NATIONAL BOARD OF ACCREDITATION

Data Capturing Points of the Program Applied for NBA Accreditation– Tier I/II UG (Engineering) Institute Programs

Program Name : Mechanical Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 11455	**Date of Submission**: 01-02-2026

PART A- Profile of the Institute

A1.Name of the Institute: Gandhi Institute of Engineering and Technology University, Odisha, Gunupur (GIET University)	
Year of Establishment : 1997-1997	Location of the Institute: Gunupur
A2. Institute Address:AT GOBARIGUDA PO KHARLING VIA GUNUPUR DT RAYAGADA ODISHA	
City:GUNUPUR	State:Odisha
Pin Code:765022	Website:WWW.GIET.EDU
Email:DEANAGGI@GIET.EDU	Phone No(with STD Code):06857-250172
A3. Name and Address of the Affiliating University (if any):	
Name of the University :	City: Rayagada
State : Odisha	Pin Code: 765022
A4. Type of the Institution: University	
A5. Ownership Status: Self financing	

A6. Details of all Programs being Offered by the Institution:

- No. of UG programs: **17**
- No. of PG programs: **14**

Table No. A6.1: List of all programs offered by the Institute.

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Computer Application	PG	Master in Computer Applications	2019	--	Computer Application
2	Engineering & Technology	UG	Aeronautical Engineering	2025	--	Aeronautical Engineering
3	Engineering & Technology	UG	Agricultural Engineering	2019	2025	Agricultural Engineering
4	Engineering & Technology	UG	Biotechnology	2004	--	Biotechnology
5	Engineering & Technology	PG	Biotechnology	2019	--	Biotechnology
6	Engineering & Technology	UG	Chemical Engineering	1997	--	Chemical Engineering
7	Engineering & Technology	PG	Chemical Engineering	2019	--	Chemical Engineering
8	Engineering & Technology	UG	Civil Engineering	2009	--	Civil Engineering
9	Engineering & Technology	Diploma	Civil Engineering	2023	--	Civil Engineering
10	Engineering & Technology	Diploma	Computer Science & Engineering	2025	--	Computer Science and Engineering

11	Engineering & Technology	UG	Computer Science & Technology	2019	--	Computer Science and Engineering
12	Engineering & Technology	UG	Computer Science and Engineering	1997	--	Computer Science and Engineering
13	Engineering & Technology	PG	Computer Science and Engineering	2004	--	Computer Science and Engineering
14	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2021	--	Computer Science and Engineering
15	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2021	--	Computer Science and Engineering
16	Engineering & Technology	UG	Computer Science and Engineering (Internet of Things)	2021	--	Computer Science and Engineering
17	Engineering & Technology	PG	Construction Technology and Management	2021	--	Civil Engineering
18	Engineering & Technology	UG	Electrical and Electronics Engineering	2007	--	Electrical Engineering
19	Engineering & Technology	UG	Electrical Engineering	2008	--	Electrical Engineering
20	Engineering & Technology	Diploma	Electrical Engineering	2023	--	Electrical Engineering
21	Engineering & Technology	UG	Electronics & Communication Engineering	2000	--	Electronics and Communication Engineering
22	Engineering & Technology	PG	Electronics & Communication Engineering	2006	--	Electronics and Communication Engineering
23	Engineering & Technology	PG	Electronics and Communication (VLSI Design)	2023	--	Electronics and Communication Engineering
24	Engineering & Technology	UG	Electronics Engineering (VLSI Design and Technology)	2023	--	Electronics and Communication Engineering
25	Engineering & Technology	PG	Heat Power & Thermal Engineering	2010	--	Mechanical Engineering
26	Engineering & Technology	PG	Industrial Safety Engineering	2025	--	Mechanical Engineering
27	Engineering & Technology	PG	Machine Design	2010	--	Mechanical Engineering
28	Engineering & Technology	PG	Manufacturing Technology	2019	--	Mechanical Engineering
29	Engineering & Technology	UG	Mechanical Engineering	1997	--	Mechanical Engineering
30	Engineering & Technology	Diploma	Mechanical Engineering	2023	--	Mechanical Engineering
31	Engineering & Technology	UG	Petrochemical & Petroleum Refinery Engineering	2019	2024	Chemical Engineering
32	Engineering & Technology	PG	Power Electronics	2009	--	Electrical Engineering
33	Engineering & Technology	PG	Structural Engineering	2013	--	Civil Engineering
34	Hotel Management	UG	Hotel Management & Catering Technology	2024	--	Hotel Management

35	Management	PG	MBA (General Management)	2001	--	Management

A7. Programs to be considered for Accreditation vide this Application:

Table No. A7.1: List of programs to be considered for accreditation.

