/M. Tech and PhD	10/04/2017	Power System	Associate Professor	20/06/2016	30	30	30	Yes	Regular	
Pradeep Kumar Sahu	AZIPS4641 N	ME/M. Tech and PhD	16/11/2016	Power Electronics	Associate Professor	23/06/2017	30	30	30	Yes	Regular	
Rudra Narayan Dash	AMGPD903 5Q	ME/M. Tech and PhD	05/11/2018	Electrical Machines	Associate Professor	21/07/2011	30	30	30	Yes	Regular	
Satyanarjan Jena	AHYPJ6801 B	ME/M. Tech and PhD	09/11/2016	Power control and Drives	Associate Professor	18/06/2012	30	30	30	Yes	Regular	
Sriparna Roy Ghatak	AQMPG319 3J	ME/M. Tech and PhD	02/11/2018	Power System Engineering	Associate Professor	09/04/2007	30	30	30	Yes	Regular	
Subhra Debdas	AHLPD700 2M	ME/M. Tech and PhD	13/08/2018	Power System Engineering	Associate Professor	06/10/2019	30	30	30	Yes	Regular	
Alivarani Mohapatra	AUPPM310 5M	ME/M. Tech and PhD	12/06/2018	Energy system	Associate Professor	20/07/2009	30	30	30	Yes	Regular	
Anil Kumar Behera	BSJPB7951 D	M.E/M.Tech	22/04/2017	Power Electronics and Drives	Assistant Professor	31/07/2017	30	30	30	Yes	Regular	

Ankit Kumar Soni	CQAPS8654L	M.E/M.Tech	06/07/2017	Power and Energy System	Assistant Professor	21/06/2017	30	30	30	Yes	Regular	
Deepak Kumar Gupta	BJAPG1813K	ME/M. Tech and PhD	24/02/2018	Power System Engineering	Assistant Professor	07/11/2017	30	30	30	Yes	Regular	
K. V. V. S. R Chowdary	BITPK4849P	ME/M. Tech and PhD	06/05/2014	Power Electronics and Drives	Assistant Professor	21/07/2011	30	30	30	Yes	Regular	
Padarbinda Samal	BOZPS5346M	ME/M. Tech and PhD	20/01/2018	Power System Engineering	Assistant Professor	23/06/2017	30	30	30	Yes	Regular	
Ranjeeta Patel	BHHPP0139E	ME/M. Tech and PhD	31/05/2017	Power Electronics and Drives	Assistant Professor	12/03/2018	30	30	30	Yes	Regular	
Satyabrata Sahoo	BYEPS1070D	ME/M. Tech and PhD	26/06/2012	Control and protection of Electrical Apparatus	Assistant Professor	26/06/2012	30	30	30	Yes	Regular	
Swagat Das	BDJPD3185N	MS	16/05/2016	Power Electronics Device Reliability	Assistant Professor	21/08/2017	30	30	30	Yes	Regular	
Tapaswini Biswal	BFWPB7491C	M.E/M.Tech	20/05/2016	Power System Engineering	Assistant Professor	03/09/2016	30	30	30	Yes	Regular	
Subodh Kumar Mohanty	AWLPM3405E	M.E/M.Tech	22/05/2013	Power System Engineering	Assistant Professor	24/11/2014	30	30	30	Yes	Regular	
Shubhashree Kundo	AWAPK4226G	ME/M. Tech and PhD	16/03/2016	Automation and Robotics	Assistant Professor	04/01/2016	30	30	30	Yes	Regular	
Samita Rani Pani	BQFPP1220H	M.E/M.Tech	04/06/2014	Power System Engineering	Assistant Professor	17/06/2014	30	30	30	Yes	Regular	
KRUSHNA GOPAL MISHRA	AJWPM3483A	M.Sc. and PhD	12/09/1988	Electrochemistry	Professor	22/07/2003	40	40	40	Yes	Regular	
Alok Ranjan Patnaik	DVGPP6761M	M.Sc. and PhD	11/01/1987	Astronomy	Professor	02/12/2019	40	40	40	Yes	Regular	
Samaresh Jana	AOFPJ8123G	M.Sc. and PhD	24/12/2007	Organic chemistry	Associate Professor	19/02/2013	100	100	100	Yes	Regular	
Chandana Mohanty	AEMPM3551J	M.Sc. and PhD	09/11/2001	Nanotechnology Drug delivery and Tissue engineering	Assistant Professor	09/07/2018	100	100	100	Yes	Regular	
Pratap Kumar Deheri	DOWPD6481R	M.Sc. and PhD	09/11/2012	Material Science	Assistant Professor	23/07/2018	85	85	85	Yes	Regular	

Sushant Kumar Sahoo	BJLPS9986 A	M.Sc. and PhD	03/09/2014	Condensed matter theory	Associate Professor	17/07/2008	67	67	67	Yes	Regular	
Prasanta Rath	AMRPD532 9G	M.Sc. and PhD	11/05/2004	Environmental geochemistry	Professor	01/12/1999	40	40	40	Yes	Regular	
Biswabandita Kar	AHGPK103 9C	M.Sc. and PhD	04/04/2001	Chemical metallurgy and environmental chemistry	Professor	03/01/2005	40	40	40	Yes	Regular	
Priyadarshini Parida	AVZPP1627 Q	M.Sc. and PhD	26/01/2016	Computational Condensed matter Physics	Assistant Professor	01/01/2019	80	80	80	Yes	Regular	
A K Paul	ALDPP5523 H	M.Sc. and PhD	20/11/2012	Numerical Analysis	Assistant Professor	15/07/2014	70	70	70	Yes	Regular	
Debasis Sharma	IRBPS4942 F	M.Sc. and PhD	09/11/2021	Numerical Analysis	Assistant Professor	26/07/2021	46	46	0	Yes	Regular	
Tapan Kumar Bastia	AHFPB436 6A	M.Sc. and PhD	08/05/1993	composite materials	Associate Professor	03/08/2009	60	60	60	Yes	Regular	
Puspalata Pattojoshi	AGQPP776 4A	M.Sc. and PhD	07/01/1987	Physics	Professor	20/06/2014	30	30	30	Yes	Regular	
Subhadarshan Sahoo	DPNPS8597 K	M.Sc. and PhD	19/01/2019	Differential equation	Assistant Professor	17/10/2017	70	70	70	Yes	Regular	
Jagnyaseni Tripathy	AQTPT868 6J	M.Sc. and PhD	06/05/2011	Biophysics	Assistant Professor	10/01/2012	87	87	87	Yes	Regular	
Bidhubhusan Sahu	EJPPS3096J	M.Sc. and PhD	30/03/2011	Nuclear Physics	Associate Professor	04/08/2012	75	75	75	Yes	Regular	
Akshaya Kumar Panda	AMMPP292 9H	M.Sc. and PhD	17/03/2017	Number Theory	Assistant Professor	05/01/2017	78	78	78	Yes	Regular	
Manoranjan Sahoo	CCXPS0915 H	M.Sc. and PhD	28/05/2011	Fractal and OR	Assistant Professor	14/03/2011	50	50	50	Yes	Regular	
Kajal Parashar	AXKPP108 9R	M.Sc. and PhD	05/09/2004	Nano materials	Associate Professor	10/08/2009	60	60	60	Yes	Regular	
Laxmipriya Nayak	ASGPN030 0G	M.A and Ph.D	25/05/2015	Fourier Analysis	Assistant Professor	03/09/2012	80	80	80	Yes	Regular	
Mitali Routaray	BPBPR3224 Q	M.Sc. and PhD	20/01/2018	Topology	Assistant Professor	07/01/2017	62	62	77	Yes	Regular	
Sarbari Acharya	ANIPA9387 K	M.Sc. and PhD	17/07/2017	Nanotechnology and cancer drug delivery	Assistant Professor	07/09/2018	100	100	100	Yes	Regular	
Sohini Sarkar	CSFPS8703 P	M.Sc. and PhD	29/11/2013	Inorganic Chemistry	Assistant Professor	20/07/2016	84	84	88	Yes	Regular	
Sushma Singh	EDRPS9100 P	M.Sc. and PhD	27/11/2019	Ring Theory	Assistant Professor	17/06/2019	88	88	88	Yes	Regular	

Dibakar Behera	ARFPB2801 G	ME/M. Tech and PhD	04/07/2009	Materials Science	Associate Professor	25/07/2008	100	100	100	Yes	Regular	
Ch. Vinod	AVEPC8967 B	M.Sc. and PhD	01/10/2016	Chronobiology and Neurochemistry	Assistant Professor	17/07/2018	100	100	100	Yes	Regular	
Debdulal Panda	AIFPP5844 E	M.Sc. and PhD	10/07/2010	Operations research	Associate Professor	10/01/2012	25	25	50	Yes	Regular	
R N MUKHARJEE	AFUPM677 0J	M.Sc. and PhD	02/02/1996	Experimental Nuclear Physics	Associate Professor	02/12/2013	90	100	100	Yes	Regular	
Prasanta Kumar Mohanty	AHAPM275 2L	ME/M. Tech and PhD	21/11/2014	Numerical Analysis	Assistant Professor	20/02/2011	25	25	50	Yes	Regular	
Pramod Kumar Das	ACEPD254 6G	M.A and Ph.D	11/10/1989	Combinatorics and Graph Theory and Fuzzy Logic	Professor	27/07/2016	50	50	50	Yes	Regular	
Manas Mukul	AJPPM8535 N	ME/M. Tech and PhD	01/11/2016	Software Engineering	Professor	07/08/2010	20	20	20	Yes	Regular	
Sudhansu Dubey	CLTPD7631 L	M.E/M.Tech	28/06/2017	Machine Design	Associate Professor	07/10/2021	20	20	20	Yes	Regular	
Rabindra Kumar Barik	BMPPB735 7F	MCA and PhD	07/09/2014	Database Engineering	Assistant Professor	18/06/2012	20	20	20	Yes	Regular	
Jagori Dutta	APFPD3424 F	ME/M. Tech and PhD	22/06/2016	Geotech Engineering	Assistant Professor	27/06/2016	0	0	20	No	Regular	#####
Shiv Shankar Kumar	HLXPK768 7A	ME/M. Tech and PhD	25/06/2018	Geotech Engineering	Assistant Professor	30/07/2018	0	0	0	No	Regular	#####
Subrat Kumar Barik	AKHPB873 2B	ME/M. Tech and PhD	15/06/2016	Power and Energy System	Associate Professor	01/02/2011	30	30	30	No	Regular	#####
Sanjaya Kumar Panda	AXEPP1772 D	M.A and Ph.D	01/09/2017	Yoga and Spiritualism	Assistant Professor	01/09/2017	100	100	100	Yes	Regular	
Kriti Raj	BEMPR775 2B	MA	24/05/2019	Yoga and Spiritualism	Assistant Professor	21/01/2020	90	100	100	Yes	Regular	
Rituparna Kar	DZCPK392 9J	MA	12/08/2017	Yoga	Assistant Professor	20/11/2017	90	100	100	Yes	Regular	
Sashikanta Khuntia	BJLPK3305 H	MA	23/02/2015	Yoga and Spiritualism	Assistant Professor	27/11/2017	90	100	100	Yes	Regular	
Swapnamoyee Palit	AUEPP8658 H	M.A and Ph.D	01/12/2016	Econometrics and mathematical economics	Assistant Professor	10/10/2017	90	90	90	Yes	Regular	

Chetna Sinha	BVAPS4153 G	MBA & Ph.D	15/12/2014	ELT and Linguistics	Assistant Professor	07/03/2022	90	90	0	Yes	Regular	
Sahel Md Delabul Hossain	ADTPH206 1G	M.A and Ph.D	09/10/2018	Postcolonial Studies and Film Studies and Race Relation and Gender Studies and Migration and Diaspora and ELT	Assistant Professor	02/01/2022	90	90	0	Yes	Regular	
Sourabh Rajwade	BSFPR8215 Q	M.E/M.Tech	15/11/2017	CAD or CAM	Assistant Professor	07/04/2021	60	60	60	Yes	Regular	
Kalyani Mohanta	AHAPM960 1Q	ME/M. Tech and PhD	15/09/2007	Material Science and Engineering	Professor	18/06/2021	30	30	20	Yes	Regular	
Amulya Kumar Mahto	DFRPM100 0K	ME/M. Tech and PhD	04/01/2021	Statistical Inferences	Assistant Professor	26/07/2021	60	60	0	Yes	Regular	
Ajay Kumar Mishra	BBPPM083 7E	M.Sc. and PhD	24/02/2007	Nanotechnology	Professor	21/06/2021	88	88	88	Yes	Regular	
Chandan Kumar Mohapatra	AVZPM724 2A	MA	01/05/2020	Yoga and Spiritualism	Assistant Professor	12/10/2020	90	100	100	Yes	Regular	
Aparajita Sahoo	BYVPS735 6H	MA	01/05/2020	Yoga and Spiritualism	Assistant Professor	12/10/2020	90	100	100	Yes	Regular	
Pradyumna Kumar Behera	BZRPB1667 H	MA	01/05/2020	Yoga	Assistant Professor	12/10/2020	90	100	100	Yes	Regular	
ARATRIK A GANGULY	BFEPG7204 N	M.Phil	24/12/2018	Comparative Literature	Assistant Professor	01/02/2022	90	90	0	Yes	Regular	
SHRADDH A DHAL	AXLPD983 0H	M.A and Ph.D	30/01/2020	Postcolonial Literature and Diaspora Studies	Assistant Professor	23/07/2018	60	60	90	Yes	Regular	
Manoranjan Sahoo	EQGPS0576 B	M.A and Ph.D	16/04/2018	International Trade and Applied Econometrics	Assistant Professor	08/01/2018	60	60	90	Yes	Regular	
Dhyanaaditya Panda	ARLPP4507 H	MBA & Ph.D	10/03/2022	Human Resource Management	Assistant Professor	01/02/2011	90	90	90	Yes	Regular	
Arijit Patra	FZVPP7498 Q	M.Sc. and PhD	03/12/2020	Reliability Theory	Assistant Professor	03/08/2022	60	0	0	Yes	Regular	

Data for first year courses to calculate the FYSFR:

Year	Number of students (approved intake strength)	Number of faculty members (considering fractional load)	FYSFR	*Assessment = $(5 \times 20) / \text{FYSFR}$ (Limited to Max. 5)
2022-2023 (CAY)	1500	108	13.9	5
2021-2022) CAYm1	1620	108	15.0	5
(2020-2021) CAYm2	1620	102	15.9	5
Average	1580	106	14.9	5

**Average FYSFR: 14.9**

**Assessment [  $(5 * 20) / \text{Average FYSFR}$ ]: 5**

### 8.2 Qualification of Faculty Teaching First Year Common Courses (5)

Assessment of qualification =  $(5x + 3y) / RF$ ,  $x$  = Number of Regular Faculty with Ph.D.,  $y$  = Number of Regular Faculty with Post-graduate qualification  $RF$  = Number of faculty members required as per SFR of 20:1, Faculty definition as defined in 5.1

Year	x (No of Regular Faculty with PhD )	y (No of Regular Faculty with Post Graduate Qualification)	RF (No of Faculty Members required as per SFR 20:1)	Assessment of Faculty Qualification $[(5x+3y)/RF]$
CAY	195	48	81	14
CAYm1	194	48	81	13
CAYm2	185	43	81	13

*Table B.8.2*

### 8.3 First Year Academic Performance (10)

*Academic Performance = ((Mean of 1<sup>st</sup> Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks in First Year of all successful students/10)) x (number of successful students/number of students appeared in the examination)*

*Successful students are those who are permitted to proceed to the second year.*

Academic Performance	CAYm1 (2021-22)	CAYm2 (2020-21)	CAYm3 (2019-20)
Mean of CGPA or mean percentage of all successful students(X)	8.7	8.5	8.68
Total Number of successful students(Y)	180	180	180
Total Number of students appeared in the examination(Z)	180	180	180
API $[X*(Y/Z)]$	8.7	8.5	8.68

Average API[ (AP1+AP2+AP3)/3 ] :

Assessment = Average API : 8.6

#### 8.4. Attainment of Course Outcomes of first year courses (10)

##### 8.4.1. Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5)

The performance of student in each semester is assessed for a maximum of 100 marks for theory, practical and sessional/project components. These different categories of courses have different assessment schemes as discussed in the table below

<b>Course category:</b>	<b>Assessment Methods:</b>
Theory courses (assessed out of 100 marks)	<ul style="list-style-type: none"> <li>● <b>Continuous assessment of 30 marks:</b> <ul style="list-style-type: none"> <li>○ Assessment is done through student’s performance in different assignments/tests/tasks/learning activities given by the course faculty-member. The tasks are designed to address all the course outcomes almost uniformly. These tasks are given at different times in the semester.</li> </ul> </li> <li>● <b>Mid semester examination/assessment of 20 marks (questions corresponding to attainment of different COs):</b> <ul style="list-style-type: none"> <li>○ Assessment is done through student’s performance in the mid-semester examination which is conducted once in a semester which is currently of one hour duration. As the name implies, this examination is conducted in the middle of the semester.</li> <li>○ Frequency: once in a semester.</li> <li>○ Questions are set to assess the attainments of certain course outcomes defined for the course, through the students’ marks or scores.</li> </ul> </li> <li>● <b>End semester examination/assessment of 50 marks (questions correspond to attainment of different COs):</b> <ul style="list-style-type: none"> <li>○ Assessment is done through student’s performance in the end-semester examination which is conducted at the end of every semester. This examination is currently of two hours duration.</li> <li>○ Frequency: once in a semester.</li> <li>○ Questions are set to assess the attainments of course outcomes defined for the course through the students’ marks or scores.</li> </ul> </li> </ul>
Practical courses (assessed out of 100 marks)	<ul style="list-style-type: none"> <li>● <b>Continuous assessment of 60 marks</b> <ul style="list-style-type: none"> <li>○ Assessment is done through student performance in day to day laboratory activities where the student’s involvement, conduct of the experiment, recording of observations and analysis/ design outputs, documentation of results and</li> </ul> </li> </ul>

	<p>observations, clarity of concept is taken into account by the designated laboratory faculty member.</p> <ul style="list-style-type: none"> <li>o All the laboratory tasks are designed to assess the attainments of different course outcomes defined for the course through students' marks or scores.</li> </ul> <ul style="list-style-type: none"> <li>● <b>End semester examination/ assessment of 40 marks</b> <ul style="list-style-type: none"> <li>o Assessment is done through conduct of a given experiments tasks, viva, etc. This is normally conducted at the end of the semester and is normally of three hour duration.</li> <li>o Frequency: once in a semester.</li> <li>o The tasks, questionnaires are mapped to course outcomes and the students' marks or score is used to compute the attainment.</li> </ul> </li> </ul>
Sessional courses (assessed out of 100 marks)	<ul style="list-style-type: none"> <li>● <b>Continuous assessment of 100 marks:</b> <ul style="list-style-type: none"> <li>o Assessment is done through student's performance in different assignments/tests/tasks/learning activities given by the course faculty-member. The tasks are designed to address all the course outcomes almost uniformly.</li> <li>o Frequency: Assessed throughout the semester.</li> <li>o Different tasks are mapped to different outcomes and the students' marks or score in that category is used to compute the attainment</li> </ul> </li> </ul>

Every course has a defined set of course outcome statements which describes the abilities a student will develop after successfully completing the course. The assessment methods are used to evaluate the attainment of the course outcomes on a scale of 0-3 lead to the direct attainment of program outcomes. The attainments of course outcomes are measured from marks obtained by the students in different examinations, course related assessments (different assessment and examination questions are framed to test the attainment of different course outcomes for a course).

**Class average is the average percentage of marks secured by all the students in a assessment component in a specific CO**

Targets are quantized into three different levels (Level 1, Level 2 and Level 3) based on Class average in each CO as per the rubrics given below.

Target Levels for CO Attainment				
Level	<b>0</b>	0	$\leq$ Class Average in each CO $<$	Threshold 1
Level	<b>1</b>	Threshold 1	$\leq$ Class Average in each CO $<$	Threshold 2
Level	<b>2</b>	Threshold 2	$\leq$ Class Average in each CO $<$	Threshold 3
Level	<b>3</b>	Threshold 3	$\leq$ Class Average in each CO $<$	100

Thresholds 1, 2, and 3 are normally set at 25%, 50% and 75% respectively. However, if the course coordinator and course committee involved in ascertaining the attainment levels can raise the



thresholds if required.

#### **Data Acquisition Process:**

- All the questions of mid semester and end semesters are mapped with course outcomes during the preparation of question paper.
- All the activities/assignments/quiz/ experiments are mapped with course outcomes by the course coordinator.
- Exam papers are assessed and marks of obtained by all the students are saved in ediquity software which is shared with the course coordinator for further CO attainment analysis.
- During Covid 19, marks obtained by all the students are saved in Moodle which is shared with the course coordinator for further CO attainment analysis.
- Final computation of course outcome is done through spreadsheets and also through SAP.

CO attainment information will be compiled by the course coordinators and information passed on to the School Quality Assurance Cell and Program Assessment Committee for subsequent decisions and actions. The calculation for attainments is performed after declaration of end semester examination results. All documentations related to attainments are maintained by the course coordinators.

Course outcome attainment for each type of courses are discussed below.

#### **Attainment of course outcomes for theory courses:**

- The course outcomes attainment is assessed based on students' performance in cumulative internal examination (which included continuous assessment and mid-sem) and semester end examination. A summary of different assessment components and respective weightage is given in the table below.

Course Category	Assessment Tools	Marks	Category	Weightage
Theory Course	Continuous Evaluation	30	Cumulative Internal Examination (CIE)	50
	Mid-Semester Examination	20		
	End Semester Examination	50	Semester End Examination (SEE)	50

The students' marks in different questions are mapped to different Course Outcomes (COs) and are used to compute the class average corresponding to every CO in the course as described below:

Cumulative Internal Examination: Class average corresponding to each CO is assessed as below.

Course Outcomes	Continuous Evaluation		Mid Semester Examination		Cumulative Internal Examination		
	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Class Average
CO <sub>x</sub>	X'	X	Y'	Y	X'+Y'	X+Y	$\frac{X'+Y'}{X+Y} \times 100$

Semester Internal Examination: Class average corresponding to each CO is assessed as below.

Course Outcomes	Semester Internal Examination		
	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Class Average
CO <sub>x</sub>	Z'	Z	$Z'/Z \times 100$

Targets are quantized into three different levels (Level 1, Level 2 and Level 3) based on Class Average in each CO as per the rubrics given below. The course outcome attainment is assessed based the set target levels as given below.

The course outcome attainment is assessed based on the set threshold levels as given below.

Threshold Levels for CO Attainment				
Level	<b>0</b>	0	$\leq$ Class Average in each CO <	25
Level	<b>1</b>	25	$\leq$ Class Average in each CO <	50
Level	<b>2</b>	50	$\leq$ Class Average in each CO <	75
Level	<b>3</b>	75	$\leq$ Class Average in each CO <	100

The CO attainment is assessed separately for CIE and SEE. The final CO attainment is measured based the weighted average of CIE (C) and SEE (S). For the theory course, the weightage of CIE and

SEE is 50 % and 50%.

**Final Attainment level=**

**Weightage in CIE (=0.5) \* CO Attainment in Cumulative End Semester Exam (CIE) +**

**Weightage in CIE (=0.5) \* CO Attainment in Semester End Exam (SEE)**

**Attainment of course outcomes for Practical courses:**

The course outcome attainment is assessed based on the students' performance in cumulative internal examination (which included continuous assessment through experimental activities/tasks) and semester end examination. A summary of different assessment components and respective weightage is given in the table below.

Course Category	Assessment Tools	Marks	Category	Weightage
Practical Course	Continuous Evaluation (Experimental activities/ tasks)	60	Cumulative Internal Examination (CIE)	60
	End Semester Examination	40	Semester End Examination (SEE)	40

The experimental activities and tasks are mapped to different Course Outcomes (COs) and are used to compute the class average corresponding to every CO in the course as described below:

Cumulative Internal Examination: Class average corresponding to each CO is assessed as below.

Course Outcomes	Cumulative Internal Examination		
	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Class Average
CO <sub>x</sub>	X'	X	$X'/X \times 100$

Semester Internal Examination: Class average corresponding to each CO is assessed as below.

Course Outcomes	Semester Internal Examination		
	Total marks obtained by all the	Total marks allotted to each CO	Class Average

	student corresponding to each CO	(considering all the students)	
CO <sub>x</sub>	Z'	Z	Z'/Z x 100

The course outcome attainment is assessed based on the set target levels as given below.

Threshold Levels for CO Attainment				
Level	<b>0</b>	0	≤ Class Average in each CO <	25
Level	<b>1</b>	25	≤ Class Average in each CO <	50
Level	<b>2</b>	50	≤ Class Average in each CO <	75
Level	<b>3</b>	75	≤ Class Average in each CO <	100

The CO attainment is assessed separately for CIE and SEE. The final CO attainment is measured based the weighted average of CIE (C) and SEE (S). For the practical theory course, the weightage of CIE and SEE is 60 % and 40%.

**Final Attainment level= Weightage in CIE (=0.6) \* CO Attainment in CIE + Weightage in CIE (=0.4) \* CO Attainment in SEE**

**Attainment of course outcomes for Sessional courses:**

The course outcome attainment is assessed based on the students' performance in cumulative internal examination (which included continuous assessment through different activities like design, development, analysis or any other tasks) and semester end examination. A summary of different assessment components and respective weightage is given in the table below.

Course Category	Assessment Tools	Marks	Category	Weightage
Sessional Course	Continuous Evaluation (Experimental activities/ tasks)	100	Cumulative Internal Examination (CIE)	100

The experimental activities and tasks are mapped to different Course Outcomes (COs) and are used to compute the class average corresponding to every CO in the course as described below:

Cumulative Internal Examination: Class average corresponding to each CO is assessed as below.

Course Outcomes	Cumulative Internal Examination		
	Total marks obtained by all the student corresponding to each CO	Total marks allotted to each CO (considering all the students)	Class Average
CO <sub>x</sub>	X'	X	X'/X x100

The course outcome attainment is assessed based on the set threshold levels as given below.

Threshold Levels for CO Attainment				
Level	<b>0</b>	0	≤ Class Average in each CO <	25
Level	<b>1</b>	25	≤ Class Average in each CO <	50
Level	<b>2</b>	50	≤ Class Average in each CO <	75
Level	<b>3</b>	75	≤ Class Average in each CO <	100

**Final Attainment level= CO Attainment in CIE**

#### 8.4.2. Record the attainment of Course Outcomes of all first year courses (5)

Course Outcome attainment of all the first year courses is given below for the Academic Year 2020-2021

Sl. No.	Course Code	Course Title	CO1	CO2	CO3	CO4	CO5	CO6
1	CE101	Mathematics-I	3	2	3	2.5	2.5	2.5
2	CE102	Physics	2	3	2	3	2.5	2.5
3	CE103	Basic Electrical Engineering	2	2.5	2.5	2	2.5	3
4	CE104	Engineering Mechanics	2	3	2.5	3	3	3
5	CE105	Physics Lab	2.6	3	2.4	3	3	2.4
6	CE106	Basic Electrical Engineering Lab	2.4	2	2.6	3	2.4	2
7	CE107	Basic Manufacturing Systems	3	2.8	3	2.8	3	2.8
8	CE108	Environmental Science	3	2.8	3	2.2	3	2.8
9	CE109	Mathematics-II	2.5	2.5	2.5	2.5	2.5	2
10	CE110	Chemistry	2	2.5	3	2.5	2.5	2.5
11	CE111	Professional Communication	2.5	2.5	2.5	2.5	2.5	2.5
12	CE112	Biology	2.5	2.5	2	3	3	2.5
13	CE113	Chemistry Lab	2	2.4	2.6	3	2.6	2
14	CE114	Computer Programming	3	2.6	2.6	2.4	2.6	2
15	CE115	Language Lab	3	3	2	2	3	2
16	CE116	Engineering Graphics	3	3	2.2	2.8	2.2	3
17	CE117	Yoga and Human Consciousness	3	3	3	3	3	3

### 8.5. Attainment of Program Outcomes from first year courses (20)

#### 8.5.1. Indicate results of evaluation of each relevant PO and/or PSO if applicable (10)

##### PO/PSO Attainment: Mention first year courses

Sl. No.	NBA Course Code	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
1	CE101	Mathematics-I	2.58	2.56	2.58	2.53	2.50	2.50	2.25	-	3.00	-	-	-
2	CE102	Physics	2.46	2.50	2.50	2.50	-	-	-	-	-	-	-	-
3	CE103	Basic Electrical Engineering	2.38	2.38	2.35	2.41	-	2.33	2.40	-	-	-	-	-
4	CE104	Engineering Mechanics	2.75	2.75	2.75	2.75	-	-	-	-	-	-	-	-
5	CE105	Physics Lab	2.78	2.72	3.00	-	-	-	-	-	-	-	-	-
6	CE106	Basic Electrical Engineering Lab	2.49	2.50	2.30	2.40	2.58	2.43	2.53	2.47	2.20	2.40	-	-
7	CE107	Basic Manufacturing Systems	2.90	-	2.90	-	2.90	2.89	-	-	2.91	2.92	-	-
8	CE108	Environmental Science	2.80	2.80	2.80	3.00	3.00	2.80	2.80	3.00	3.00	3.00	-	-
9	CE109	Mathematics-II	2.42	2.42	2.42	2.42	-	-	-	-	-	-	-	-
10	CE110	Chemistry	2.46	2.50	2.33	2.50	-	2.83	2.83	-	2.50	-	-	-
11	CE111	Professional Communication	-	-	-	-	-	-	2.50	2.50	-	2.50	-	-
12	CE112	Biology	2.62	-	2.58	-	-	2.56	2.58	-	-	-	-	-
13	CE113	Chemistry Lab	2.45	2.46	-	2.49	2.44	-	2.43	-	-	-	-	-
14	CE114	Computer Programming	2.53	2.53	2.50	2.48	2.36	-	-	2.30	-	2.33	-	-
15	CE115	Language Lab	-	-	-	-	-	2.50	-	2.75	-	2.47	-	-
16	CE116	Engineering Graphics	2.62	2.54	-	-	2.65	2.60	-	-	-	-	-	-
17	CE117	Yoga and Human Consciousness	-	-	-	-	-	3.00	-	3.00	-	-	-	-

##### PO Attainment Level

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Direct Attainment	2.59	2.55	2.58	2.55	2.63	2.64	2.54	2.67	2.72	2.60	-	2.57
PO Attainment	2.59	2.55	2.58	2.55	2.63	2.64	2.54	2.67	2.72	2.60	-	2.57

##### PSOs Attainment:

Sl. No.	NBA Course Code*	Course Title	PSO1	PSO2	PSO3
1	CE101	Mathematics-I	2.58	-	-
2	CE102	Physics	2.50	-	-
3	CE103	Basic Electrical Engineering	2.21	-	2.42
4	CE104	Engineering Mechanics	2.75	-	-
5	CE105	Physics Lab	-	-	-

6	CE106	Basic Electrical Engineering Lab	-	-	-
7	CE107	Basic Manufacturing Systems	2.90	-	-
8	CE108	Environmental Science	-	-	-
9	CE109	Mathematics-II	2.42	-	-
10	CE110	Chemistry	-	-	-
11	CE111	Professional Communication	-	-	-
12	CE112	Biology	-	2.58	-
13	CE113	Chemistry Lab	-	-	-
14	CE114	Computer Programming	-	-	-
15	CE115	Language Lab	-	-	-
16	CE116	Engineering Graphics	2.70	-	-
17	CE117	Yoga and Human Consciousness	-	-	-

**PSO Attainment Level**

<b>Course</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>
Direct Attainment	2.58	2.58	2.42
PSO Attainment	2.58	2.58	2.42

**8.5.2. Actions taken based on the results of evaluation of relevant POs and PSOs (10)**

**PO Attainment Levels and Actions for improvement – CAYm1 only – Mention for relevant POs**

POs	Target Level	Attainment Level	Observations
PO1: Engineering Knowledge			
PO1	2.5	2.59	Target Attained
Action 1: Attainment level is commendable, still steps should be taken to give more challenging questions on fundamental concepts on mathematics and science.			
PO2: Problem Analysis			
PO2	2.5	2.55	Target Attained
Action 1: Attainment level is positive at the same time more numerical intensive exercises must be conducted to enhance the skills of students to do comprehensive problem analysis related to Science and Engineering field of study.			
PO3: Design/development of Solutions			
PO3	2.5	2.58	Target Attained
Action 1: Design based activities should be added in the core and basic engineering courses. Action 2: Study tours should be arranged to expose the students to actual field condition and provide them opportunities to interact with the field engineers and understand the need of the society.			
PO4: Conduct Investigations of Complex Problems			
PO4	2.5	2.55	Target Attained
Action 1: Attainment level is satisfactory due to excellent laboratory infrastructure comprising state-of-the-art equipment. Action 2: Activity based learning introduced to develop skills like problem solving, critical thinking, creation, interactivity focus and reflection among students.			
PO5: Modern Tool Usage			



PO5	2.5	2.63	Target Attained
Action 1: The students are exposed to professional software like SOLIDWORKS. Hence, more emphasis can be given to use software for drawing of different types of simple structure like one storied building.			
PO6 : The Engineer and Society			
PO6	2.5	2.64	Target Attained
Action 1: The Professional Communication, Yoga and human consciousness and Physics, Basic Electrical Lab, Basic Manufacturing System etc directly or indirectly enable students to build sustainable engineering systems and solutions for society at large.			
PO7: Environment and Sustainability			
PO7	2.5	2.54	Target Attained
Action 1: Students are encouraged to indulge in the projects where global and environmental issues are concerned.			
PO8: Ethics			
PO8	2.5	2.67	Target Attained
Action 1: This attainment level indicates the students are implicate as well as explicitly exposed to various scenario to test their judgemental skills to be more ethical for the entire environment, stakeholders and most importantly the society at large. Action 2: Corporate lectures and motivational talks are arranged periodically to address professional ethics and responsibilities.			
PO9 : Individual and Team Work			
PO9	2.5	2.72	Target Attained
Attainment level is commendable but at the same time team building tasks through social science subjects should be included to improve the team work among students			
PO10 : Communication			
PO10	2.5	2.6	Target Attained

Action 1: Apart from explicit course on Professional Communication, exercises like Presentation in class, Seminar, Grand Viva, group experiment sessions in laboratory are the curricular components which help students to become an effective communicator, which is highly required for their professional career ahead.			
PO11 : Project Management and Finance			
PO11	NA	NA	Target Attained
Action 1: Not applicable			
PO12 : Life-Long Learning			
PO12	2.5	2.57	Target Attained
Action 1: Environmental science and Yoga and Human consciousness are directly link to life long learning process .			
Action 2: Alumni and guest lectures are periodically conducted for imparting life-long learning to students.			
Action 3: The curriculum includes a component of the seminar in which the students are directed to prepare and present the details related to some of the emerging technologies. This helps them in lifelong learning of the technology and its various applications.			
Action 3: Using ICT facilities, such as PPTs, live demonstration of topic imparted using video lecture.			

### PSOs Attainment Levels and Actions for Improvement- (2020-21)

PSOs	Target Level	Attainment Level	Observations
PSO1: Continuously advance themselves by expanding their technical and professional skills through formal means as well as through informal self-study.			
PSO 1	2.5	2.58	Target Attained
Action 1: The target for Program Specific Outcomes also attained considering the basic science subjects directly helps students to have technical and professional skills			
PSO2: Join a technical workforce as successful professionals in a wide range of mechanical engineering and related domains.			
PSO 2	2.5	2.58	Target Attained

Action 1: The target for Program Specific Outcomes also attained considering the basic science subjects directly helps students to prepare themselves for higher study and further research in a specific domain.

PSO3: Pursue advanced degrees in engineering, business, or other professional fields.

PSO 3	2.5	2.42	Target Not Attained
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Action 1: The target for this Program Specific Outcome is not attained, hence more emphasis should be given on advanced courses on engineering, business and other professional fields.

<b>CRITERION 9</b>	<b>Student Support Systems</b>	<b>50</b>
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## **9.1 Mentoring system to help at individual level (5)**

### **9.1.0 Mentoring System**

The KIIT deemed to be University has institutionalized the Tutor- Mentor system since 1997, the year of establishment as institution. In the system the student is termed as mentee and the faculty member as mentor. Excerpts from the guidelines for the mentors towards effective mentoring system is furnished below. In this section the generic issues to be addressed by mentors are furnished. An overall introduction to category of mentors is also furnished. Excerpts from the Guidelines for tutor mentors

#### **9.1.1 Background**

Effective and Close teacher-learner interaction has proved to be a key factor in learning and success of a student. In recognition of this, The KIIT University has institutionalized the Tutor-Mentor system since the beginning. In the system the student is termed as mentee and the faculty member as mentor. This document prescribes the guidelines for the mentors towards effective mentoring. In this section the generic issues to be addressed by mentors are furnished. An overall introduction to category of mentors is also furnished.

##### **9.1.1.1 The Issues**

Academics (regarding the status of classes, attendance, course progress, difficulties in understanding the subjects of study, registration, marks etc.)

Career (issues relating to placement / higher studies / entrepreneurship)

Emotion (issues relating to anyone in family/friends or a person whom he/she gives the utmost importance, quarrel/misunderstandings, money, recent happenings etc.)

**Discipline** (altercations/fights, threats, bunking, fines, complaint from the hostel/teachers etc)

**Grievances** (regarding any problem faced by the student during and/or after the classes which may not be addressed properly)

Any other issue(s) not coming under the above categories.

##### **9.1.1.2 Mentor categories**

**Mentor:** The mentors are to take care of the following activities related to the mentees: Registration, Academic information, interaction with guardians, attendance status, health conditions, general conduct and etiquettes, Brand awareness promotion. They are the first tier contacts to receive and initiate appropriate steps towards grievance redressal.

**Counseling mentor:** The counseling mentors are to take care of the emotional stability upon recommendation of the mentors.

**Senior mentors:** The senior mentors are supposed to groom mentors and counseling mentors. They may

conduct sessions/workshops periodically towards ensuring effective mentoring program.

### **9.1.2 Mentors Appointment**

At the beginning of the academic year, the Dean/Director of the Schools will notify the mentors, counseling mentors and senior mentors from among the faculty members of the school. Following guidelines may be followed during mentors appointment.

- For a group of students a faculty may be nominated as mentor. The head of the school may nominate a demonstrator only if he/she is sure of potential of the demonstrator to work as an effective mentor.
- The group size for undergraduate students should preferably be thirty. Deans / Directors are however empowered to choose the group size.
- For female students, in no case a male faculty member will be nominated as mentor.
- The head of school will nominate counseling mentors from among the faculty. The faculty member with good rapport establishing skills and rational decision making skills may be preferred.
- The number of counseling mentors will be one for a student group size of 200.
- Senior mentors will be nominated by the Head of Schools from among the senior professors.

### **9.1.3 Mentors Responsibilities**

#### **9.1.3.1 Mentor**

- To ensure a cooperative and supportive environment to the mentees towards facilitating learning and engagement in active scholastic work.
- To hold frequent and regularly scheduled meetings with the mentees and make himself/herself available or accessible for the mentees as often as needed.
- To keep the guardians informed on students academic progress, attendance and discipline related issues (if any).
- To keep the students and guardians informed of organizational achievements.
- To help the mentees develop a thorough understanding of the academic programs and the required regulations.
- To identify opportunities for students to disseminate their skill in discipline specific or extra-curricular activities.
- To provide direction to enhance and reinforce the mentees discipline specific or interdisciplinary methods and skills.
- To identify need of counseling and arrange regular interaction with the counseling mentors. The number of mentees in need of counseling should not be more than 1/4th of group size.

#### **9.1.3.2 Counseling mentor**

- To recognize that each mentee is unique and needs tailored mentoring. This involves learning and

respecting mentees personality, style of work and expectations.

- To help the students passing through a hard phase of life through providing adequate emotional support, motivation and inspiration.

### 9.1.3.3 Senior mentor

- To interact with mentors and counseling mentors. They are expected to provide support towards enhancing effectiveness of the system.

### 9.1.4 Documentation Requirement

1	Notification of mentors appointment	Dean/ Director	Beginning of semester	The notification intended to students to offer name and contact details of the mentor.
2	Primary data sheet	Compliance cell	Beginning of semester	Mentees name, address, mail, phone, guardians name, mail and phone number
3	Notification of mentees meeting schedule	Mentor	Beginning of semester	The routine meeting schedule with the group of mentees
4	Interaction register	Mentor	Routine	The register should record interactions made with group of mentees, individual mentees and guardians
5	Individual files	Counselling mentors	As and when required	The file should have documents of evidences of interaction, any professional support taken and the recommendations
6	Mentoring development workshop notification	Senior Mentors	At least once a year	The notification should offer schedule, venue and resource persons.

### 9.1.5 What Do Good Mentors Do?

- They interact daily with some of mentees
- They do not counsel mentees in front of friends
- They prefer to hold mentoring sessions not during class timing
- They follow-up with appropriate authorities on behalf of the mentee

**The mentoring services do have weightage in the performance appraisal. Further, The University is devising a module to recognize mentoring services and reward best of the mentors.**

Number of students per mentor: 25-30

Frequency of meeting:

- 1/ week of one hour direction with the group.
- 5 minutes per individual mentee in a week (Each mentor interacts with 5 mentees each day, individually)
- Counselor interacts with Identified critical mentee each week

*Efficacy of the System:* The mentoring activities lead to multiple outcomes across a broad spectrum of

activities. The mentee-mentor relationship can be complex and thus efficacy is not easily measurable. The University collects feedback from mentees on mentors and also from mentors on mentees. The efficacy is assessed from the following parameters.

- % of mentees without any backs (From examination results)
- Achievements of mentees (From mentors)
- Mentor contacts used (From mentees)

The University has a student friendly atmosphere. In spite of more than hundred program catering to 27000 students, the University is proud of its recognition as a disciplined institution. The number of student unrest is zero since 2014. The placement is 100% and the number of students pursuing higher education is increasing rapidly. All of these indicate to the efficacy of the mentoring system.

## 9.2. Feedback analysis and reward /corrective measures taken, if any (10)

Feedback collected for all courses: YES (Twice a year)

Average Percentage of students participate in the feedback process: 95-100%

### 9.2.1 Feedback Collection Process:

The institute has a well-defined process for feedback collection with respect to all the courses, which is required to ensure continuous improvement and refinement of teaching learning process and curriculum. The detail of feedbacks collected from the students and the process of collection is given below.