Name of the Department	Having Allied Departments	Name of the Program	Program Level
Mechanical Engineering	No	Mechanical Engineering	UG
Computer Science and Engineering	No	Computer Science and Engineering	UG

Table No. A7.2: Allied Department(s) to the Department of the program considered for accreditation as above.
Cluster ID. Name of the Department (in table no. A7.1) Name of allied Departments/Cluster (for table no. A7.1)

No Record

PART-B: Program information

B1. Provide the Required Information for the Program Applied For:

Table No. B1: Program details.
A. List of the Programs Offered by the Department:

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	Mechanical Engineering	UG	1997 / --	60	Yes	2021	60	2021	File No.: Eastern/1-9319432457/ 2021/EOA/ Corrigendum-1 Date: 04-Aug-2021	Granted accreditation for 3 years for the period (specify period)	2023	2026	4	4

Sanctioned Intake for Last Five Years for the Heat Power & Thermal Engineering	
Academic Year	**Sanctioned Intake**
2025-26	60
2024-25	60
2023-24	60
2022-23	60
2021-22	60
2020-21	120

List of the Allied Departments/Cluster and Programs:

B2. Detail of Head of the Department for the program under consideration:

A. Name of the HoD :	Dr. Kali Charana Rath
B. Nature of appointment:	Regular
C. Qualification:	Ph.D

B3. Program Details

Table No.B3.1: Admission details for the program excluding those admitted through multiple entry and exit points.

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	60	60	60	60	60	120	120
N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	60	57	56	49	47	90	89
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	6	6	6	6	12	12
N3=Separate division if any	0	0	0	0	0	0	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	0	0	0	0	0	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	60	63	62	55	53	102	101

CAY= Current Academic Year. CAYm1= Current Academic Year Minus 1 CAYm2= Current Academic Year Minus 2. LYG= Last Year Graduate. LYGm1= Last Year Graduate Minus 1. LYGm2= Last Year Graduate Minus 2.

B4. Enrolment Ratio in the First Year

Table No. B4.1: Student enrolment ratio in the 1st year.

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2025-26 (CAY)	60	60	0	100.00
2024-25 (CAYm1)	60	57	0	95.00
2023-24 (CAYm2)	60	56	0	93.33

Average [(ER1 + ER2 + ER3) / 3] = 96.11≡ 20.00

B5. Success Rate of the Students in the Stipulated Period of the Program

Table No.B5.1: The success rate in the stipulated period of a program.

Item	(2021-22) LYG	(2020-21) LYGm1	(2019-20) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	66.00	132.00	132.00
B=No. of students who graduated from the program in the stipulated course duration	51.00	99.00	97.00
Success Rate (SR)= (B/A) * 100	77.27	75.00	73.48

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 75.25

B6. Academic Performance of the First-Year Students of the Program

Table No.B6.1: Academic Performance of the First-Year Students of the Program.

Academic Performance	CAYm1(2024-25)	CAYm2(2023-24)	CAYm3 (2022-23)
Mean of CGPA or mean percentage of all successful students(X)	7.92	7.71	7.53
Y=Total no. of successful students	57.00	59.00	47.00

Z=Total no. of students appeared in the examination	57.00	59.00	47.00
API [X*(Y/Z)]	7.92	7.71	7.53

Average API[(AP1+AP2+AP3)/3] : 7.72

B7: Academic Performance of the Second Year Students of the Program

Table No.B7.1: Academic Performance of the Second Year Students of the Program.

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	7.91	7.73	7.52
Y=Total no. of successful students	62.00	55.00	53.00
Z=Total no. of students appeared in the examination	62.00	55.00	53.00
API [X * (Y/Z)]	7.91	7.73	7.52

Average API [(AP1 + AP2 + AP3)/3] : 7.72

B8. Academic Performance of the Third Year Students of the Program

Table No.B8.1: Academic Performance of the Third Year Students of the Program

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	8.21	7.95	7.89
Y=Total no. of successful students	55.00	53.00	102.00
Z=Total no. of students appeared in the examination	55.00	53.00	102.00
API [X*(Y/Z)]:	8.21	7.95	7.89

Average API [(AP1 + AP2 + AP3)/3] : 8.02

B9. Placement, Higher Studies, and Entrepreneurship

Table No.B9.1: Placement, higher studies, and entrepreneurship details.

Item	LYG (2021-22)	LYGm1(2020-21)	LYGm2(2019-20)
FS*=Total no. of final year students	66.00	132.00	132.00
X=No. of students placed	43.00	89.00	84.00
Y=No. of students admitted to higher studies	5.00	6.00	7.00
Z= No. of students taking up entrepreneurship	1.00	1.00	2.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	74.24	72.73	70.45

Average Placement Index = (P_1 + P_2 + P_3)/3: 72.47 Placement Index Points:

PART C: Faculty Details in Department and Allied Departments

(Data to be filled in for the Department and Allied Departments)

C1. Faculty details of Department and Allied Departments

Table No.C1: Faculty details in the Department for the past 3 years including CAY