Sl. No.	Type of feedback collected	Feedback on Curriculum, Teaching & learning	Feedback on facilities
1	Process of collection	Online submission through SAP portal	Google form/ Through SAP
2	Medium of notification to students and follow up	Via mail from IQAC via Dean and tutor mentors	Via mail from IQAC via Dean and tutor mentors
3	Frequency of collection	Once after end of each semester	Once in every year
4	Department responsible for collection, analysis and action taken	IQAC	IQAC

Thus SAP portal is opened or student feedback after end of each semester for online submission of students' feedback on curriculum and teaching-learning. The feedback form is so designed to collect information on the curriculum, attributes of teachers and their teaching learning methodologies and effectiveness of the methodology. The feedback form 9.2.2 collects the satisfaction of the students in Likert scale of 1 to 5. Following major components are covered in the feedback analysis process which is given below.

- Course Objectives
- General observation
- Skill Development
- Innovations and Methodology

- Commitment and Command
- Help and Motivation

### 9.2.2. Sample Feedback form

FEED BACK FROM STUDENTS						
QUALITY ASSURANCE CELL						
Form No			KIIT/QAC/01			
<b>Instructions:</b>						
1 – Put a Tick (Ö) mark in the following table that reflects your choice.						
2 – Give your opinion based on your observation / experience with an open and unbiased mind.						
3 – Do not disclose your personal identity anywhere in the questionnaire.						
Name of the School & Branch						
Name of the teacher assessed						
Programme		Section		Semester		
Subject / Paper taught			Course Code			
Course Objective					Yes	No
1	The course so far has provided new knowledge.					
2	After attending the course awareness or insight of the subject has improved.					
3	The course is interesting and relevant.					
4	The course is up to date and Industry designed.					
5	The course may be helpful in future goal.					
RATING ON TEACHER		Excellent [5]	Very Good [4]	Good [3]	Average [2]	Below Average [1]
SUBJECT						
GENERAL OBSERVATIONS						
6	Punctuality & Regularity in taking Classes					



7	Communication skills					
8	Delivery of structured lectures					
9	Completes the entire syllabus in time					
<b>SKILL DEVELOPMENT</b>						
10	Skill of linking subject to life experience and creating interest in the subject					
11	Refers to latest developments in the related field					
12	Scheduled organization of Assignments, Class tests, Quizzes, Seminars etc.					
13	Helps the students through Instructions/ Demonstrations					
<b>INNOVATIONS &amp; METHODOLOGY</b>						
14	Use of innovative teaching methods (Case Study, Group Discussion, Problem Solving etc.).					
15	Use of open education resources.					

16	Use of teaching aids (OHP, PPT etc.).					
17	Blackboard / White board work in terms of legibility, visibility and structure.					
<b>COMMITMENT &amp; COMMAND</b>						
18	Effective control mechanism to conduct the class.					
19	Tendency of inviting opinion and questions on subject matter from students.					
20	Skill of addressing inappropriate behavior of student.					
21	Inspires students to maintain discipline.					
<b>HELP &amp; MOTIVATION</b>						
22	Availability / willingness to guide the students beyond regular lecture hours.					

23	Gives equal attention to all students					
24	Helps students facing physical, emotional and learning challenges.					
25	Motivate students for their future goals in realizing their strengths and needs.					
	<b>Total</b>					
<b>Suggestions (if any) for the improvement in Teaching / Learning process:</b>						
<b>For Office Use (Quality Assurance Cell)</b>						
Comments:						
						(Authorized Signatory)

### 9.2.3 Feedback analysis process:

The feedback collected through SAP portal is shared to Internal Quality Assurance Cell of University for further analysis by a feedback analysis committee. The Analysis of the feedback is obtained in following components.

- Course Objectives
- General observation
- Skill Development
- Innovations and Methodology
- Commitment and Command

- Help and Motivation

Based on the students feedback, a score index is computed by using following formula.

$$S_i = \frac{\sum m_i}{5N}$$

Where N represents the total number of students m is the mark assigned for ith component.

#### 9.2.4 Basis of reward/ corrective measures, if any;

- The course teachers committee is offered the score on course. They are required to redesign the course if score under "NO" is more than 60%
- The IQAC Cell shares the scores with the Deans and the faculty members including course coordinators. IQAC also share specific feedbacks with the individual faculty members to know their specific strength or weakness and improve the teaching skills. The close view of the score and interaction usually results in improvement in teaching-learning aspects.
- In case of a particular course, whose teachers have not got a satisfactory score index, the IQAC representative and the Dean discuss with the Course Coordinator. Subsequently the Course Coordinator and teachers are required to bring changes in content delivery and communicate the information back to the Dean.
- The feedback score of each faculty is also taken as cut-off during faculty promotion activities.
- The faculty who get low index, are counselled by Dean and IQAC.

#### 9.2.5 Summary of the index values for all courses/teachers;

Sl. No.	Name of the faculty	General Observation	Skill Development	Innovation & Methodology	Commitment and Command	Help and Motivation
1	F1	4.2	3.9	3.6	4.6	4.1
2	F2	4.1	3.9	4.1	4.2	3.9
3	F3	3.8	4.1	3.9	4.5	4.2
4	F4	4.1	4.2	4.5	4.3	4.2
5	F5	4.3	4.3	4.3	4.3	4.4
Name of the Subject		Xxxxxx Yyyy				

#### 9.2.6 Number of corrective actions taken.

Corrective actions were taken as per the students' feedback and further analysis. The actions are programme/subject specific.

### 9.3. Feedback on facilities (5)

#### 9.3.1 Students Feedback Collection Process

The Quality Assurance Cell collects student feedback on the facilities of the University and school annually once. The feedback collection is conducted during the month of November.

The form of the feedback asks students opinion on various facilities of school and university. The feedback format is attached in Table 9.3.1. Different facilities for which feedbacks are taken from students are given below.

- Classrooms and labs (seating, lighting, fans, A/C, ventilation, cleanliness, etc.)
- Teaching aids (Projectors, blackboards, computers, posters, display boards, drawing boards)
- Washrooms, drinking water, water supply, first aid, etc.
- Hostel
- Telephone & internet
- Canteen and other services
- Sports facilities (Sports items, ground facility, etc.)
- Library facilities
- Transport facilities
- Medical Facilities

**Table 9.3.1 Feedback on facilities**

Students Name						
Roll No						
Sl. No.	Indicators	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	The lighting, ventilation and acoustics in class rooms/demonstration rooms/laboratory rooms present an inviting setup for learning					
2	The audio-visual capability in classrooms have enhanced learning					
3	The resources to impart practice sessions are adequate, of good quality and mostly operational					
4	The students have access to research and development facilities of the School					
5	The faculty and research scholars are approachable when a new idea develops					
6	The sanitation standard in the campus is excellent					

7	Book resources at the library are adequate to meet prescribed reading in the course.					
8	The book resources at the central library cater to the learning needs in diverse areas.					
9	Most student users are aware of journals and access these for learning/research activities					
10	A learner friendly ambience prevails in the reading room of library					
11	The quality of hostel accommodation in context of space and facilities meets expectations					
12	The learning ambience in hostel reading room is well maintained					
13	The hostel staff are student friendly					
14	Facilities including equipment and trainers prevailing in gym, swimming pool, indoor games, outdoor games meet requirement of amateurs and professionals.					
15	Student administered societies are functional and atmosphere is usually inviting					
16	The availability of a computer/laptop for use any time is never an issue					
17	Internet connectivity is everywhere in the University campus					
18	Medical facilities are of good quality and can be availed by students					

### 9.3.2 Feedback Analysis

The feedback collected is analyzed by school level quality assurance cell and a score is determined based on the following equation.

$$S_k = \frac{\sum_{s=1}^N \sum_{i=1}^m P_{Q_{ki}}}{5N}$$

Where  $P_{Q_{ki}}$  =Points scored for question components marked to kth category

N= Number of students who offer feedback

S = Score for kth category Q<sub>k</sub> K Table 9.3.2 provides the scoring pattern and the responsible office being shared with the score.

Table 9.3.2: Scoring pattern and Action Centers

Aspect	Score	Action Centre
Academic Resources (Q1-5)	0.94	Dean of School, Administrative Officer of School and Joint Registrar (Administration)
Hygiene (Q2)	0.96	Development Office
Central Library resources (Q 7-10)	0.95	Senior Librarian, Central Library
Hostel Facilities (13, 14, 15)	0.93	Dy. Registrar (Hostels), Senior AO (Girls Hostel)
Sports Facilities (Q14)	0.94	Director, Sports
Student Societies (Q15)	0.93	Director, Student Support Services
ICT Facilities (Q16-17)	0.97	Head, ICT Cell
Medical Facilities (Q 18)	0.9	General Manager, KIMS

#### 9.4. Self-Learning (5)

KIIT-DU provides wide scope, opportunities and facilities to its students for self-learning and learning beyond syllabus. During 2004, the KIIT became youngest Deemed to be University (Within 7 years of inception as institution) with a special mention to the innovative measure the organization has initiated. And the measure was providing wi-fi enabled laptop to each student (During 2004, it is an innovation and now adopted at many organizations). KIIT students have access to internet and computing facilities any where in the University premises round the clock, round the year.

KIIT Deemed to be University, made the library 24X7 during 2005, another remarkable innovative measure to promote self learning. The students can go through books of any domain, wherever they wish to venture in. Specific.

##### *Support to students for self learning activities*

- Integrated library web portal for searching of subscribed e-resources as well as open access e-content.
- RSS Feed and Email alert services.
- LCD projectors for self learning and demonstration.
- Access to the Lecture videos from NPTEL and other open course wares
- Access to the National Digital Library of India.
- The institute has introduced a framework of learning activities which promotes self learning among students with the following focus areas in all streams:
- **Interactive focus:** Activities include synchronous and collaborative discussions, group activities and assignments, etc.
- **Critical thinking:** Activities include undertaking case studies, field surveys, problem identification, reviewing impacts created by previous researchers, identifying gaps and scope for further improvement

and strategy formulation.

- **Problem solving:** Activities include implementation of strategies under real life circumstances, developing an understanding of constraints, realizing relevant social, environmental, legal and economic implications and analyzing the impact created; activities also include solving real life open ended problems supported by simulations and modeling relevant to the purpose.
- **Creation:** Activities include design and implementation tasks both at simulation level followed by hardware implementation, real time deployment and study of the impacts.
- **Preparedness for competitive examinations and higher studies:** Activities include extra studies (self-learning) and problem solving as preparation for competitive examinations and higher studies.
- In laboratories, students are allowed to take up open ended tasks either at individual or group basis in the form of micro-projects to hone their analytical and design skills which can be further explored during final year major design projects.
- Students undertake field/industry visits and undergo internships/trainings to acquaint themselves with the industry and job requirements and develop an understanding of the real time issues. Students are also engaged in live and interdisciplinary projects (in different Centers of Excellence) as well as product innovation and entrepreneurship supported by the Technology Business Incubator Cell.
- Open course wares including NPTEL, and MITopen coursewares are promoted by teachers, what students can access anytime.
- The institute has also entered into collaboration with MOOCs giant Coursera offering more course options and learning avenues for students.
- Students can opt for a foreign language learning at the School of Language. School of Leadership caters to requirements of students desirous to appear Civil Service Examinations.
- Career Augmentation and Advisory services prepares students for industry-readiness; School of leadership prepares students for higher studies, competitive and civil services examination.
- Students are encouraged to be active component in organizing Symposia, conferences, workshops etc. Student Societies are operational, where students plan, execute and coordinate the activities, which are immensely contributing towards self learning. In this section, some societies are mentioned.
- **Model UN Society:** A society where one gets to know the world, world politics, societies and obviously all of that through a multitude of never ending fun. A society meant for the strong of heart, meant for the listener, the speaker in you. With the flagship event of KIIT International Model UN 2015, the society promises to deliver many grilling session over the coming year.
- **TEDx:** KIIT students have got the licence to organise TEDx in 2015 for KIITUniversity (Reg. No. 17657). The students hosted the first ever TEDx event in any technical university in the state of Orrisa and probably 2nd after IIT KGP in Eastern India . Since the event like TEDx which is new to the University



may have some rules that we need to abide but that will surely give a world class university like ours a mileage and be counted among the elite ones .It was the grandest TEDx event in India with speakers from various fields. TEDX is a spin off conference of independent talks of technology demonstrations, art performances, research lectures and world changing ideas that are organized locally by the volunteers, free of any commercial, religious or political agenda.

- **“KHWAAAB”(Society on Philosophy of the Founder KIIT & KISS)-** In service to humanity ‘is a society solely dedicated to help people. The innovative grass root approach is to transform citizens into agents of change who will rejuvenate the spaces disinvested, into new generation of helping, loving and inspiring destinations in line with the philosophy of Dr A. Samanta, Founder of KIIT and KISS.
- The three basic foundation tools include:
  - Art of giving
  - Garment Bank
  - India against negativity
- **Entrepreneurship Cell:** The KIIT Entrepreneurship-Cell is primarily responsible for fostering the business mind among students and assisting budding entrepreneurs by providing them with necessary resources.
- **The Quizzing society ~ Qutopia:** Established with the motto of ‘Quiz for Quizzes Sake’, the society claims to be a perfect haven for all the quizzers. Born out of a desire to learn more about the world and beyond, as well as an urge to share what we know.
- **The Music & Dance Society (Korus):** For the sprinkling joy of the ushered music and dance within, we have the Korus Society to unleash the attached strings. There’s a Michael Jackson in one corner and a Zakir Hussain crooning in the other and a whole family of instrumented passion to accompany them.
- **Automobile Society:** It offers a rich and varied examination of automobiles, automotive culture and design, and the personalities that shape the industry to inform and entertain consumers who are passionate about cars.
- **Aeronautical Society (Apogeo):** KIIT Aeronautical Society named "APOGEIO" aims to promote scientific and educational activities towards the advancement of the theory and practice of Aeronautical Engineering.
- **Robotics Society (KRS):** The Robotics Society focuses on research, knowledge sharing and learning with the aim of embracing new technology and making new discoveries in the field of Robotics with a high standard of ethics in service to the community.
- **The Cooking Society (Keurig):** The Cooking Society of KIIT University, where food becomes cuisine and the kitchen becomes ~ a platter in the hands of budding chefs and the enthusiasts at heart.
- **Photography and Painting Society (Kreative Eye):** Kreative eye is a society which provides you a

platform to hone your photographic & painting skills, express yourselves through your lenses and colours. When your soul can dream and your heart can desire, you will be able to create.

- **Differently Able Society (Karma):** This society aims to perceive, build and conceive what the world normally cannot. It welcomes members who are strongly motivated to work for the differently able populace of the world, any form, any kind.
- **Social Responsibility Cell (Kartavya):** SRC acts as a motivator for young students to come together from all walks of life and join together to be the harbinger of light in the lives of those who have been deprived of it.
- **Women's Society (Kamakshi):** The womens society of KIIT promotes equality for women. They not only believe in providing women a better platform but also in encouraging them to be the torch bearers.
- **KIIT International Students Society (Khetshan):** It is the society that has students from outside India who come together and work. They not only learn and grow but also promote their culture, traditions and heritage.
- **The Hindi Society (Khwahishein):** The Hindi Society of KIIT believes in promoting our mother tongue. It brings out the best poets and writers of the college to portray their dreams on papers and rest its magic.
- **Film Society:** It gives platform to the students to bring out the most expressive and creative skills of film making. The society also plays a major role in the making of the official videos of the University.
- **Dramatics Society (Kalakaar):** Creativity is the food for imagination and spark for thought. With this inspiration, the dramatics society is the place for the polishing and the nourishing of skills of those with the flare to perform both on and off stage, for those to see the light, which others cannot even grasp, for those to whom drama is life.
- **Society of Web Development & IT Society: (Social & Digital Branding)Konnections:** The society which prepares you for the new ultra modern world of internet, the destination for development of applications and websites/domains of daily use and a place for those professionals to be. IT Society encourages students to take a step ahead in the enigmatic information technology world. The need of the hour is the ever-growing technology and all that is informed here.
- **Society for Alumni Connect (K-Konnect):** The past meets with the present for a better tomorrow- This is what connection is and this is how our most dynamic society for our alumni members would be a place for them to connect with the present members of the University.
- **KIIT-Wordsmith (The Writing Society):** The pen often proves to be mightier than the sword. Wordsmith is the platform where the students of the University can express their ingenious, unorthodox, profound thoughts through the pen. Kritika - the annual magazine, Kirti- womens magazine, monthly newsletters, e-magazines to name a few are our flagship projects.
- **Fashion Society (Kzarshion):** Fashion helps define tastes and shape tastes of individuals. And can be

very influential in personality development of a person. Fashion is a necessary item in day to day schedule. It is the newly created society to inculcate proper dressing sense according to the occasion in students.

- **Marketing Society( kraya):** “Sell me this pen”, said once the famous Jordan Belford. All events conducted by Marketing Society shall be designed to give students a deep working insight into what Marketing is really about. This society will provide students an allround experience of marketing through industry exposure and on-campus fun marketing activities.
- **Finance Society(Kuber):** Business, market, society, entrepreneur- all have that one thing in common- funds and finance. They hone the students management skills by organizing events related to the various aspects of management. This society brings together group-work, leadership skills, creativity, hard work, management principles and general camaraderie in an entertaining way.
- **Medical Society(Kimaya):** Kimaya “An Endeavour To Understand”, aims to provide a platform for the congregation of the entire medical fraternity of odisha and major Universities and beyond.
- **Science & Spiritual Society:** A new society committed to a spiritual way of life based on meditation and service to others. Its a scientific look at the nature of spirituality, including meditation, near death experience, religion and altered states of consciousness. To create an awareness that a thin line exist between science & Spiritual.
- **Society for Civil Engineering:** This is the society for all civil engineers who work regarding the development of building, monuments, bridges, planning of structures, city, etc with constructive and new technologies. The society organizes different seminar and workshops for students to increase their creative skills and to provide ideas on recent technologies.
- **KIITFEST:** KIIT organizes Annual Fest of the University to promote the showcase of technical, cultural, spiritual, literary, dramatics, artistic, professional skills and innovation. Various competitions among the students at national level are being held. 20,000+ students participate every year.
- Effectiveness of the self learning measures is directly visible from the achievements of the students in academic, professional and extra-academic domains. Not only the achievements, but also the satisfaction of the students, the informal communication with teachers and mentors, contact retention after years of passing out, zero indiscipline records speak volumes of the effectiveness of the self-learning modes keeping students engaged in creative thinking and aided exploration.

#### **9.5. Career Guidance, Training, Placement (10)**

Career guidance, training and placement is one of the advantages that KIIT offers since its inception. It has an impeccable record in campus placement. KIIT has always been much favored talent hunting ground for corporate world as it delivers industry-ready students. KIIT has an established structure for guiding the students for training and placement i.e, Industry Engagement Cells and KIIT Career School (CAAS).

## **9.5.1 Industry Engagement Cell (IEC)**

### **9.5.1.1 Purpose**

The Industry Engagement Cell (IEC), KIIT Deemed to be University would be responsible to create and nurture an enduring and sustainable environment to foster and maintain a symbiotic relationship with the industry and other external agencies that are mutually beneficial and value-adding. The major goal is to create and sustain a positive impact on the Corporate World and other organizations of repute at National and International levels, primarily in the space of academic excellence and the overall knowledge ecology within the University.

### **9.5.1.2 Management:**

The department functions under a widely-experienced Pro Vice-chancellor, KIIT Deemed to be University with cognizance of various industry-academia collaboration and career opportunities. Two able Deans lead the administrative, strategic, academic collaboration activities of the department. Two verticals with capable and qualified staff and faculty to address all end-to-end placement activities and Industry Academia collaboration with concerned Schools/Departments. To address the aspiration of each student a dedicated Career School (CAAS) headed by Director and Dean has been consciously formed and running successfully.

### **9.5.1.3 Activities:**

Beginning with continuous monitoring of end-to-end execution of industry academia collaboration and campus recruitment activities related of constituent schools and consulting partners of the University, Industry Engagement Cell (IEC) delivers a range of duties. To address the ever changing industry requirements our major objective is to bringing in more intervention of industry into academic with following activities:

- Collaborating with Technical Heads / CTOs / Operational Heads of the industry for all possible Industry Engagement activities including placements of the students.
- Setting up and initiating the student-focused ‘Innovation & IPR Cell’ within the University & fostering a culture of ‘Innovations & Entrepreneurship’ among the students by organizing a series of the state-of-art lectures/seminars/workshops in the said area/topic in collaborations with the industry/repute academicians of foreign Universities (aim is to create an entrepreneur pipeline for KIIT TBI for encouraging more students from SOT to go for start-ups)
- Encouraging researchers within the University to develop strong ties with the Industry, Government / Non-Government Organizations, and associated Community Groups with the purpose of collaborating on new research frontiers.
- Promoting awareness for creation of IPR and commercialization of the same including the protection and management of Patents from research findings.
- Generating sponsored research consultancy corpus fund in association with various corporate houses.
- Developing state-of-art laboratories for experimentation and knowledge incubation by corporate funding.

- Forging ties with Corporate for training and certification of students, arranging technical lectures by SME's (Subject Matter Experts), organizing industry-sponsored workshops/symposiums for students and faculty.
- Offering opportunities to the corporate for Leadership/Executive Development Programs and/or customized learning programs in selected areas of specialization to leverage from the expertise resident with the KIIT faculty.
- Generating recruitment-related database of Corporate and reaching them for the same by sharing the data with Corporate Relations team.
- Creating Advisory Bodies for various Schools across KIIT University with experienced professionals from the corporate world with prime responsibility to craft appropriate corporate tie-ups and courses-of-study, syllabus, and curriculum development synergized with current industry needs.
- Communicating the contemporary industry requirements and needs especially for fresher's recruitment by industry research to internal stakeholders and to act as a proactive link between the corporate world and university.
- Augmenting the University branding process by promoting all classes of constructive and productive activities as and when advised by University leadership.
- Creation of in-house industry forums at KIIT and promotion of associated technical societies.
- Creation and maintenance of KIIT Alumni database, which would help us in tapping people from the industry.
- Providing teaching/research opportunities to the industry professionals on sabbaticals and creating opportunities for KIIT faculty to work in corporate on sabbaticals.

#### **9.5.1.4 IEC Flagship Initiatives:**

- Industry Electives and Minor
- Capstone Projects
- Internship & Projects
- Centre of Excellence (CoE)
- K-Hub
- Power Talk
- Tech Talk
- Pep Talk

#### **9.5.1.5 Impact/Effectiveness:**

- The initiative & interventions that IEC has been providing over the years have cemented the industry-academia relationship elevating the students strength, capability and readiness. Having the corporate presence in the campus has certainly given the students a real-time opportunity to intern in the

campus itself thereby getting billable in all aspects much before they get graduated

## **9.5.2 KIIT Career School – CAAS**

### **9.5.2.1 Purpose:**

Kareer School (CAAS) was instituted with a solitary purpose of improving the career-readiness of Engineering & Management students of KIIT University. Its purpose has evolved to cater to all other disciplines like Law, Medical, Biotech and more. It is now also tasked with skill enhancement for in-house staff, partner institution and even foreign universities.

### **9.5.2.2 Management:**

The department functions under a widely-experienced Director with cognizance of various career avenues and their dynamics. An astute Dean leads the administrative, strategic and academic activities of the department. Three verticals with capable and qualified faculty fulfil Quantitative, Technical and Verbal demands of career-concerned candidates.

### **9.5.2.3. Activities:**

Beginning with continuous monitoring of job related requirements of constituent schools and consulting partners of the University, Kareer School (CAAS) delivers a range of duties. It on boards, trains, tests and finally supports aspirants of various professional goals. With its tech-focused approach, it seamlessly conducts physical, virtual and phy-gital courses, sessions and events.

### **Counseling for Higher Education (GATE/GRE, GMAT etc.)**

- Workshops & Webinars
- Various workshops and webinars are being arranged for the students to guide and assist them in preparation of higher education like GATE/GRE/GMAT etc. This is purely in choice basis by the student.
- Counseling and Orientation
- These are continuous process and goes on as per the need.

### **Placement Training**

#### **1. Assessment**

Students are being assessed at various periods by national level partners viz. Elitmus, CoCubes, SHL Aspiring Minds etc. To know the students eligibility according to the industry standards which leads to prepare then in the shortfall areas.

#### **2. Company Specific Training**

Before every upcoming placement drives company specific training is being provided to the students in order to make them specific company ready.

#### **3. Soft Skill (HR PI /GD)**

Mock GD and PI sessions are being arranged for the students frequently to groom the students for HR round interviews of the original placements.

#### 4. Tech PI/ Industry focused project review session

These sessions go on round the year continuously one after another in order to make students ready for technical round interviews of original placements. Project review helps a student to get his minor/major projects evaluated in various parameters eventually makes the student industry ready.

#### 5. Summer Training

Need base training programs run during summer seasons where a student get opportunity to enroll himself/herself in the course(s) in which he or she is poor. For an example if a student is good in JAVA but not very good in Python, then he/she can learn it. Courses are also customized according to the requirements of the students. The core benefit is all the trainings are available for the students inside campus and a student need not to go outside by taking burden to learn.

#### 6. SIP review

Students get opportunity to produce their SIP document and get it reviewed in various parameters and eventually are able to make themselves placement ready. This guidance also helps them to groom themselves for HR round interviews. This is specifically done for the MBA students.

#### 7. Pre placement training (Tec/VA/OA)

These are the training classes on the subjects of Programming, Quantitative Aptitude, Logical Reasoning, Verbal Ability etc. which happen the whole year as per the time table prepared. Semester wise preparation break up is given below for your better understanding. Note that it is subject to change in nature.

##### 1<sup>st</sup> year

2<sup>nd</sup> semester :

- Orientation and platform onboarding
- Highlighting the Roadmap including the pre-requisites

2<sup>nd</sup> year

3<sup>rd</sup> semester :

- 2-3 Nos of Base Line Assessment on Cognitive and Communication Skills including Soft skills.

4<sup>th</sup> semester :

- Orientation and Base-Level Training on Technical, Cognitive, Communication Writing Skills and Soft skills.

3<sup>rd</sup> year

5<sup>th</sup> Semester:

- Base Line Assessment on core Domain areas
- Regular Training Sessions on Technical, Cognitive, Communication and Core-Domain Area.

- Certifications
- Live Workshops on Resume Building GD, PI and Writing Ability.
- Orientation on Internship Document Preparation and Presentation
- End semester Assessment (Exit Test-1)

6<sup>th</sup> Semester :

- On boarding to Global Assessment Platforms.
- Regular Training Sessions on Technical, Cognitive, Communication and Core-Domain Area.
- Domain Training Sessions and Workshops on key domain Areas with assessments.
- Students Dossier Publication highlighting journey from the 1 year including participation, performance with a predictive analysis presentation followed by recommended learning and certification.
- Creation of Buckets @ Different levels of standard and niche-area competency
- Video Resume Building, Resume Document Creation and Portfolio Creation
- End Semester Assessment (Exit Test-2)

4<sup>th</sup> year

7<sup>th</sup> Semester :

- Publication of List of placement eligible students.
- Launching of Assessments Packages
- One to one Internship Evaluation
- Technical /HR PI & GD evaluation and grooming sessions
- Level-validation Assessments on both Domain and Cognitive skills.
- Resume validation, Profile Validation and Portfolio Validation
- Case Study Presentation and analysis on niche area proficiency
- Company Specific Trainings
- Placement Focused Internship Document Creation, Presentation and Assessment
- ExitTest-3

8<sup>th</sup> Semester :

- Company Specific Training for yet to be placed students.
- Remedial Sessions and Need base Training.

**NB: The above Semester wise Training road map is specially designed for SOT. Similar kind of interventions are designed for SOM, KSRM, KSOL, KSBT and other Schools as per their need.**

8. K200: This is a group of special top 200 students who are being selected for the off campuses in top notch companies like Google, Amazon etc.

9. Platform On boarding and Certification

Students get guidance regarding various Online Competitive Coding Platforms like HackerRank, LeetCode,



HackerEarth, CodeChef etc etc. to on board, register themselves and go for certification. They get bit by bit assistance and information to complete the process.

**Impact/Effectiveness:**

The interventions that Kareer School has been providing over the last 9 years have progressively raised the collective standard of the graduates industry-readiness. Despite pandemic-induced economic slowdown, inconsistent hiring trends and remote learning channels, Kareer School has fulfilled its obligations and kept the success indicators rising with one-to-one approach as well as digital outreach.

**9.6. Entrepreneurship Cell (5)**

KIIT Deemed to be university encourages the development of entrepreneurs in a structured manner through Entrepreneurship Cell and KIIT Technology Business Incubator (KIIT TBI).

**9.6.1 Entrepreneurship Cell:**

Founded in 2013, KIIT E-CELL is dedicated to nurturing entrepreneurship culture among young and enthusiastic minds and helping them develop the perseverance muscle to walk the extra mile. We are keen to uphold budding entrepreneurs who seek to tackle the challenges of people through groundbreaking technological solutions; by implementing the assistance required with Indias largest inbuilt technology business incubator, KIIT TBI. We ensure holistic development and a conducive learning environment for our students by hosting start-up talks, innovation challenges, workshops, techno-business sessions by celebrated entrepreneurs besides internship camps, and much more. The Cell is drawn to enhancing the hustle of young minds who are determined and driven.

**9.6.1.1 Committee:**

Sl. No.	Name	Post
1	Adrita Chatterjee	Chairperson
2	Asmita Hobisyachi	ED-HR
3	Om Chaitanya	Managing Director
4	Pranab Das	Chief Operating Officer (COO)
5	Rupabarna Dastidar	Chief Marketing Officer (CMO)
6	Barneet Panda	Director-PCR
7	Smriti Srivastava	Director-R&D
8	Nishtha Konwar	Director-Content
9	Sambhavi Bhavya	Director-Design
10	Aarushi Shanker	Director-Tech
11	Vishwanath Akash	Director-T&P Associate
12	Abhilasha Sahoo	Director- ESC
13	Ayush Raj	Director-TAC
14	Shreya Prachi	Advisory(PCR)

15	Bitan Datta	Advisory(PCR)
16	Siddharth Prusty	Advisory(R&D)
17	Purba Dey	Advisory(R&D)
18	SN Surajbhan	Advisory(Content)
19	Aditya Singh	Advisory(Design)
20	Devansh Shaw	Advisory(Tech)
21	Mithilesh Mishra	Advisory(Tech)
22	Akshita Agarwal	Advisory(Tech)
23	Sumit Kumar Sahu	Advisory(Tech)
24	Shashank Shekhar	Senior Executive(PCR)
25	Khushi Kumari	Senior Executive(PCR)
26	Rishabh Bharadwaj	Senior Executive(PCR)
27	Pragya Pranjali	Senior Executive(PCR)
28	Navnil Das	Senior Executive(PCR)
29	Yash Vardhan Gupta	Senior Executive(PCR)
30	Srijita Bhattacharya	Senior Executive(PCR)
31	Avinav Kumar Roy	Senior Executive(PCR)
32	Aditya Srivastava	Senior Executive(R&D)
33	Pranshu Sharma	Senior Executive(R&D)
34	Debankur Das	Senior Executive(R&D)
35	Yuvika Singh	Senior Executive(R&D)
36	Abhiraj Singh	Senior Executive(R&D)
37	Bhavya Mittal	Senior Executive(Content)
38	Diksha Pranjali	Senior Executive(Content)
39	Bhawya Sinha	Senior Executive(Content)
40	Parth Maheshwari	Senior Executive(Content)
41	Mayank Jain	Senior Executive(Content)
42	Bibek Ranjan Biswal	Senior Executive(Design)
43	Cyrus Bhandari	Senior Executive(Design)
44	Antarik Dutt	Senior Executive(Design)
45	Durgesh Kumar	Senior Executive(Tech)
44	Aditya Sinha	Senior Executive(Tech)
45	Shubham Kumar	Senior Executive(Tech)
46	Swayam Kumar	Senior Executive(Tech)
47	Soham Raj Jain	Executive(PCR)
48	Alisha Panigrahi	Executive(PCR)
49	Shreya Roy	Executive(Design)
50	Marvis	Executive(Design)
51	Shubh Mittal	Executive(Tech)
52	Deeksha Lakhotia	Intern(PCR)

53	Suryansh Kumar Singh	Intern(PCR)
54	Abhishek Dutta	Intern(PCR)
55	Aman Kumar	Intern(PCR)
56	Ayushi Mohanty	Intern(PCR)
57	Ryan Alam	Intern(PCR)
58	Shivli Singh	Intern(PCR)
59	Anish Singh	Intern(PCR)
60	Krish Batra	Intern(PCR)
61	Abhipsha Das	Intern(PCR)
62	Mudit Yadav	Intern(PCR)
63	Pranjal Biswas	Intern(PCR)
64	Rahul Raj	Intern(R&D)
65	Aviral Kishore	Intern(R&D)
66	Aaryak Prasad	Intern(R&D)
67	Abhyuday Upadhyay	Intern(R&D)
68	Varanya Dwivedi	Intern(R&D)
69	Tushar Bhattarai	Intern(R&D)
70	Sohini Joarder	Intern(Content)
71	Vaidehi Gupta	Intern(Content)
72	Sachi Verma	Intern(Content)
73	Sarvagya	Intern(Design)
74	Sanu Verma	Intern(Design)
75	Dipta Talukdar	Intern(Design)
76	Rishit Divyam	Intern(Design)
77	Vineet Kumar Pilani	Intern(Tech)
78	Bhaskar Gupta	Intern(Tech)
79	Ashish Mahapatra	Intern(Tech)
80	Saptaswa Mistri	Intern(Tech)

#### 9.6.1.2. Activities:

a. **E-Summit:** KIIT E-Summit is E-Cells annual mega event bringing in number of speakers, investors, incubators, early entrepreneurs, students, corporates, venture capitalists and start-ups from all over the country to one platform sharing their entrepreneur

ventures and wisdom and delegates to plunge into a memorable and splendid frenzy of the startup world with competitions with huge cash prizes, number of speaker sessions by CEOs and other top level executives in India.

b. **Internship Camp:** A 3 Day workshop aimed to develop entrepreneurial aptitude among students by holding events with recognized start-up giants. E-Summit falls under this initiative. The Internship Camp facilitates a symbiotic relationship between companies and the students of KIIT University. In this camp we focus on

providing the best set of talents to the companies keeping in mind their needs, simultaneously we offer students bag internships in various domains

c. **Startup Konclave:** KIIT Startup Konclave stands for bringing together people from all around KIIT University and India who are interested in starting their own business and are showcasing their skills and strengths to the world. This will aid in fostering an entrepreneurship temperament and culture among participants as well as their professional development.

d. **Hult Prize:** The Hult Prize Foundation transforms how young people envision their own possibilities as leaders of change in the world around them. With a US\$1,000,000 global startup prize as its anchor activity, the Hult Prize has brought impact-focused programs, events and training to over a million students globally, creating a pathway for youth everywhere to take action to build a better world. KIIT E-Cell organizes the on-campus round of Hult Prize.

e. **Entrepreneurship Awareness Camp:** A 3 Day workshop aimed to develop entrepreneurial aptitude among students by holding events with recognized start-up giants. E-Summit falls under this initiative.

f. **Community Learning:** A 3 Day workshop aimed to develop entrepreneurial aptitude among students by holding events with recognized start-up giants. E-Summit falls under this initiative.

g. **Bizzand Bytes:** KIIT E-CELL brings you "Bizz & Bytes", a unique hackathon for both tech junkies as well as budding entrepreneurs!

h. **WOW:** We hope to give a platform to engage with women in the field of technology, raise them as a brand, launch an app, or change jobs by connecting to Women Who Code in the global network through the Women on the Web project

i. **MAKERS LAB:** Our newest initiative is the Makers Lab. We hope to establish an incubator place for entrepreneurs where they may come and collaborate. We will also provide them with the necessary mentorship, technological support, and resources. This would serve as a platform for the institution to produce successful enterprises in the future.

j. **CAMPUSPRENEUR:-** We believe that when our talented and motivated people work with us towards the same goal, we can increase our efficiency and influence. Our CAMPUSPRENEUR program aims to achieve the above goals

**9.6.1.3 List of Entrepreneurs:**

Sl. No.	Name	Name of Company
1	Divyanshu Shekhar	TyUp
2	Rahul Anand	Eduflick
3	Rajat	Exavaganza
4	Deviprasad Nayak	Fetch Giant
5	Prince Raj	Notescare
6	Sarthak Mishra	Plates

7	Sourav Rout	ReadyGo Cabs
8	Prateek Kunwar	Yoken Online
9	Aman Kumar	PaperMart
10	Biswadeep Sarkar	BrandAd
11	Niket Raj Dwivedi	The Write Order
12	Prince Raj	Ozy Foods
13	Akshat Anurag	TayBill
14	Oismita Mishra	A Bow on Top
15	Sourav Dhal	Adore Beings
16	Vivek Kumar	EduHill Technologies
17	Shubham Saurav	Financialfancier

### 9.6.2. KIIT-Technology Business Incubator (KIIT-TBI)

KIIT-Technology Business Incubator (KIIT-TBI), recipient of National Award for TBI in 2017 is a not-for-profit incubator established in 2009, as an initiative of KIIT Deemed to be University, Bhubaneswar and is supported by government bodies like NSTEDB, DST, MeitY, MSME, BIRAC, TDB to boost the entrepreneurial ecosystem in the country.

Today KIIT-TBI is recognized as a “Centre of Excellence in Incubation” awarded by DST, Govt of India. As a Technology Business Incubator, it has been networked with all TBIs in the country through various networks like ISBA through which the organization is networked with AABI (Asia Pacific), European UKBI and US NBIA. It is also a member of the Asia Pacific Incubator Network (APIN). Over the years, KIIT-TBI has been working as an implementing partner of various government sponsored flagship funding and fellowship programs like DST - NIDHI EIR and PRAYAS, DBT BIRAC - Biotechnology Ignition Grant, Boeing India - BUILD Program, DBT BIRAC – Social Innovation Immersion Programme, Invest India – Agriculture Grand Challenge and many more. Recently, KIIT-TBI has been recognized as one of the satellite centers for DST-CAWACH Program and MeitY SASACT Program. The DBT BIRAC has established one of its regional centers (BRTC) at KIIT -TBI to promote the startup ecosystem in east and northeast regions of India and SPARSH center to address the problems of societal relevance through technological solutions. MSME, Govt. of India has established SFURTI Centre at KIIT-TBI to promote cluster development. KIIT-TBI is also identified as the Nodal Incubator to set up Food Testing Lab facility by Startup Odisha. Recently, DBT BIRAC announced to establish one of the Technology Transfer Offices in KIIT-TBI.

KIIT-TBI provides an appropriate platform and environment with a world-class infrastructure of around 120,000 sq. ft. that offers a wide range of incubation facilities and services to the prospective entrepreneurs to convert their innovative ideas into commercially viable products and till date, it has already incubated and mentored 200+ startups and filed 80+ IPs.

KIIT-TBI is incubating startups in the domain of IT and Engineering, Cleantech, Healthcare and Life Sciences, Biotechnology, Agri and Food Tech and other social innovation areas. KIIT-TBI always holds the door wide open to welcome innovations to grow in to businesses by its stimulating and enterprising ecosystem.

### 9.6.3 Objectives:

- Create awareness among the students & graduates of the importance of small and medium business houses towards community development.
- Identify potential entrepreneur and nurture and support them to develop independent self-sustaining business.
- To foster linkages between the parent institution, industries and R & D institutions in the region and other related organizations engaged in promoting small and medium enterprises including NGOs & other voluntary organizations.
- To catalyze and promote development of S & T based enterprises and promote employment opportunities.
- To provide a platform for speedy commercialization of the research and technologies developed in the institutes.

### 9.6.4 Function:

- Build appropriate training programmes suitable for socio – economic culture of Odisha.
- Identify market niche for technology products and services to be addressed.
- Train the entrepreneurs in technology and business management.
- Offer the professional business development services for the entrepreneurs who have mature concepts for unique and innovative products assessed to have strong commercial viability.
- Provide platform for IPR protection, technology transfer and commercialization facility for the innovators.

### 9.6.5 Facilities

Sl. No.	Start up life cycle / feature	Ideation	Prototyping	Commercialization
1	Advisory Support	· Conducting outreach programs for idea spotting	· Providing mentoring: human resources	· Conducting training on marketing skills, finance etc.
		· Validating viability/potential of various ideas	· Assistance in conducting marketing trails: marketing & related ideas	· Assistance in developing business growth strategy.
		· Providing mentoring support	· Developing client entry & exit criteria	· Providing recruitment advice.
		· Conducting business training program	· Conducting training on marketing skills, finance etc	· Customized mentor clinics for innovators on IP, Regulatory, Business, etc.
		· Team Building resource planning	· Design Thinking Workshops	· Product Piloting & Launch

		· Team Building resource planning	· Buisness Model Canvas	· Creating fund raising plan & building the runway the right way.
		· Market opportunity Analysis	· Product design & Prototyping	· Product Sales strategy
		· Competitive Landscape Analysis	· Product Validation	· Cost benefits Analysis
<b>Sl No.</b>	<b>Support Features</b>	<b>FUNDING AGENCIES</b>		
2	Funding support	The National Science and Technology Entrepreneurship Development Board (NSTEDB)	Technology Development Board, Department of Science & Technology (DST), GOI.	Biotechnology Industry Research Assistance Council.
		<u>TIDE</u> ( <a href="http://meity.gov.in/">http://meity.gov.in/</a> )	<u>MSME</u> ( <a href="http://www.msme.nic.in/mob/home.aspx">http://www.msme.nic.in/mob/home.aspx</a> )	<u>SIDBI</u> ( <a href="https://www.sidbi.in/">https://www.sidbi.in/</a> )
		Technology Incubation & Development of Entrepreneurs Scheme, Department of Electronics & Information Technology (DeitY).	Ministry of Micro Small & Medium Enterprises, Government of India.	<u>Small Industries Development Bank of India</u> ( <a href="https://www.sidbi.in/">https://www.sidbi.in/</a> )
		Invest India	Startup Odisha	<b>Meity</b> (Ministry of Electronics & Information Technology)
		India Health Fund	Public Serving Unit	Social Alpha
		Neotech Hub	Ankur Capital	IDEX Ministry of Defense, Government of India
		HDFC Bank	Design Alpha	Boeing
		Erasmus		
		Programme of the European Union	Agnii	YES Bank
		Department of International Development	CARPEDIEM	India Patent Foundation
		Infrastructure Support	<b>1) Digital Fabrication lab-PRAYASHALA (Supported By DST)</b>	
Design & Prototyping lab				
Electronics lab				
Heavy Machinery lab				
<b>2) BioNEST Lab (Supported by DBT BIRAC)</b>				

	Cell Culture lab
	Bioprocess lab
	Analytical lab
	Central Instrumentation lab
	<b>3) NIDHI-CoE Digital Health Lab (Supported by DST)</b>
	Analytical Facility, Fablab, Digital Health Lab, Digital Health Lab
	Digital Health Lab
	<b>4) Food Testing Lab (Supported by Startup Odisha)</b>
	Food Testing Facilities
	Water Testing Facilities

### 9.6.6 The impact of the KIIT TBI

Total Incubation Space 130000 sq.ft.	Total IP Generated 170+	Product Commercialised 100+	Total External Investment Raised 13 Billion+
Total Valuation of start-ups -80 Billion	Direct Jobs Created 4500+	Technologies Developed 250+	Awards & Recognition by start-ups 90+
Total Start-ups supported 350+	Total Start-ups supported 352	Start-ups Graduated 160+	Stakeholders Partners 150+
Women led start-ups supported 70+	Products in the Market 90+	Mentors Engaged 200+	

### 9.6.7 Workshop Conducted by KIIT TBI (2018-2019 to 2021-2022)

Sl. No.	Date	Name of the Event	Resource Person
1	02.08.2021	BIG-19th Call Sensitization Session Series- 01	BIG Team
2	04.08.2021	BIG-19th Call Sensitization Session Series- 02	BIG Team
3	06.08.2021	BIG-19th Call Sensitization Session Series- 03	BIG Team
4	09.08.2021	BIG-19th Call Sensitization Session Series- 04 (Northeast)	BIG Team
5	11.08.2021	BIG-19th Call Sensitization Session Series- 05	BIG Team
6	14.08.2021	BIG-19th Call Sensitization Session Series- 06	BIG Team
7	17.08.2021	BIG-19th Call Sensitization Session Series- 07	BIG Team
8	18.08.2021	BIG-19th Call Sensitization Session Series- 08	BIG Team
9	20.08.2021	BIG-19th Call Sensitization Session Series- 09	BIG Team
10	23.08.2021	BIG-19th Call Sensitization Session Series- 10	BIG Team
11	24.08.2021	BIG-19th Call Sensitization Session Series- 11	BIG Team
12	26.08.2021	BIG-19th Call Sensitization Session Series- 12	BIG Team



13	28.08.2021	BIG-19th Call Sensitization Session Series- 13	BIG Team
14	30.08.2021	BIG-19th Call Sensitization Session Series- 14 (Northeast)	BIG Team
15	31.08.2021	BIG-19th Call Sensitization Session Series- 15	BIG Team
16	01.09.2021	BIG-19th Call Grant Writing Session Series- 01	BIG Team
17	02.09.2021	BIG-19th Call Grant Writing Session Series- 02	BIG Team
18	03.09.2021	BIG-19th Call Grant Writing Session Series- 03	BIG Team
19	06.09.2021	BIG-19th Call Grant Writing Session Series- 04	BIG Team
20	07.09.2021	BIG-19th Call Grant Writing Session Series- 05	BIG Team
21	08.09.2021	BIG-19th Call Grant Writing Session Series- 06	BIG Team
22	09.09.2021	BIG-19th Call Grant Writing Session Series- 07	BIG Team
23	13.09.2021	BIG-19th Call Grant Writing Session Series- 08	BIG Team
24	14.09.2021	BIG-19th Call Grant Writing Session Series- 09	BIG Team
25	15.09.2021	BIG-19th Call Grant Writing Session Series- 10	BIG Team
26	17.09.2021	360 Degree Overview Biotechnology Ignition Grant (BIG)	BIG Team
27	22.09.2021 - 23.09.2021	Capacity building Training program on Innovation and Entrepreneurship	BRTC
28	27.09.2021 - 28.09.2021	Capacity building Training program on Innovation and Entrepreneurship	BRTC
29	03.01.2022	BIG-20th Call Sensitization Session Series- 01	BIG Team
30	06.01.2022	BIG-20th Call Sensitization Session Series- 02	BIG Team
31	10.01.2022	BIG-20th Call Sensitization Session Series- 03	BIG Team
32	13.01.2022	BIG-20th Call Sensitization Session Series- 04 (Northeast)	BIG Team
33	17.01.2022	BIG-20th Call Sensitization Session Series- 05	BIG Team
34	19.01.2022	BIG-20th Call Sensitization Session Series- 06	BIG Team
35	21.01.2022	BIG-20th Call Sensitization Session Series- 07	BIG Team
36	24.01.2022	BIG-20th Call Sensitization Session Series- 08	BIG Team
37	27.01.2022	BIG-20th Call Sensitization Session Series- 09	BIG Team
38	29.01.2022	BIG-20th Call Sensitization Session Series- 10	BIG Team
39	02.02.2022	BIG-20th Call Grant Writing Session Series- 01 (Bionest CITAR)	BIG Team
40	02.02.2022	BIG-20th Call Grant Writing Session Series- 02 (AIC- SKU)	BIG Team
41	03.02.2022	BIG-20th Call Grant Writing Session Series- 03 (RiiDL, Somaiya Vidhyavihar)	BIG Team
42	03.02.2022	BIG-20th Call Grant Writing Session Series- 04 (AIC- Nalanda)	BIG Team
43	04.02.2022	BIG-20th Call Grant Writing Session Series- 05 (IIITM- K)	BIG Team
44	04.02.2022	BIG-20th Call Grant Writing Session Series- 06 (AIC- SEED IISER Pune)	BIG Team

45	07.02.2022	360 Degree Overview Biotechnology Ignition Grant (BIG)	BIG Team
46	2-3 March 2022	Capacity building Training program on Innovation and Entrepreneurship	BRTC
47	25-26 March2022	Capacity building Training program on Innovation and Entrepreneurship	BRTC
48	09.07.2022	BIG-21st Call Sensitization Session Series- 01	BIG Team
93	26.11.2021	Technical Validation & NABL Accreditation	Riya Roy & Ray SaiSoubhagya
94	29.12.2021	Product Compliance	Riya Roy & Ray SaiSoubhagya
95	03.01.2022	Discussion on Required API	Riya Roy & Ray SaiSoubhagya
96	29-12-2021 - 27.01.2022	BIG-19 Pre-Mentoring Sessions	Aryan Jaiswal
97	17.05.2022 - 4.06.2022	BIG-20 Pre-Mentoring Sessions	Aryan Jaiswal
98	21.05.2022	Tricks of Effective Branding & Social Media Outreach	Riya Roy
99	23.05.2022	SIIP: Building a social Enterprise	Riya Roy
100	26.05.2022	SIIP: Team Building	Riya Roy
101	27.05.2022	SIIP: Idea Validation & Building MVP	Riya Roy
102	30.05.2022	Design Thinking to Choose Need Area & drafting your innovative need Statement	Riya Roy
103	30.05.2022	Environmanetal Impact of agri waste	Riya Roy
104	31.05.2022	Tools for Identifying Value Proposition and USP	Riya Roy
105	31.05.2022	Story Telling	Riya Roy
106	02.06.2022	Market Competitive Landscape Analysis	Riya Roy
107	02.06.2022	Sustainable Business Plan	Riya Roy
108	03.06.2022	Business communication skills for entrepreneurs	Riya Roy
109	06.06.2022	Problem statement canvas for startups	Riya Roy
110	06.06.2022	Essentials for successful Prototyping	Riya Roy
111	07.06.2022	Insights on exixsting innovation in waste related to pharma based companies	Riya Roy
112	07.06.2022	Grassroot level exixsting innovation on waste to value sector	Riya Roy
113	08.06.2022	Existing innovation in agrowaste sector	Riya Roy
114	08.06.2022	Waste to Value: Priority Areas, Ecosystem Partners, Funding landscape	Riya Roy
115	09.06.2022	Waste to Value: Facts, Priority Areas & Government Initiatives	Riya Roy
116	17.05.2022 -4.06.2022	BIG-20 Pre-Mentoring Sessions	Aryan Jaiswal
117	21.05.2022	Tricks of Effective Branding & Social Media Outreach	Riya Roy

118	23.05.2022	SIIP: Building a social Enterprise	Riya Roy
119	26.05.2022	SIIP: Team Building	Riya Roy
120	27.05.2022	SIIP: Idea Validation & Building MVP	Riya Roy
121	30.05.2022	Design Thinking to Choose Need Area & drafting your innovative need Statement	Riya Roy
122	30.05.2022	Environmanetal Impact of agri waste	Riya Roy
123	31.05.2022	Tools for Identifying Value Proposition and USP	Riya Roy
124	31.05.2022	Story Telling	Riya Roy
125	02.06.2022	Market Competitive Landscape Analysis	Riya Roy
126	02.06.2022	Sustainable Business Plan	Riya Roy
127	03.06.2022	Business communication skills for entrepreneurs	Riya Roy
128	06.06.2022	Problem statement canvas for startups	Riya Roy
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130	07.06.2022	Insights on exixsting innovation in waste related to pharma based companies	Riya Roy
131	07.06.2022	Grassroot level exixsting innovation on waste to value sector	Riya Roy
132	08.06.2022	Existing innovation in agrowaste sector	Riya Roy
133	08.06.2022	Waste to Value: Priority Areas, Ecosystem Partners, Funding landscape	Riya Roy
134	09.06.2022	Waste to Value: Facts, Priority Areas & Government Initiatives	Riya Roy
135	03.12.2021	Business Model & Business Plan	Riya Roy & Ray SaiSoubhagya
136	13.01.2022	The art to VC negotiation	Riya Roy & Ray SaiSoubhagya
137	14.01.2022	Investor Connect:Social Alpha	Riya Roy & Ray SaiSoubhagya
138	17.01.2022	Funding opportunities for product commercialization	Riya Roy & Ray SaiSoubhagya
139	01.02.2022	Deployment & Market connect for technology-led startups in lifeline sectors like water	Riya Roy & Ray SaiSoubhagya
		Session on Technology Development Board , GoI support in funding and product development and commercialization	Riya Roy & Ray SaiSoubhagya
140	23.03.2022		
141	26.03.2022	Masterclass on Investor Aligned Pitch Deck	Riya Roy & Ray SaiSoubhagya
142	29.03.2022	BIG-Investment :Pitch Perfect	Dr. Bhaskar Das
143	19.11.2021	Intellectual Property Rights	Riya Roy & Ray SaiSoubhagya
144	18.01.2022	Support in IP & Technology Development	Riya Roy & Ray SaiSoubhagya
145	26.02.2022	Intellectual Property & Its Significance in Academia	Dr. Amaresh & Dr. Samuel
146	04.03.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
147	11.03.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
148	20.04.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel

149	18.05.2022 - 19.05.2022	IP Formation Workshop	Dr. Bhaskar Das
150	27.05.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
151	09.06.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
152	13.06.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
153	22.06.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
154	28.06.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
155	26.07.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
156	27.07.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
157	28.07.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
158	02.08.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
159	03.08.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
160	05.08.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
161	10.08.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
162	26.09.2022	The Role of IP in Biotechnology Innovation @Bootcamp	Dr. Amaresh & Dr. Samuel
163	27.09.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
164	30.09.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
165	13.09.2022	Reasearch to Reality 2.0 (2 days workshop for IP & TT	Dr. Amaresh & Dr. Samuel
166	30.09.2022	IPR Awareness Program	Dr. Amaresh & Dr. Samuel
167	29.01.2021	Road Show	Riya Roy
168	17.03.2021	Road Show	Riya Roy
169	11.05.2021	Road Show	Riya Roy
170	06.08.2021	Road Show	Riya Roy
171	16.12.2021	TTO Road Show	Dr. Amaresh & Dr. Samuel
172	10.03.2022	TTO Road Show	Dr. Amaresh & Dr. Samuel
175	19.04.2022	TTO Road Show (BOOT CAMP)	Dr. Amaresh & Dr. Samuel
177	20.04.2022	TTO Road Show (BOOT CAMP)	Dr. Amaresh & Dr. Samuel
178	06.07.2022	Road Show	Riya Roy
179	15.07.2022	Road Show	Riya Roy
180	30.07.2022	Road Show	Riya Roy

#### 9.6.8 List of Entrepreneurs

Name of Entrepreneur	Company Name/PI name	Project details
Mr. Sambit Tripathy	Workoff Industries Pvt. Ltd.	Agropac- converting crop residues (corn cob, corn stalk, rice husk, rice straw) into self binding natural fiber through mechanical process.
Mr. Surjeet Singh Gour	IVEYS Innovation Pvt Ltd	Automation of Welding Machines
Mr. Pritam Dhalla	Larkai Innovations Pvt Ltd	CardioTrack - A handheld cardiac abnormalities screening device based on acoustics

Mr. Sudipta Pathak	Shyama Projection Engineering And Research	3-AXIS STABILIZED BIPOD MOUNT
Dr. Ashok Badamali	INFINITY RESEARCH AND DEVELOPMENT PRIVATE LIMITED	SANJIVANI: Compression Only Life Support (COLS) Assist Gadget for Community use
Dr. Kanika Singh Dhull	K First Biotech Pvt. Ltd.	A Impregnated Disposable Baby Tooth Cleaning and Gum Massaging Device
Dr. Nivedita Sahoo	RN Biomedical Pvt Ltd	Cranio-mandibular Brace: A novel device for Myo-facial Pain Dysfunction Syndrome (MPDS)
Mr. Prithwiraj Dasgupta	VENOM PLASMA LLP	VENOM - our Air De-Toxifier provides Bio-Oxygen Plasma.
Mr. Rudra Prasad Das	Orassia Biotechnology Private Limited	Probiotics from millets
Mr. Shikha Singh		The project is to make low-cost temporary utensils using plant leaves.

## 9.7. Co-curricular and Extra-curricular Activities (10)

### 9.7.1 Introduction

The Institute has a fully functional nominated students' Council i.e. KIIT Student Activity Centre that aims to bring all the students of the Institute under one roof with the objective of establishing a common ground for extracurricular activities as well as providing a platform for sharing talent, culture, and innovative ideas. In addition to that, KIIT Student Activity Centre organizes a handful of events comprising different genres such as delegation, workshops, cultural, etc which help students working as Organizers to develop interpersonal skills such as leadership, positive attitude, relationship management, and team management. In addition to this, KIIT has KIIT NSS, KIIT NCC, KIIT Youth Red Cross. Brief details of each society along with activity details are given

### 9.7.2 KIIT NSS Bureau

NSS trains the body and mind of young men and women to rise to help others in distress, voluntarily, without being asked or without a personal motive.

- Programme Coordinator - 1
- Units of NSS - 35
- Programme Officers - 20
- NSS Volunteers - 1750



Clothes Distribution



World Cancer Day During COVID 19



Jal Diwas



Sanitary Napkin Distribution



Addhyayan (Teaching in Slum Area)



Animal Care (Food Donation Drive)

**Fig. 9.7.2.1: Snapshots of NSS activities**

**9.7.2.1 List of Events conducted by KIIT NSS (2018-2019)**

Sl. No.	Date	Activity
1	08-01-2019	Founder's Cup Debate
2	23-03-2019	Tata cracable campus quiz
3	01-04-2019	Pratijja (National level oratory competition)
4	28-08-2018	Sweden India Memorial Quiz
5	01-10-2018	Sweden India Memorial Quiz
6	23-10-2018	KIIT MUN
7	26-01-2018	Observation of Republic Day
8	02-02-2019	KIIT TEDX Event
9	16-02-2019	Foundation Day
10	08-03-2019	Observation of International Women's Day
11	19-03-2019	Observation of International Student's Day
12	01-04-2019	Observation of Utkal Divas
13	08-04-2019	Observation of Telugu New Year
14	14-04-2019	Observation of Regional New Year
15	17-05-2019	Observation of International Art of Giving Day
16	21-06-2019	Observation of International Yoga Day
17	01-07-2018	Iftar Party Celebration
18	15-07-2018	Observation of World Youth Skill Day
19	05-08-2018	Suhana Safar Event
20	15-08-2018	Observation of Independence Day
21	19-08-2018	Fest on Global Village
22	25-08-2018	Observation of Onam

23	05-09-2018	Observation of Teacher's Day
24	14-09-2018	Observation of Hindi Divas
25	21-09-2018	Observation of International Peace Day
26	24-09-2018	Observation of NSS Day
27	18/9/2018 to 30/9/2018	KIIT International MUN
28	12/10/2018 to 14/10/2018	Kritarth Event
29	09/11/2018 to 11/11/2018	Chimera Event
30	14-11-2018	Observation of Children's Day
31	01-12-2018	Observation of World Aids Day
32	03-12-2018	Differently able Day Celebration
33	13/12/2018 to 16/12/2018	KIIT Fest
34	25-12-2018	Christmas Day Celebration
35	26-12-2018	Grand Alumni Meet

#### 9.7.2.2 List of Events conducted by KIIT NSS (2019-2020)

Sl. No.	Date	Activity
1	13-01-2019	Swachhata Pakhwada
2	09-01-2019	Swachh Bharat Abhiyan
3	10-02-2019	Sarva Shiksha Abhiyan
4	24-02-2019	Swachh Bharat Mission
5	10-03-2019	Program on Eat Right India
6	26-03-2019	Awareness Program on Prevention of Alcoholism and Substance (Drug) Abuse
7	04-04-2019	Swachh Bharat Abhiyan
8	19-04-2019	Anti-drug addiction drive
9	27-04-2019	Cancer awareness program
10	04-05-2019	NukkadNaatak – women's empowerment
11	20-05-2019	Jal Sakti Abhiyan
12	31-05-2019	Swachh Bharat Abhiyan
13	11-06-2019	Green India mission
14	25-06-2019	Daan Seva
15	07-07-2019	Prashanti Vihar School Visit
16	10-07-2019	Swachh Bharat Village Visit at Padmakesharipur
17	13-07-2019	Mega Plantation Utsav

#### 9.7.2.3 List of Events conducted by KIIT NSS (2020-2021)

Sl. No.	Date	Activity
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1	11-01-2020	Swachhata Pakhwada
2	18-01-2020	Cyclothon
3	19-01-2020	Personal Health and Hygiene Drive (Barang village)
4	23-01-2020	NSS: Nukkad Natak
5	23-01-2020	Nukkad Natak at Sri Sri University
6	23-01-2020	Nukkad Natak at KIIT Campus 3
7	26-01-2020	Silent March KIIT campus and KIIT road
8	26-01-2020	Happiness concert
9	26-01-2020	Kaizer 2.0 Event
10	26-01-2020	Observation of Republic Day 2020
11	30-01-2020	Talk Show
12	01-02-2020	Traffic Awareness (KIIT Chowk)
13	01-02-2020	Awareness about Corona Virus and Bird Flu (Shikharchandi slums)
14	01-02-2020	Prashanti Vihar School
15	01-02-2020	Shri Krishna Old Age Home Visit
16	01-02-2020	Army Day Celebration with 120 Infantry Battalion(TA), Bihar
17	02-02-2020	Manna Wisdom School Visit
18	08-02-2020	Nandankanan Cleanliness Drive

#### 9.7.2.4 List of Events conducted by KIIT NSS (2021-2022)

Sl. No.	Date	Activity
1	20-02-2021	Awareness Program on First Aid In Emergencies; Saftey Measures To Prevent Home Accidents
2	20-02-2021	Awareness Campaign On Basic Hygiene And Sanitation At Tangibanta Village
3	08-03-2021	International Women's Day Celebration
4	14-03-2021	Plantation Drive
5	24-03-2021	Awareness Programme: "Violence Against Women"
6	13-04-2021	Awareness Program: Tika Utsav
7	14-04-2021	Tika Utsav (Distribution Of Masks And Motivating Eligible People To Get Vaccinated)
8	24/05/2021 to 31-05-2021	Observation of World No Tobacco Day
9	31-05-2021	Bharat Ka Amrut Mahotsav
10	05-06-2021	Environment Day Celebration
11	06-06-2021	Webinar On Summer Diet And Covid
12	12-06-2021	World Day Against Child Labour
13	14-06-2021	Blood Donors Celebration
14	21-06-2021	Observation of International Day Of Yoga
15	25-06-2021	National Symposium On 'Bharat Ka Amrut Mahotsav'



16	17-07-2021	Bharatka Amrut Mahotsav
17	23-07-2021	Tokyo Olympics # Cheer For India Campaign
18	26-07-2021	Kargil Vijay Diwas 2021
19	01-08-2021	Swachhta Pakhwada Celebration
20	04-08-2021	Plantation Drive
21	05-08-2021	Observation of Oral Hygiene Day
22	05-08-2021	World Breastfeeding Week 2021
23	08-08-2021	Delta Covid Variant
24	15-08-2021	Swacchhta Pakhwada
25	15-08-2021	Observation of Independence Day
26	16-08-2021	Spreading Awareness To Villages Of Bhubaneswar And Similipal
27	19-08-2021	Observation of World Humanitarian Day
28	26-08-2021	Womens Equality Celebration
29	16-09-2021	Rashtriya Poshan Maah 2021
30	16-09-2021	NSS Week-2021
31	18-09-2021	Vitamin Vs Covid 19 Awareness
32	20-09-2021	KINS & KIDS NSS Celebrate NSS Week-2021
33	11-10-2021	Observation of International Girl Child Day 2021
34	21-10-2021	International Cyber Security Awareness Month
35	30-10-2021	Observation of National Unity Day
36	24/10/2021to 30-10-2021	Waste Management Week
37	01-11-2021	Awareness On Malnutrition
38	02/11/21 to 03/11/21	Campaign on Vocal For Local
39	08-11-2021	Kids' Canvas: An Art Competition For Children
40	14-11-2021	Children's Day Event
41	22-11-2021	Cyber Security Awareness Month Pledge
42	26-11-2021	Constitution Day Pledge: NSS SoEE
43	28-11-2021	Plogging
44	30-11-2021	Kangaroo Mother Care
45	07-12-2021	World Aids Day 2021 Kids Organizes Health Education Programme
46	11-12-2021	School Health Program

### 9.7.3 NCC Activities

NCC trains students to stay disciplined and united in all the tasks they undertake.

- **Army Wing**
- **NCC Cadet Strength- 50**
- **2 Certificate Programmes in NCC : B & C**

#### 9.7.3.1 List of Programme conducted by KIIT NCC

Sl. NO	YEAR	NAME OF THE CADETS	RDC/SNIP/AMC/BMC/AAC	YEP
				(Youth Exchange Programme)
<b>2018-19</b>				
1	2018-19	SUO Debajit Datta	RDC-2018,New Delhi	Kazakhstan(May-18)
2	2018-19	SUO Koyal Chattopadhyay	RDC-2018,New Delhi	Sri Lanka(Oct-18)
3	2018-19	SUO Prasanta Jaiswal	RDC-2018,New Delhi	Kazakhstan(May-18)
4	2018-19	SUO Avantika	RDC-2018,New Delhi	Singapore(Nov-18)
5	2018-19	SUO Siddharth Singh	RDC-2018,New Delhi	Russia(Oct-18)
6	2018-19	SUO Ananya Shahi	RDC-2018,New Delhi	-
7	2018-19	SER Lakshya Arya	SNIC-2018,Port Blair	-
8	2018-19	CDT Yaashi Jain	i)AMC, Uttarkashi-2017	
			ii)BMC, Darjeeling-2016	
			iii)Mt Everest Base Camp trek-2017	
			iv) Mt. Jogin III peak summit-2018	
9	2018-19	JUO Abhishek Rai	Army attachment Camp, Ramgarh	-
10	2018-19	CDT Gaurav Sahoo	Para Basic Course,Agra	Agra(Sept-18)
<b>2019-20</b>				
1	2019-20	SUO Adil Ahmad	RDC-2019,New Delhi	Kazakhstan(May-18)
2	2019-20	SUO Ashutosh Barik	RDC-2019,New Delhi	
3	2019-20	SUO Himansu Basanta Choudhary	RDC-2019,New Delhi	Bhutan(Dec-19)
<b>2020-21</b>				
1	2020-21	SUO Debamalya Gupta	RDC-2020,New Delhi	Cancelled due to Covid-19
2	2020-21	SUO Ameet Singh Manyal	RDC-2020,New Delhi	
3	2020-21	SUO Anikate Sharma	RDC-2020,New Delhi	
4	2020-21	SUO Adityaa Acharya	RDC-2020,New Delhi	
5	2020-21	SUO Divya Singh	RDC-2020,New Delhi	
<b>2021-22</b>				
1	2021-22	SUO Akash Kumar Nayak	RDC-2021,New Delhi	Cancelled due to Covid-19
2	2021-22	JUO Neelashis Banerjee	RDC-2021,New Delhi	
3	2021-22	JUO Barnali Bera	RDC-2021,New Delhi	
4	2021-22	JUO Abhishek Bhardwaj	Army attachment Camp, Ramgarh,JH	
5	2021-22	JUO Akash Chand	Army attachment Camp, Ramgarh,JH	
<b>2022-2023</b>				
1	2022-2023	CDT. Diksha Singh	RDC-2022, New Delhi	Nominated for YEP
2	2022-2023	CDT.Sumedha Tiwari	Made in OTA Chennai (NCC batch 2017-2020)	

3	2022-20 23	CDT. Shivani Tiwari	Made in OTA Chennai (NCC batch 2017-2020)	
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#### 9.7.4 Red Cross and Rotaract Club

The Red Cross and Rotaract Club have the spirit of NSS with a global vision and local or crossborder volunteering work. These forums help in developing the students' empathy and appreciation for other peoples need and also to show consideration towards other living beings which in turn could help them contribute towards society. The volunteers work for a cause not for applause. However the volunteers are recognized and motivated at different levels. Also, it gives students an opportunity to apply and if selected partake in Youth Delegations visiting different countries.

#### 9.7.5 KIIT Student Activity Centre

The University has 28 student societies at the University level. Detail are available at: <https://ksac.kiit.ac.in/kiit-societies/>. Different schools also have their individual student societies as in School of Management has Marketing Club, Finance Club, Entrepreneurship Club, snergy Club, Optix (Operations, IT Club), Bookhive, Aequitas (Sports club) etc. and School of Law has IPR society, Moot Court Society, Legal Aid Society and Trial advocacy society etc.

##### 9.7.5.1 Societies under KSAC:

- **Cultural:** KORUS (Music & Dance Society), Kreative Eye (Photography & Painting Society), Kzarshion (Fashion Society), Kalakaar (Dramatic Society), Film Society, Keuring (The Cooking Society), Khetshan (International Students Society), K-Konnect (Society for Alumni Connect), Khwahishein (The Hindi Society), Kamakshi (Women Society)
- **Technical/ professional:** E-labs, Apogeio (Aeronautical Society), KRS (Robotic Society), Automobile Society, Society for Civil Engineers, Kimaya- Medical Society, IoT society, IET student chapter, IEEE Student chapter, CSI Student Chapter, Konnexions (Web & IT Society), and Entrepreneurship Cell
- **Academic:** Qutopia (The Quizzing Society), Kraya- Marketing Society, Kuber- Finance Society, KIIT Wordsmith (The Writing Society), and Kronice (Literary Society)
- **Social :** Spiritual Society, TEDX Society, Khwaab (Society on philosophy of Founder Dr. A. Samanta), Kartavya (Social Responsibility Cell), Karma ( Differently abled Society), MUN Society (Model United Nation Society), NSS, NCC and Red cross society.

<b>CRITERION 10</b>	<b>Governance, Institutional Support and Financial Resources</b>	<b>120</b>
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### 10.1. Organization, Governance and Transparency (55)

#### 10.1.1. State the Vision and Mission of the Institute (5)

##### Vision of the Institution:

To create an advanced centre of professional learning of international standing where pursuit of knowledge and excellence shall reign supreme, unfettered by the barriers of nationality, language, cultural plurality and religion.

##### Mission of the Institution:

- Imparting quality value based education of international standard and imbibing skill for solving real life problems.
- Inculcating global perspective in attitude.
- Creating leadership qualities with futuristic vision.
- Fostering spirit of entrepreneurship and realisation of societal responsibilities.
- Cultivating adaptation of ethics, morality and healthy practices in professional life.
- Instilling habit of continual learning.
- Encouraging and supporting creative abilities and research temperament.
- Establishing and promoting close interaction with industries and other utility sectors and keep abreast with state-of-the-art technology.

#### 10.1.2. Availability of the Institutional Strategic Plan and its Effective Implementation and Monitoring (25)

##### A. Teaching-Learning Environment

Parameter	Present Status	Target at 10 years	Target at 15 years	Implementation	Monitoring
Faculty to Student Ratio	01:13	01:10	01:08	Recruitment of international faculty Recruitment of faculty with qualifications acquired at top ranked universities Retention policy incorporating schemes to ensure better life	Review by IQAC in every year
Doctorate-to-bachelor's ratio	01:30	01:15	01:10	Starting Doctoral programs in inter-disciplinary area Starting Doctoral programs for persons experienced in industry/administration/social sectors Admitting more students in Ph.D. Programs Scholarship policy to benefit more students	Review by IQAC in every year

### B. Research (Volume, Income, Reputation)

Parameters	Present Status	Target at 10 years	Target at 15 years	Implementation	Monitoring
Indexed publication per faculty per year	1.25	2.5	4	Sustained motivation and institution of attractive research recognition system Financial award for faculty with average 5 publications per year	Review by IQAC in every six months. Brief report is submitted to Registrar
Average cite score in Scopus indexed journals	2.73	4	6	Engagement in high end research Engagement in collaborative research Selection of journals in which publications are to be encouraged	Review by IQAC in every six months.
Citations per publication	2.33	5	10	Emphasis on Content factor Involvement of research group member	Review by IQAC in every six months.
Number of patents	338	2300	3000	Workshops are being conducted on patent filing by KIIT TBI and KIIT TEC Technical support, legal support and financial support is provided by the institutions for patent filing	Review by Director, R&D and IQAC in every six months

### C. International Outlook (Staff, Students and Research)

International to domestic student ratio	01:20	01:15	01:10	Float of academic programs to attract international students Strengthening amenities to cater to the international student needs	Review by Registrar in every six months.
International to domestic staff ratio	01:100	03:100	05:100	Recruitment Planning	Review by Registrar once in every year
International collaboration	Number of MoU: 284 Effective usage of 90	Additional 150 MoUs with Universities and effectiveness thereof	Additional 200 MoUs with Universities and effectiveness thereof	Faculty are inspired to carryout joint research and visit to top Universities as pdf. Guest faculty base expansion	Review by Vice Chancellor once in every year
Proportion of faculty presenting research paper abroad	5%	50%	100%	Enhancing grant to travel Strengthening faculty exchange programs Strengthening effectiveness of MoUs	Review by IQAC in every six months.

### D. Industry and Academia Collaboration

Parameter	Present Status	Target at 10 years	Target at 15 years	Implementation	Monitoring
Number of MoUs	Number of MoU: 467 Effective usage of 300	MoUs with 550 Universities/ organisations and effectiveness thereof	MoUs with 600 Universities and effectiveness thereof	Faculty are inspired collaborate with industry for research, consultancy, student projects, student internship.	Review by Vice Chancellor once in every

### E. Institutional Income from Research and Consultancy

Parameter	Present Status	Target at 10 years	Target at 15 years	Implementation	Monitoring
Institutional Income from Consultancy and Research	1%	10%	30%	Selection of industry specific research objectives Funded Programs Industry Oriented Programs Reskilling programs for industry professionals Consultancy Services	Reviewed by Registrar once in every six months

### 10.1.3. Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies (10)

The details of governing bodies of KIIT Deemed to be University is given below.

#### 10.1.3.1 Details of Governing bodies

Governing Body		
<b>Board of Management</b>	Memberships	List is attached (Cl. 10.1.3.2)
	Functions and Responsibilities	Descriptions given (Cl. 10.1.3.2 A)
	Frequency of meetings	4 times in a year
	Attendance	99%
<b>Academic Council</b>	Memberships	List is attached (Table 10.1.3.3)
	Functions and Responsibilities	Descriptions given (Section 10.1.3.3 A)
	Frequency of meetings	95%
	Attendance	5 times in a year
<b>Finance Committee</b>	Memberships	List is attached (Table 10.1.3.4)
	Functions and Responsibilities	Descriptions given (Section 10.1.3.4 A)
	Frequency of meetings	3 times in a year
	Attendance	99%

#### 10.1.3.2: Member of Board of Management

Sl. No.	Constitution of the Board	Name of the Members
1	Vice-Chancellor-Chairperson	Prof. Sasmita Samanta
2	Eminent Academicians (External)	Prof.(Dr.) M. C. Mishra, Emeritus Professor, J P N Apex Trauma Centre, AIIMS, New Delhi
		Prof. Saswat Chakraborty, Professor, G. S. Sanyal School of Technology
		Prof. (Dr.) Shankar Acharya, Sr. Consultant, Sri Gangaram Hospital, Delhi
		Prof. Saroj Kumar Mohapatra, Director, School of Management
3	Two Deans/ Directors of Faculties	Prof. Biswajit Sahoo, Director, School of Computer Engineering
		Maj. Gen. (Dr.) P. K. Pattnaik, Director General, KIMS
5	Two teachers of the Institution	

		Prof. Mrutyunjay Suar, Director General, R& D
6	Nominee of the Sponsoring Society	Mr. S. Samir Panda, Vice President, Corporate Relations Mr. D. N. Diwedy, Vice President, IT & Operations
7	Registrar - Secretary	Prof. J. R. Mohanty, Registrar

#### **10.1.3.2 A: Functions and Responsibilities of the Board of Management**

The Board of Management shall be the principal organ of Management and principal executive body of the Deemed to be University and shall have the following powers, namely:

- To establish, on the advice of the Academic Council, Divisions and Departments for the academic work and functions of the Deemed to be University and to allocate areas of study, teaching and research to them;
- To create teaching and academic posts, to determine the number, cadres and qualifications thereof as approved by the Commission, and statutory body concerned and the emoluments of such posts in consultation with the Finance Committee;
- To appoint such Professors, Associate Professors, Assistant Professors and other academic staff as may be necessary on the recommendation of the selection Committee;
- To lay down the duties and conditions of service of the Professors, Associate Professors and Assistant Professors and other academic staff of the Deemed to be University in consultation with the Academic Council;
- To provide for appointment of Visiting fellows and Visiting Professors;
- To create administrative, ministerial and other necessary posts in terms of the cadres laid down and to make appointment thereof in consultation with the Finance Committee;
- To constitute, for the benefit of the teaching, academic, technical, administrative and other staff, such pension, insurance, provident fund and gratuity as it may deem fit and aid in the establishment and support of Association, Institutions, Funds, Trusts and conveyances calculated to benefit the staff and the students of the Deemed to be University;
- To regulate and enforce discipline among the employees of the Deemed to be University and to take appropriate disciplinary action, wherever necessary;
- To entertain and adjudicate upon and, if thought fit, to redress the grievances of the employees and students of the Deemed to be University;

- To grant leave of absence to the Vice-Chancellor and to make necessary arrangements for carrying on his/her functions during the period of absence;
- To approve the award of Degrees and diplomas based on the results of examinations and tests and to confer, grant or award Degrees, Diplomas, Certificates and other academic titles and distinctions;
- To fix the emoluments and traveling and other allowances of examiners, moderators, tabulators and such other personnel appointed for examinations in consultation with the Academic Council and the Finance Committee;
- To institute Fellowships, including Travel Fellowships, Scholarships, Studentships, Medals and Prizes in accordance with the Rules to be framed for the purpose;
- To advise the Holding Trustees (if any) on matters regarding acquisition, management and disposal of any immovable property on behalf of the Deemed to be University;
- To purchase, take on lease or accept as gift or otherwise any land or buildings or works which may be necessary or convenient for the purpose of the Deemed to be University, on such terms and conditions as it may deem fit and proper, and to construct or alter and maintain any such building(s) or work(s);
- To transfer or accept transfers of any movable property on behalf of the Deemed to be University, provided that the Board of Management shall not transfer or alter ownership in any manner whatsoever of any moveable or immoveable property of the Institution Deemed to be University without the approval of the sponsoring Society / Trust / Company.
- To execute in consultation with the Holding Trustees (if any) conveyance, transfer Government Securities, re-conveyances, mortgages, leases, bonds, licenses and agreements in respect of property, movable or immovable, belonging to the Deemed to be University or to be acquired for the purposes of the Deemed to be University;
- To issue appeals for funds for carrying out the objectives of the Deemed to be University and, consistent with the provisions of the objectives, to receive grants, donations, contributions, gifts, prizes, scholarship, fees and other moneys, to give grants and donations, to award prizes, scholarships, etc.;
- To raise and borrow in consultation with the Holding Trustee (if any) money on bonds, mortgages, promissory notes or other obligations or securities founded or based on any of the properties and assets of the Deemed to be University, or without any securities, upon such terms and conditions as it may think fit and to pay out of the funds of the Deemed to be University, all expenses incidental to



the raising of money and to repay and redeem the money borrowed;

- To draw and accept and make and endorse discount and negotiate Government of India and other promissory notes, bills of exchange, cheques or other negotiable instruments;
- To maintain a fund to which shall be credited:
- All moneys provided by the Central or State / UT Government / University Grants Commission;
- All fees and other charges received by the Deemed to be University;
- All money received by the Deemed to be University as grants, gifts, donations, benefactions, bequest or transfers and
- All money received by the Deemed to be University in any other manner or from any other source;
- To open account or accounts of the Deemed to be University with anyone or more scheduled banks and to lay down the procedure for operating the same;
- To deposit all moneys credited to the funds in scheduled banks or to invest them in consultation with the Finance Committee;
- To invest the funds of the Deemed to be University or money entrusted to the Deemed to be University in or upon such securities and in such manner as it may deem fit and from time to time transpose any investment;
- To maintain proper accounts and other relevant records and prepare Annual Statements of Accounts, including the balance sheet for every previous financial year, in such form as may be prescribed by the Regulations / Bye-Laws;
- To manage, regulate and administer the revenue, the finance, accounts, investments, properties, business and all other administrative affairs of the Deemed to be University and for that purpose to appoint such agent or agents as it may deem fit;
- To provide building or buildings, premises, furniture, fittings, equipments, appliances and other facilities required for carrying on the work of the Deemed to be University;
- To establish, maintain and manage residencies for faculty and staff and hostels for the students of the Deemed to be University;
- To recognize and maintain control and supervision on hostels owned and managed by other agencies for the students of the Deemed to be University and to rescind such recognition;
- To appoint such committees for such purpose and with such powers as the Board of Management

may think fit and to co-opt such persons on these Committees as it thinks fit;

- To appoint in order to execute an instrument or transact any business of the Deemed to be University, any person as attorney of the Deemed to be University with such powers as it may deem fit.
- To appoint Auditor(s) for the ensuing year;
- To select an emblem and to have a common seal for the Deemed to be University and to provide for the custody and use of such seal;
- To delegate all or any of its powers to any Committee or sub- Committee constituted by it or the Vice-Chancellor of the Deemed to be University or any other person;
- To conduct all administrative affairs of the Deemed to be University not otherwise specifically provided for;
- To take all necessary decisions for the smooth and efficient functioning of the Deemed to be University.

#### 10.1.3.3: Member of Academic Council

Sl. No	Name	Designation
1	Prof. Sasmita Samanta, Vice Chancellor	Chairperson
2	Prof. Faizan Mustafa, Vice Chancellor, Nalsar, Hyderabad	External Member as Educationist nominated by Vice Chancellor
3	Prof. Amol A Gokhale, Professor, IIT Mumbai	
4	Dr. Sanghamitra Pati, Director, ICMR	
5	Dr. Bhimaraya Metri, Director, IIM Nagpur	
6	Mr. M. Sasikumar, Executive Director, C – DAC, Mumbai	
7	Mr. Indrajit Sanyal, Head – Ericsson Global India, Kolkata	External Member as from other field nominated by Vice Chancellor
8	Mr. Amit Sharma, VP & Head HR, Volvo Group India, Bangalore	
9	Mr. Suraj Chettri, Head – HR, Airbus Group India, Bangalore	
10	Mr. Kumar Amarendra Narayan Singh, Director, KPMG	
11	Mr. Sambit Sahu, Vice President, IoT Group	
12	Prof. Sudarsan Nanda Research Head	Research Head
13	Prof. Mrutyunjay Suar Director General, R & D	Director General, R & D
14	Prof. Gopal C. Kundu Director, R&D	Director, R&D
15	Prof. Damodar Suar Chairman, Social Science Research	Chairman, Social Science Research
16	Prof. Asish Kumar Sen UG Chairman	UG Chairman
17	Dr. Santosh Kumar Pani Controller of Examinations	Controller of Examinations

18	Dr.Ambika Prasad Mohanty, Principal, Kalinga Institute of Medical Sciences	Deans of the Schools / Head of the Departments	
19	Prof. Saranjit Singh, Director, IEC		
20	Prof. Saroj Kumar Mohapatra, Director, School of Management		
21	Prof. Nishit Parida, Director, School of Rural Management		
22	Prof. Veena Goswami, Director, School of Computer Applications		
23	Prof. Bhavani Prasad Panda, Director, School of Law		
24	Prof. Soumyendu Shankar Ray Director General, School of Architecture		
25	Mr. Himansu Sekhar Khatua Director General, KSFT		
26	Prof(Dr) Sudhir Kumar Satpathy, Director, School of Public Health		
27	Prof. Jayanta Kumar Parida, Director, School of Social, Financial & Human Sciences		
28	Prof. Biswajit Sahoo, Director General, School of Computer Engg.		
29	Prof. (Dr.) Beerendra Pandey, Dean, School of Language		
30	Prof. Prasant Rath, Dean, School of Applied Sciences		
31	Prof. Satya Narayan Mishra, Dean, School of Management		
32	Prof. Sanjib Moulick, Dean, School of Civil Engg		
33	Prof. Byamakesh Nayak, Dean, School of Electrical Engg		
34	Prof. Bharat Chandra Routra, Dean, School of Mechanical Engineering		
35	Prof. Suprava Patnaik, Dean, School of Electronics Engg		
36	Dr. Srinivas Patnaik, Dean, School of Biotechnology		
37	Prof. Biswa Bandita Kar, Dean, School Of Yoga		
38	Prof. P. K. J. Mohapatra, Head, Department of Public Policy		
39	Dr. Aswini Kar, Principal, KIDS		
40	Prof. Niyati Das, Principal, KINS		
41	Academic Head, KISS		
42	Prof. Nirmal Kumar Rout Professor & Director (SRC), School of Electronics Engineering		Professors
43	Prof. Pradip Kumar Sarkar, Professor, School of Law		
44	Prof. Koustubh Kanti Ray, Professor, School of Management		
45	Prof. Arun Kumar Ray, Director, Academics		
46	Prof. Ashok Kumar Sahoo, Director, R & D (Technology)		
47	Prof. Chinmay Kumar Panigrahi, Director, QA Cell		
48	Prof. Samaresh Mishra, Director, Student Affairs		

49	Prof. Benu Gopal Mohapatra, Director, Consultancy Services	
50	Prof. Suresh Chandra Satapathy, Professor & Dean, R&D, School of Computer Engineering	
51	Dr. Pramod Kumar Das, Professor, School of Applied Science	
52	Dr. Ram Chandra Das, Professor, Dept of Psychiatry, Vice Principal, KIMS	
53	Dr. Shruti Vishal Dev, Professor, KIDS	
54	Dr. Krishna Padarabinda Tripathy Department of General Medicine, KIMS	
55	Dr. Amaresh Mishra, Department of General Surgery, KIMS	
56	Dr. Kabi Kant Samantaray, Department of ENT, KIMS	
57	Dr. Dayanidhi Meher, Department of Endocrinology, KIMS	
58	Dr. Tribikram Mohanty, School of Civil Engineering	Associate Professors
59	Dr. Anita Pati, Dean, International Students Relations, School of Applied Science	
60	Dr. Arindam Deb, School of Electronics Engineering	
61	Dr. Visakha Raina, School of Biotechnology	
62	Dr. Arup Abhinaa Acharya, Dean, School of Computer Engineering	
63	Dr. Amulya Ratna Swain, Dean, School of Computer Engineering	
64	Dr. Bhabani Shankar Prasad Mishra, Dean, School of Computer Engineering	
65	Dr. Debashis Mishra, Department of Orthopedics, KIMS	Assistant Professors
66	Dr. Santosh Das, Department of Neurology, KIMS	
67	Prof. Tanmoy Roy Chaudhury, School of Electrical Engineering	Assistant Professors
68	Prof. Rishi Khanna, School of Electronics Engineering	
69	Dr. Sanket Nayak	Alumni
70	Ms. Nidhi Singh	
71	Mr. Dipankan Bandopadhyay	Student
72	Ms. B. Swetali Subudhi	
73	Ms. Zikshita Patni	
74	Prof. Jnyana Ranjan Mohanty, Registrar	Member Secretary

#### 10.1.3.3 A: Functions and Responsibilities of the Academic Council

The Academic Council shall have the following powers and duties, namely

- i. To consider matters of academic interest either on its own initiative or at the instance of the Board

- of Management or those proposed by the departments/ faculties and to take proper action thereon,
- ii. To exercise general supervision over the academic work of the Deemed to be University and to give direction regarding methods of instruction, evaluation, and improvements in academic standards;
  - iii. To promote research within the Deemed to be University, acquire reports on such researches from time to time;
  - iv. To prescribe courses of study leading to degrees and diplomas of the Deemed to be University;
  - v. To make arrangements for the conduct of examinations in conformity it with the Bye-Laws;
  - vi. To appoint examiners, moderators, tabulators and such other personnel for different examinations;
  - vii. To maintain proper standards of the examinations;
  - viii. To recognize diplomas and degrees of universities and other Institutions and to determine equivalence with the diplomas and degrees of the Deemed to be University;
  - ix. To suggest measures for departmental co-ordination;
  - x. To make recommendations to the Board of Management on:
    - a) measures for improvement of standards of teaching research and training;
    - b) institution of Fellowships, Travel Fellowships, Scholarships, Medals, Prizes etc.;
    - c) to recommend to the Board of Management, the establishment or abolition of departments/ centres; and
    - d) To frame rules covering the academic functioning of the Deemed to be University, admissions, examinations, award of fellowships and studentships, free-ships, concessions, attendance, discipline, residence etc.
    - e) To appoint sub-committees to advise on such specific matters as may be referred to it by the Board of Management;
    - f) To consider the recommendations of the sub-committees and to take such action as the circumstances of each case may require;
    - g) To take periodical review of the activities of the Departments/Centres and to take appropriate action with a view to maintaining and improving standards of instruction;
    - h) To recommend institution of teaching posts (Professors, Associate Professors and Assistant Professors) to the Board of Management; and

- i) To exercise such other powers and perform such other duties as may be conferred or imposed upon it by the Rules.

#### 10.1.3.4: Member of Finance Committee

Sl. No	Name	Designation
1	Prof. S. Samanta	Vice Chancellor & Chairman
2	Mr. D. N. Dwivedy	Vice President
3	Prof. J. R. Mohanty	Registrar
4	Mr. S. C. Satapathy	Finance Officer & Secretary

#### 10.1.3.4 B: Functions and Responsibilities of the Finance Committee

- To look into Bank Loans, Taxes, Insurances, Matters, Statutory dues and liaisoning with different financial institution
- To make policy planning of finance, communications with statutory financial bodies, day – to day transactions, disbursement, coordination with Chartered Accountant.
- Develop an annual operating budget with staff.
- Approve the budget within the finance committee.
- Monitor adherence to the budget.
- Set long-range financial goals along with funding strategies to achieve them.
- Develop multi-year operating budgets that integrate strategic plan objectives and initiatives.
- Present all financial goals and proposals to the board of directors for approval.

#### 10.1.3.5. Rules, Policies and procedures

Published Rules, Policies and Procedures	Year of publication
Quality Policy	2022
Academic Regulation	2016
Working Guideline	Published every year
IPR Policy	2021
Research and Consultancy Policy	2022
HR Manual	2022
Anti-Corruption and Anti-Bribery Policy	2020
Academic Freedom Policy	2020
Anti-Discrimination and Equal Opportunity	2020
<u>Stakeholder Engagement Policy</u> ( <a href="https://kiit.ac.in/policies/stakeholder-engagement-policy/">https://kiit.ac.in/policies/stakeholder-engagement-policy/</a> )	2020

<u>Smoke-Free and Tobacco-Free policy</u> ( <a href="https://kiit.ac.in/policies/smoke-free-and-tobacco-free-policy/">https://kiit.ac.in/policies/smoke-free-and-tobacco-free-policy/</a> )	2018
Policy for differently abled	2018
Continuous Improvement Evaluation Policy	2022
KIIT Sustainable Policy	2018

### Extent of Awareness

Formal Modes of promoting awareness:

- Hard copy circulation in all Schools
- Presentation during beginning of the Academic year during Faculty Development Programs
- Detail elaboration in faculty council meeting and staff council meeting

#### 10.1.4. Decentralization in working and grievance redressal mechanism (5)

10.1.4.1 The academic and administrative head of Schools involved in BTech programmes are given below.

Faculty Member	Administrative Responsibility
Prof. Sanjib Moulick, Dean, School of Civil Engg.	1. Job chart of the functionaries i.e. SOP
Prof. Suprava Pattanaik, Dean, School of Electronics Engg.	2. Capital Assets
Prof. Sarita Nanda, Associate Dean, School of Electronics Engg.	3. Personnel Administration Staff Description
Prof. Bharat Chandra Routara Dean, School of Mechanical Engg.	Service Book, Personal files and PARs Accountability and value addition
Prof. Nitin Sharma, Associate Dean, Dean, School of Mechanical Engg.	4. Office Management
Prof. Byamakesh Nayak, Dean, School of Electrical Engg	Attendance, Disciplinary action & Punctuality Security & Safety arrangement
Prof. Biswajit Sahoo, Director, School of Computer Engg	Registers
Prof. Bhabani Shankar Prasad Mishra, Dean Prof. Amulya Ratna Swain, Dean-I	- Cash Book
Prof. Arup Abhinna Acharya, Dean-II School of Computer Engg.	- Bill Register & Drawal Register
Prof. Prasanta Rath, Dean, School of Applied Sciences	- Pay Acquittance Register
Prof. A. K. Sen, Dean, School of Humanities	- CL/EL Register Library
	Workshops & Labs Space Management Transport Management Office infrastructure Financial Management

#### 10.1.4.2: The mechanism and composition of grievance redressal cell including Anti Ragging Committee & Grievance Redressal forum for women

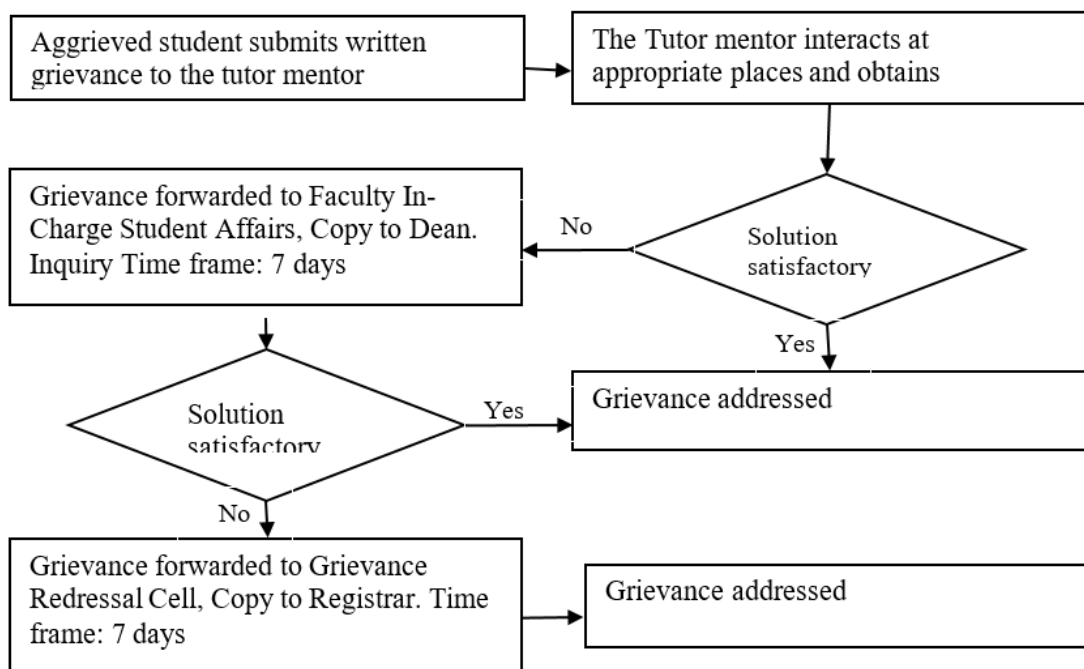
Grievance Redressal Cell	Mechanism	Description is given (Section 10.1.4.3 A)
	Composition	List is attached (Table 10.1.4.3)
Anti ragging Committee	Mechanism	Description is given (Section 10.1.4.4 A)

	Composition	List is attached (Table 10.1.4.4)
Grievance Redressal forum for women	Mechanism	Description is given (Section 10.1.4.5 A)
	Composition	List is attached (Table 10.1.4.5)

### 10.1.4.3: Member List of University Level Grievance Redressal Cell

Sl. No.	Name	Designation
1.	Prof. Damodar Suar, Chairperson, Social Science Research	Chairman
2.	Prof. Samaresh Mishra, Director, Student Affairs	Member
3.	Dr. Sucheta Priyabadani, Director, Student Counselling	Member
4.	Dr. Sanjib Moulick, Dean, School of Civil Engineering	Member
5.	Dr. Srinivas Pattanaik, Dean, School of Biotechnology	Member
6.	Dr. Sumita Mishra, Dean, School of Management	Convener

#### 10.1.4.3 A: Mechanism of Grievance Redressal Cell



The Decisions are made considering the existing rules and regulations and expected students conduct aspects. In case the grievance is not acceptable legally, the student is counseled.

The University level Committee shall consider the appeal of the student and make appropriate recommendations to the Registrar within a reasonable time, preferably within 15 days. On approval by the Registrar, the final decision shall be communicated to the student through the Director Student Affairs.

The University level Committee, if needed, may recommend to the Director Counseling Cell, necessary corrective action as it may deem fit, to ensure avoidance of recurrence of similar grievance at any of the



Schools under the University.

While dealing with the complaint, the Committee at all levels shall observe law of natural justice and hear the complainant and concerned people.

While passing an order on any Grievance at any level, the relevant provisions of the Act/Regulations would be kept in mind and no such order would be passed in contradiction of the same.

**Table 10.1.4.4: Member List of University Level Anti Ragging Committee**

Sl. No	Name	Designation
1	Prof. Sasmita Samanta, Vice Chancellor	Chairperson
2	Prof. Saranjit Singh, Pro Vice Chancellor	Member
3	Prof. Jnyana Ranjan Mohanty, Registrar	Member
4	Dr. Sucheta Priyabadini, Director, Student Counseling	Member
5	Prof. Prasant Rath, Dean SAS	Member
6	Prof. Bhavani Prasad Panda, Director, Law	Member
7	Mr. P. K. Chamupaty, Jt. Registrar(Admin.)	Member
8	Mr. Sudhir Rath, Director, Hostels	Member
9	Ms. Jayanti Nath, Joint Director, Girls Hostel & Student Affairs	Member
10	Mr. P. K. Pattnaik, Chief Proctor	Member
11	Dr. Shyam Sunder Behura, Dy Director(SS)	Member
12	Prof. Ambika Prasad Mohanty, Principal, KIMS	Member
13	Mr. Bijay Swain, Reporter-The Samaja News Paper	Member
14	Mr. Ramesh Chandra Bisoi, ACP, Zone – 6 , Police Commissionerate	Member
15	Mr. Rashmi Mohanty, Odisha Chapter Head, Tech Mahindra Foundation	Member
16	Mr. Babloo Sharma, DGM, IOC, Parent	Member
17	Shayari Halder, Student(1st Year), CSE	Member
18	Ankit Dhar, Student (2nd Year), CSE	Member
19	Auro Prasad Nanda, Student (3rd Year), CSE	Member
20	Prof. Samaresh Mishra, Director, SA	Convenor

**Section 10.1.4.4 A: Mechanism for Anti Ragging committee (Towards preventing ragging)**

Task	Activities	Frequency
Publicity	Students Orientation meetings	Annually twice
	Parents meeting	Annually twice
	Mentees meeting	Monthly once
	Published Student hand book	Annually once
	Display of help line	
	Display of posters promoting good will among batches	

Group constitution	Anti ragging committee	
	Anti ragging squad	
	School level committees	
Security features	CCTVs across locations	
	Security staff engaged at strategic locations	
	Staff member deployment at strategic locations	
Student Counseling	During tutor-mentor meeting	
	During hostel visit	
	Referral of potential trouble initiators to Counseling cell	
Surprise visits	Accommodation area	
	Recreational areas	
	Rest areas	

**Table 10.1.4.5: Member List of University Level Grievance Redressal Forum For Women (GRFW)**

Sl. No.	Name	Position
1.	Dr. Sucheta Priyabadani, Director, Student Counselling	Chairperson
2.	Dr. Anita Pati, Associate Professor, School of Applied Sciences	Member
3.	Ms. Jayanti Nath, Joint Director, Girls' Hostel & Student Affairs	Member
4.	Dr. Sumita Mishra, Dean, School of Management	Convener

**10.1.4.5 A: Mechanism for Grievance Redressal Forum for Women:**

The grievance redressal forum for women is empowered to entertain application and complain from working woman for sexual harassment. According to supreme court definition sexual harassment in any unwelcome sexually determined behavior such as

- a) Physical contact and advances
  - b) A demand or request for sexual favors
  - c) Sexually colored remarks
  - d) Showing pornography
  - e) Any other unwelcome, physical verbal or non – verbal conduct of sexual nature
- Where any of these acts is committed in circumstances where under the victim of such conduct has a reasonable apprehension that such conduct can be humiliating and may constitute a health and safety problem
  - For instance when the woman has reasonable grounds to belief that her objection would disadvantage her in connection environment. Adverse consequence might be inferred if the victim does not consent to the conduct in question or to raise any objection thereto.

- **Penalties:** If any of the offence mentioned above is proved against the offender the same shall be treated as grave misconduct and punishment shall be imposed for grave misconduct as prescribed by the University in its rules and regulation adhering to the appropriate procedure mentioned therein.
- **Preventive Steps:** GRFW shall take appropriate steps to prevent sexual harassment within the premises of KIIT which includes:
  - (a) Express prohibition of sexual harassment as defined above should notify, published.
  - (b) The rules and regulation for grave misconduct under KIIT, society shall be involved and appropriate penalties shall be awarded against the offender.
- **Time Frame:** Any complain or application received by the GRFW as per the rules mentioned has to deal with after giving a reasonable opportunity of being heard to the accused concerned and submit its report within a period of three months.
- **Appeal:** Any person aggrieved by the decision of the GRFW may appeal to the chairperson within a period of fifteen days from the date of decision. The chairperson of GRFW shall dispose.

#### 10.1.5. Delegation of financial powers (5)

##### Financial Power delegation

Designated Authority	Financial Power delegated	Utilization %
Vice-Chancellor	1 Crore	100%
Registrar	10 Lakhs	100%
Deans	1 Lakh	85%
Directors	1 Lakh	80%

#### 10.1.6. Transparency and availability of correct/unambiguous information in public domain

(5)

The exact information of KIIT Deemed to be University related to academics, policies, committee are displayed in the university websites and are updated regularly. The University website furnished all relevant information through AQAR and audited financial statement.

University Website: [www.kiit.ac.in](http://www.kiit.ac.in) (<http://www.kiit.ac.in/>)

For the internal stake holders, vital information are available in SAP portal.

- The registered users can log in through the SAP portal and have access to the academic data,

financial data and the resource usage statistics.

- The examination paper evaluation is through online mode, where students can view their evaluated answer scripts and interact with the evaluator, in case they find some errors in evaluation.
- The parents can also log in the SAP portal and can access attendance, academic status and financial dues of the student.

## 10.2. Budget Allocation, Utilization, and Public Accounting at Institute level (15)

**Total Income at Institute level: For CFY, CFYm1, CFYm2 & CFYm3**

**CFY: Current Financial Year – CFYm1 (Current Financial Year minus 1), CFYm2 (Current Financial Year minus 2), CFYm3 (Current Financial Year minus 3)**

**Table 1 - CFY 2021-2022**

Total Income in CFY:				Actual expenditure in CFY (till ...):			Total No. of students in CFY:
13,110,192,997				12,887,072,860			27071
Fee	Govt.	Grant(s)	Other Sources (specify)	Recurring including Salaries	Non-recurring	Special Projects/Any other, specify	Expenditure per student
10,321,676,032	-	99,470,484	2,689,046,481	8,563,501,905	4,237,170,169	86,400,785	476,047.17

**Table 2 - CFYm1 2020-2021**

Total Income in CFY:				Actual expenditure in CFY (till ...):			Total No. of students in CFY:
11,824,872,825				11,441,886,391			27071
Fee	Govt.	Grant(s)	Other Sources (specify)	Recurring including Salaries	Non-recurring	Special Projects/Any other, specify	Expenditure per student
9,289,988,494	-	158,908,536	2,375,975,795	7,665,272,143	3,689,296,359	87,317,889	422,662.13

**Table 3 - CFYm2 2019-2020**

Total Income in CFY:				Actual expenditure in CFY (till ...):			Total No. of students in CFY:
11,987,273,956				11,179,808,806			26024
Fee	Govt.	Grant(s)	Other Sources (specify)	Recurring including Salaries	Non-recurring	Special Projects/Any other, specify	Expenditure per student
9,688,277,517	-	250,060,636	2,048,935,803	8,076,983,610	2,857,898,348	244,926,848	429,596.10

**Table 4 - CFYm3 2018-2019**

Total Income in CFY:				Actual expenditure in CFY (till ...):			Total No. of students in CFY:
11,108,869,700				10,862,572,394			25791
Fee	Govt.	Grant(s)	Other Sources (specify)	Recurring including Salaries	Non-recurring	Special Projects/Any other, specify	Expenditure per student
9,069,388,423	-	287,399,351	1,752,081,926	7,269,712,622	3,350,890,186	241,969,586	421,176.86

Budgeted and Actual Expenses								
Year	2021-2022		2020-2021		2019-2020		2018-2019	
Items	Budgeted in CFY	Actual expenses in CFY (till ...)	Budgeted in CFYm1	Actual Expenses in CFYm1	Budgeted in CFYm2	Actual Expenses in CFYm2	Budgeted in CFYm3	Actual Expenses in CFYm3
Infrastructure Built-Up	3,310,700,000	3,214,966,639	2,805,200,000	2,712,182,771	1,738,200,000	1,680,213,522	2,614,900,000	2,566,245,419
Library	187,500,000	167,661,902	191,000,000	113,270,691	152,700,000	149,131,157	144,000,000	141,176,794
Laboratory equipment	1,124,950,000	946,498,554	1,104,800,000	923,695,581	1,151,800,000	1,088,782,527	711,000,000	688,411,150

Laboratory consumables	365,250,000	361,522,577	350,000,000	245,985,223	405,500,000	395,457,887	270,000,000	265,225,724
Teaching and non-teaching staff salary	3,987,500,000	3,535,017,767	3,513,000,000	3,161,925,920	3,192,500,000	3,135,513,635	2,681,500,000	2,640,281,165
Maintenance and spares	1,405,400,000	1,072,155,372	772,250,000	644,695,514	708,500,000	675,270,974	685,100,000	677,909,512
R&D	302,100,000	173,794,174	279,660,000	176,805,706	381,625,000	365,343,437	428,650,000	416,880,241
Training and Travel	85,500,000	33,305,898	127,800,000	23,026,570	130,000,000	113,875,918	126,000,000	124,556,813
Miscellaneous Expenses	2,500,000	2,491,921	1,800,000	1,671,330	1,500,000	1,447,601	3,000,000	3,027,062
Others Specify	4,092,800,000	3,379,658,055	3,931,590,000	3,438,627,085	3,969,000,000	3,574,772,147	3,288,650,000	3,338,858,515
	<b>14,864,200,000</b>	<b>12,887,072,860</b>	<b>13,077,100,000</b>	<b>11,441,886,391</b>	<b>11,831,325,000</b>	<b>11,179,808,806</b>	<b>10,952,800,000</b>	<b>10,862,572,394</b>

### 10.2.1. Adequacy of budget allocation (5)

Annual budget is prepared by statutory Finance Committee before beginning of the financial year by collecting individual budget from all departments, schools and central accounts. Directions have been issued to give thrust on research, academic development programme, development of infrastructure etc. On receipt of the due from all departments, school, the same is finalized on the basis of past experience and future projects.

### 10.2.2. Utilization of allocated funds (5)

The utilization heads are available on the audited statements of accounts of each year. The Budget amount is used for creation of capital assets & to meet operational expenses as per the budget guidelines. The Capital assets also includes Laboratory Equipments, Study Resources & Laboratories etc. The operational expenses includes Salaries, Research promotion, Maintenance, spares & other relevant expenses.

### 10.2.3. Availability of the audited statements on the institute's website (5)

The audited statement is available in University website in the link given below.  
<https://kiit.ac.in/balancesheet/>

### 10.3. Program Specific Budget Allocation, Utilization (30)

**Total Budget at program level: For CFY, CFYm1, CFYm2 & CFYm3**

**CFY: Current Financial Year – CFYm1 (Current Financial Year minus 1) CFYm2 (Current Financial Year minus 2) CFYm3 (Current Financial Year minus 3)**

**Table 1 - CFY 2021-2022**

Total Income in CFY:		Actual expenditure in CFY (till ...):		Total No. of students in CFY:
355,701,673		344,377,905		808
Non-recurring	Recurring	Non-recurring	Recurring	Expenditure per student
57,994,000	297,707,673	97,412,920	246,964,985	426,210.28

**Table 2 :: CFYm1 2020-2021**

Total Income in CFY:		Actual expenditure in CFY (till ...):		Total No. of students in CFY:
344,472,222		319,615,572		826
Non-recurring	Recurring	Non-recurring	Recurring	Expenditure per student
58,357,833	286,114,389	89,992,559	229,623,013	386,943.79

**Table 3 :: CFYm2 2019-2020**

Total Income in CFY:		Actual expenditure in CFY (till ...):		Total No. of students in CFY:
381,947,879		355,391,654		828
Non-recurring	Recurring	Non-recurring	Recurring	Expenditure per student
55,148,000	326,799,879	103,000,433	252,391,221	429,216.97

**Table 4 :: CFYm3 2018-2019**

Total Income in CFY:		Actual expenditure in CFY (till ...):		Total No. of students in CFY:
354,196,751		325,251,253		816
Non-recurring	Recurring	Non-recurring	Recurring	Expenditure per student
55,005,600	299,191,151	80,641,007	244,610,246	398,592.22

Year	2021-2022		2020-2021		2019-2020		2018-2019	
Items	Budgeted in CFY	Actual expenses in CFY (till ...)	Budgeted in CFYm1	Actual Expenses in CFYm1	Budgeted in CFYm2	Actual Expenses in CFYm2	Budgeted in CFYm3	Actual Expenses in CFYm3
Laboratory equipment	80,000,000	76,172,041	80,000,000	74,336,910	88,000,000	85,963,650	60,975,000	58,924,025
Software	-	-	-	-	2,000,000	1,659,080	2,000,000	1,985,021
Laboratory consumables	12,000,000	6,543,559	12,000,000	6,174,229	11,000,000	9,925,993	10,000,000	9,309,423
Maintenance and spares	65,000,000	54,931,983	45,000,000	36,899,210	40,000,000	38,649,199	39,627,000	38,800,216
R&D	20,000,000	14,036,487	40,000,000	14,279,713	32,500,000	29,506,963	34,965,000	33,669,333
Training and Travel	2,500,000	1,659,289	7,500,000	1,147,176	6,500,000	5,673,261	6,300,000	6,205,380
Miscellaneous Expenses	200,000	151,509	200,000	101,617	200,000	88,014	200,000	184,045
<b>Total</b>	<b>179,700,000</b>	<b>153,494,868</b>	<b>184,700,000</b>	<b>132,938,855</b>	<b>180,200,000</b>	<b>171,466,160</b>	<b>154,067,000</b>	<b>149,077,443</b>

### 10.3.1. Adequacy of budget allocation (10)

Budget requirements under ‘recurring’ and ‘non-recurring’ heads are collected from all the departments and units before the commencement of the financial year. Allocations are made as per the availability of funds. Spending is monitored by the accounts section. Supplementary allocations are made in special cases. The institution carefully monitors the expenses such that the necessities are met without affecting the smooth working of the institution.

### 10.3.2. Utilization of allocated funds (20)

All the Heads of the departments are intimated of the extent of funds allocated against their budget proposals in the beginning of the academic session. Major works like construction, up gradation of existing infrastructure, procurement and maintenance of common utilities, house-keeping, procurement of



furniture, etc., are controlled directly by Management in consultation with the Deans/ Directors.

#### 10.4. Library and Internet (20)

##### 10.4.1. Quality of learning resources (hard/soft) (10)

###### Library Overview

Library facilities and services are offered to students, research scholars and faculty members of different schools through 20 well established independent school libraries located at respective schools of KIIT Deemed to be University as well as from the Central Library that is located in an independent campus. The Central Library, an eight storied building functions as the main learning resource centre of the University. The total area of all the libraries is 7771 sqm with a total seating capacity of 3000.

###### **Bird's eye-view of the Print & e-Resources**

- Print Resource

<b>Print Resources</b>	
Books Titles	53,521
Books Volumes	14,21,474
Print Journals	571
World Bank Reports	46
Periodicals	94
Bound Volumes	16,806
Theses , Dissertations	2659
In-house Reports (UG & PG)	3828

- E- Resource

<b>e-Resources</b>	
eBooks	1,69,470+
e-Journal Database	45
e-Journals	43,193+
e-Theses & Dissertations	4.3 million+
Rare Books	29,821

###### **Titles and Volumes**

<b>Details</b>		<b>2021-22</b>	<b>2020-21</b>	<b>2019-20</b>	<b>2018-19</b>	<b>2017-18</b>
Engineering, Management & Computer Application	Books Title	5137	4021	2895	2355	1335
	Books Volume	1,69,764	1,74,744	1,42,607	1,70,280	1,70,912
	Print Journals	314	408	595	595	571

	Online Journals	43,193+	29,031+	28,195+	28,117+	28,000+
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## 1. Relevance of available learning resources including e-resources

### *E-Journals & Databases Collections:*

- o **IEL Online:** Electronics, Electrical & Computer Engineering: 22916 IEEE & IET full text journals & magazines and conference proceedings, 3043 IEL standards.
- o **Science Direct:** 3984 e-Journals & 42 e-Books on Computer Science, Engineering, Engineering, Health Sciences, Materials Science, Business, Management and Accounting & Economics, Econometrics and Finance.
- o **ASME:** 29 e-journals on Mechanical Engineering.
- o **ASCE:** 38 e-journals on Civil Engineering.
- o **ACM Digital University:** 61+ e-Journals and Magazines, 2537+ Scholarly Materials and Newsletters.
- o **ABI Inform Complete:** 4,200+ e-journals and magazines on Business Management and allied subjects.
- o **ProQuest Medical Sciences:** 594 e-journals on Health Science.
- o **Wiley online Journals:** 12 e-journals from Dental Sc. & 1 e-journal from Architecture.
- o **AAPD:** 2 e-journal on Dental Sc. Access available since 1998.
- o **Fluoride Research:** 1 e-journal on Dental Sc. Access available since 1968.
- o **JCO Online:** 1 e-journal on Dental Sc. Access available since 1967.
- o **Springer:** 1 e-journal on Dental Sc. Access available since 2009.
- o **Emerald :** 310 e-journals on Accounting Finance & Economics (41), Business, Management & Strategy (55), Education Collection (23), Engineering Collection (26), Health & Social Care Collection (32), HR, Learning & Organization Studies (25), Information & Knowledge Management (12), Library Sciences (16), Marketing (23), Operations, Logistics & Quality (16), Property Management & Built Environment (20), Public Policy & Environmental Management (13), Tourism & Hospitality Management (8).
- o **EBSCO Business Source Complete:** Business Source Complete is the world's definitive scholarly business database, providing the leading collection of bibliographic and full text content. As part of the comprehensive coverage offered by this database, indexing and abstracts for the most important scholarly business journals back as far as 1886 are included. With premium full-text content and peer-reviewed business journals, this database is an essential tool for business students. It covers all disciplines of business, including marketing, management, accounting, banking, finance and more. 6934 number of journals & magazines indexed and abstracted (3887 are peer-reviewed), 3761 number of journals & magazines in full text LexisNexis-Indian-Commentaries-2020 (1876 are peer-reviewed).
- o **Taylor & Francis:** 1500 e-journals on Engineering, Architecture, Arts & Humanities, Law, Management, Health Sc., Geography, Museum & Heritage Studies.

- o **Lexis Nexis:** 1000+ international journals, 300+ Indian Commentaries, Cases & Legislation from nine jurisdictions, All England Law Reports, Supreme Court of India judgements, Central Legislation and more than 40000 other sources.
- o **SCC Online:** Legal Research Database covering Indian Case Law, Indian Statutory Law, Indian Secondary Materials, International Law.
- o **Manupatra:** Legal Research Database covering Supreme Court cases and orders (1950-Current), cases and orders of all High Courts of India and other Courts, Inception of Each Court-Current, Privy Council Cases, Orders of Tribunals & Commissions, International Law Database, Bare Acts/Statutes, Bills in Parliament and Ordinances, Notifications & Circulars, e-books and others.
- o **Hein Online:** 31 e-journals on law and allied subjects.
- o **Westlaw India:** 1174 + e-journals available in the database with cases, legislation forms & reports.
- o **AIR Online:** Case law from Supreme Court of India, All High Courts of India, Privy Council, federal Courts from 1900 onwards.
- o **JCR:** Incites JCR Journal Citation Reports- Most comprehensive tool for citation based research evaluation.
- o **Sage Journals:** 35 e-journals from Dental Sciences, Management, Law and Social Sciences.
- o **JSTOR:** access to more than 3000 journals, books, images, and primary sources in 75 disciplines.
- o **UpToDate Anywhere:** UpToDate Anywhere: is an evidence-based clinical resource. It includes a collection of medical and patient information, access to Lexi-comp drug monographs and drug-to-drug interactions, and a number of medical calculators.
- o **INDIASTAT:** Socio-Economic Statistical Information about India.
- o **CMIE-Prowess:** Contains information on financial performance, Annual Reports, Time Series Data of over 2700 Indian companies.
- o **CMIE-Industry Outlook:** Provides an incisive analysis of about 100 + types of industries.
- o **ETIG:** Database on Macro-Economic and Sectoral Research.
- o **IS CHD Online (Academic):** IS- Chemical Engineering Division consisting of 1,783 standards with Campus wide access published by Bureau of Indian Standards.

### ***Bibliographic E-Database***

- o **Scopus Indexing database** of 22500+ e-journals from 5000+ publishers.
- o **Web of Science:** KCI-Korean Journal Database: 1980-present; Russian Science Citation Index: 2005-present; SciELO Citation Index: 1997-present; Web of Science Core Collection: Science Citation Index Expanded: 1985-present; Social Sciences Citation Index: 1985-present; Arts & Humanities Citation Index: 1985-present; Book Citation Index; Science: 2005-present; Conference Proceedings Citation Index; Science: 2005-present; Emerging Sources Citation Index: 2005-present.

### ***Patent Database***

- o **Derwent Innovation:** Full text Patents from USA, UK, Australia, WIPO, France, Germany etc.

### ***E-Books***

- o **E-Brary:** 1,36,268 + e-books
- o **Thomson Reuter's E-Book:** 20 UK Books & 63 Indian Books on Law.
- o **Elsevier e-books:** Bioprocess Engineering Principles By Pauline M. Doran, Second Edition; Data Mining: Practical Machine Learning Tools and Techniques, by Jiawei Han, Micheline Kamber and Jian Pei, Fourth Edition 2017. ISBN 978-0-12-804291-5 The Finite Element Method in Engineering by Singiresu S. Rao, Fifth Edition, 2018. ISBN 978-0-12-811768-2.

### ***Rare Books***

- o **EBSCO Atla Historical Monographs Collection: Series 1:** The Atla Historical Monographs Collection: Series 1 provides religious and theological literature from the late 13th century to 1922. Series 1 includes monographs prior to the 1893 World Parliament of Religions.
- o **EBSCO Atla Historical Monographs Collection: Series 2:** The Atla Historical Monographs Collection: Series 2 provides religious and theological literature from the late 13th century to 1922. Series 2 includes monographs covering 1893 through 1922.

### ***E-Dissertations and Theses***

- o **PQDT (Proquest Dissertation & Theses):** Contains 4.3 million+ dissertation and theses from 1700 leading academic institutes of the world. The subjects covered are Business & Economics; Medical Sciences; Science & Technology, Agriculture, Social Sciences, Arts, Humanities and Law.

### ***Library Automation & Information Management Tools***

- o **Web Centric Libsys 10:** Library Automation Software
- o **D-Space:** IR Software
- o **Turnitin:** Anti-Plagiarism Software
- o **EndNote X8:** Citation Management Tool
- o **SPSS:** Statistical Analysis Tool
- o **STATA:** Statistical Analysis Tool

## **2. Library Services**

- 24x7 library services
- Fully automated library operation with Libsys 10 LMS
- Web based 24x7 digital library services
- Remote Access Services
- Library Web Portal
- Library outreach programs
- Orientation programs
- Inter-Library Loan
- Research Support
- Showcase of latest impact publications on regular basis
- Citation Management

- Service to visually challenged users
- Magazine Lounge
- Open Air Learning
- Plagiarism Check
- CAS & SDI Services
- Web OPAC for online catalogue
- Institutional repository using D-space software for online access to the in-house publications.
- Cyber Lab
- Collaborative Zone
- Mini Conference Room
- 30 nos. of public access printers for print services

### ***2.1 Support to students for self learning activities***

- Integrated library web portal for searching of subscribed e-resources as well as open access e-content.
- RSS Feed and Email alert services.
- LCD projectors for self learning and demonstration.
- Access to the Lecture videos from NPTEL and other open course wares
- Access to the National Digital Library of India.

### **10.4.2 Internet (10)**

- Name of the Internet provider:
- Available bandwidth:
- Wi Fi availability:
- Internet access in labs, classrooms, library and offices of all Departments:
- Security arrangements

**Name of the Internet provider and Bandwidth:** Currently 4 ISPs provider and bandwidth provided by the ISPs providers are as follows:

- 1Gbps Internet connectivity from NKN (under NMEICT)
- 4 Gbps internet connectivity from Bharti Airtel Ltd.
- 4 Gbps internet connectivity from Powergrid.
- 100Mbps internet connectivity from NKN (Powergrid)

Currently KIIT is having a dedicated internet connectivity of 9.1 Gbps.

Note: - At present we have 9.1 Gbps internet connectivity above four ISPs.

#### **Wi Fi availability:**

The Aruba Controller and access points which supports IEEE 802.11ac (1G) and IEEE 802.11n

(2\*300Mbps) is used in the Hostels of the University to provide uninterrupted internet access to the students for their academic and research work. Wi-Fi and Wlan is provided by using Motorola and Aruba Access points to the academic and administrative buildings for faculty and staff members for their research and administrative work. From the session 2015-2016 the WLAN is converted to Wi-Fi. Aruba access points. AP205 is a multifunctional and affordable 802.11ac wireless AP that maximizes mobile device performance in medium-density enterprise Wi-Fi environments.

The details of Access Points are as follows:

Session	Make	Model	Specification	Qty
2010-2011	Motorola	5131	maximum 54Mbps data transfer rate, 802.11a/g radio, external antenna	200
2011-2012	Aruba	93	One 2x2 MIMO dual-band 2.4-GHz or 5-GHz radio with internal antenna, with 802.11a/b/g/n	150
2012-2013	Aruba	105	Two dual-band 2.4-GHz and 5-GHz radios with 2x2 MIMO and four integrated Omni directional down tilt antennas with 802.11n	450
2013-2014	Aruba	105	Two dual-band 2.4-GHz and 5-GHz radios with 2x2 MIMO and four integrated Omni directional down tilt antennas with 802.11n	500
2015-2016	Aruba	205	Dual-radio, 867Mbps to 5 Ghz with 802.11ac leveraging two spatial MIMO streams	768
2017-2018	Aruba	305	Dual-band down tilt Omni-directional antennas for 3x3 MIMO with maximum antenna gain of 4.7dBi in 2.4GHz and 6.4dBi in 5GHz.	384
2017-2018	Aruba	315	Four integrated dual-band down tilt Omni-directional antennas for 4x4 MIMO with peak antenna gain of 3.6dBi in 2.4 GHz and 6.0dBi in 5 GHz.	128
2019-2020	Aruba	315	Four integrated dual-band down tilt Omni-directional antennas for 4x4 MIMO with peak antenna gain of 3.6dBi in 2.4 GHz and 6.0dBi in 5 GHz.	256
2019-2020	Aruba	515	Four integrated dual-band down tilt Omni-directional antennas for 4x4 MU-MIMO with peak antenna gain	15
2022-2023	Aruba	515	Four integrated dual-band down tilt Omni-directional antennas for 4x4 MIMO with peak antenna gain	320

We had also implemented the Aruba Clear pass Guest, for providing Wi-Fi connectivity to the delegates and guests who visit KIIT for seminar, workshop and different events.

**Networking:** 10-1Gbps OFC / Ethernet connection from ICT Cell to all campuses. It is a secure network and each user has authentication for accessing our network. Our campus network currently uses 250 VLANs and can be extended to 1500 VLANS with current configurations. The networking switches that are used at different campuses are given below:

<b>Make/Model</b>	<b>Qty</b>	<b>Session</b>
Aruba 3810M	3	2019-2020
Aruba 2930M	3	2019-2020
Aruba 2930F	3	2019-2020
Aruba 2930F	46	2019-2020
Aruba 2930F	103	2018-2019
Aruba 1920S	38	2018-2019
Aruba 2930F	116	2017-2018
Aruba S2500	40	2015-2016
Cisco C2960	50	2014-2015
Aruba S2500	35	2014-2015
Aruba S2500	28	2013-2014
Cisco C2960s	34	2012-2013
Cisco 2960	160	2008-2016
Juniper EX2200	34	2009-2016

Internet access in labs, classrooms, library and offices of all departments are through LAN.

**Security arrangements:** As far as the security is concerned KIIT provided the security at different levels of from distribution to the client level. It has Core Layer III switch, Firewall and UTM, Aruba controller and CPPM (Clear Pass Policy manager) for protecting students' and staffs' members from being affected from any DOA attack, hacking from outside and inside KIIT. It also prevent malware and virus attacks. Intrusion Prevention System threat-detection, URL filtering, Web content filtering, application filtering, signature based filtering. The user has dot1.x authentication and captive portal authentication. The user emails has a mailer with dual authentication. The details of switch and firewall are as follows

**Network Switches and Firewall:**

<b>Make</b>	<b>Model</b>	<b>Qty</b>	<b>Session</b>
<b>Core Switch LIII</b>			
D-link	D Link 7210	1	2008-2013
Cisco	6509	1	2005-till date
Cisco	C6509	1	2013-2014
Cisco	C4500-10G(40 Ports)	1	2014-2016
Cisco	Nexus 7009	2	2017-2018
Aruba	HPE Aruba 8320	2	2019-2020
<b>Layer III switch</b>			

CISCO	C3750X/C3750	4	2010-2011
CISCO	C3750X	2	2014-2015
CISCO	WS-C4500X-40X-ES	1	2010-2011
CISCO	WS-C4500X-40X-ES	1	2014-2015
CISCO	One Nexus 3172PQ	2	2017-2018
CISCO	One Nexus 317T	2	2017-2018
<b>Firewall/UTM</b>			
Juniper firewall	SRX 5600 +IPS	1	2010-2011
Juniper UTM	SRX650	1	2010-2011
Cyberoam	2500iNG	4	2013-2014
Cisco	Firepower 4120	2	2017-2018
Palo alto	PA 7050	2	2019-2020
<b>LINK LOAD BALANCER</b>			
RADWARE	Link Proof 2016 ODS2	1	2010-2011
<b>Wi-Fi Controller</b>			
Aruba	7240 controller	1	2012-2013
Aruba	7240 controller	1	2013-2014
CPPM	Clear Pass Policy Manager	2	2015-2016
Aruba	7205 Controller	2	2019-2020





# Kalinga Institute of Industrial Technology (KIIT)

Deemed to be University

(Established U/S 3 of UGC Act, 1956)

Bhubaneswar, Odisha, India

Ref. KIIT/VC/149/2023-02

Date 21/02/2023


## DECLARATION

I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines in force as on date and the institute shall fully abide by them.

It is submitted that information provided in this Self-Assessment Report is factually correct.

I understand and agree that an appropriate disciplinary action against the Institute will be initiated by the NBA in case any false statement/information is observed during pre-visit, visit, post visit and subsequent to grant of accreditation.

Date: 21.02.2023  
Place: Bhubaneswar

  
Prof. (Dr.) Sasmita Samanta  
Vice Chancellor  
KIIT Deemed to be University

## ANNEXURE I

### (A) PROGRAM OUTCOMES (POs)

#### Engineering Graduates will be able to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the

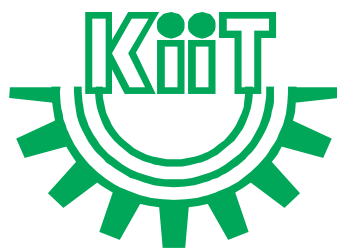
engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

**(B) PROGRAM SPECIFIC OUTCOMES (PSOs)**

**Program should specify 2-4 program specific outcomes.**

- 1 Continuously advance themselves by expanding their technical and professional skills through formal means as well as through informal self-study.
  
- 1 Join a technical workforce as successful professionals in a wide range of mechanical engineering and related domains.
  
- 1 Pursue advanced degrees in engineering, business, or other professional fields.



**Kalinga Institute of Industrial Technology (KIIT)**  
**Deemed to be University**