Sr.No	Name of the Faculty	PAN No.	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	Currently Associated (Y/N)	In case of NO, Date of Leaving	IS HOD?
1	Dr. Ajit Kumar Senapati	XXXXXXX76N	Ph.D	KIIT University	Production	11/02/2004	20.4	Assistant Professor	Professor	14/01/2017	Regular	No	17/06/2024	No
2	Dr. A.V.N.L Sharma	XXXXXXX53E	Ph.D	Rayalseema University	Production	04/06/2015	7.11	Professor	Professor	04/06/2015	Regular	No	18/05/2023	No
3	Dr. Tapan Kumar Pal	XXXXXXX49R	Ph.D	IIT Kharagpur	Production	07/06/2019	4.1	Professor	Professor	07/06/2019	Regular	No	25/07/2023	No
4	Dr.V. Venugopal	XXXXXXX75D	Ph.D	Techno Global University	Thermal	03/07/2019	4.10	Professor	Professor	03/07/2019	Regular	No	18/05/2024	No
5	Dr. Sivasankaran Venugopal	XXXXXXX41P	Ph.D	Sathyabama Univeristy	Design	06/01/2020	6	Professor	Professor	06/01/2020	Regular	Yes		No
6	Dr. Kali Charana Rath	XXXXXXX08A	Ph.D	NIT Jamshedpur	Design	15/01/2005	21	Assistant Professor	Professor	19/01/2017	Regular	Yes		Yes
7	Dr. Amitabha Biswas	XXXXXXX89E	Ph.D	IIT Kharagpur	Design	15/10/2007	15.8	Professor	Professor	15/10/2007	Regular	No	16/06/2023	No
8	Dr. Basant Kumar Palai	XXXXXXX42D	Ph.D	SOA University	Design	15/11/2019	6.2	Associate Professor	Associate Professor	15/11/2019	Regular	Yes		No
9	Mr. Shakti Prasanna Khadanga	XXXXXXX92D	M.Tech	BPUT, Rourkela	Thermal	10/01/2009	17	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Dr. Jaya Krishna Sanku	XXXXXXX69H	Ph.D	University of South Florida, Tamapa, USA	Production	01/09/2014	11.5	Professor	Professor	01/09/2014	Regular	Yes		No
11	Dr. Sasank Shekhar Panda	XXXXXXX75H	Ph.D	CUTM	Production	26/12/2013	12.1	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Mr. Nalinikanta Panda	XXXXXXX10P	M.Tech	BPUT, Rourkela	Thermal	21/12/2015	10.1	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Dr. Srinivesan Kumaresan	XXXXXXX95P	Ph.D	Pondicherry University	Design	16/07/2024	1.6	Assistant Professor	Assistant Professor		Regular	Yes		No
14	Ms. Simarani Behera	XXXXXXX57H	M.Tech	NIT Rourkela	Thermal	21/07/2025	0.6	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Dr. Gopal Krushna Mohanta	XXXXXXX73F	Ph.D	CUTM	Production	02/02/2004	22	Assistant Professor	Associate Professor	25/07/2020	Regular	Yes		No
16	Mr. Sibabrata Mohanty	XXXXXXX50D	M.Tech	BPUT, Rourkela	Industrial	11/01/2012	12.5	Assistant Professor	Assistant Professor		Regular	No	22/06/2024	No

17	Mr. Santosh Kumar Tripathy	XXXXXXX95C	M.Tech	BPUT, Rourkela	Design	22/08/2012	13.5	Assistant Professor	Assistant Professor		Regular	Yes		No
18	Dr. Manas Ranjan Panda	XXXXXXX57K	Ph.D	NIT, Raipur	Production	11/08/2015	10.5	Assistant Professor	Assistant Professor		Regular	Yes		No
19	Mr. Barun Brata Jena	XXXXXXX69E	M.Tech	BPUT, Rourkela	Thermal	03/05/2016	9.9	Assistant Professor	Assistant Professor		Regular	Yes		No
20	Mr. Sraban Kumar	XXXXXXX96B	M.Tech	BPUT, Rourkela	Production	01/07/2016	9.7	Assistant Professor	Assistant Professor		Regular	Yes		No
21	Mr. Vikash Kumar Kenguva	XXXXXXX23P	M.Tech	BPUT, Rourkela	Production	15/07/2016	9.6	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Mr. Prabin Kumar Panda	XXXXXXX62C	M.Tech	BPUT, Rourkela	Thermal	01/11/2017	6.7	Assistant Professor	Assistant Professor		Regular	No	15/06/2024	No
23	Mr. Sreenivasa Rao Nistala	XXXXXXX85M	M.Tech	GIET University	Thermal	16/07/2019	6.6	Assistant Professor	Assistant Professor		Regular	Yes		No
24	Mr. Sidhant Samal	XXXXXXX73P	M.Tech	BPUT, Rourkela	Design	25/06/2020	5.7	Assistant Professor	Assistant Professor		Regular	Yes		No
25	Mr. Mala Harish	XXXXXXX98G	M.Tech	BPUT, Rourkela	Design	18/06/2021	4.7	Assistant Professor	Assistant Professor		Regular	Yes		No
26	Dr. Prabina Patnaik	XXXXXXX01J	Ph.D	NIT Rourkela	Production	28/08/2017	6.11	Associate Professor	Associate Professor		Regular	No	30/07/2024	No
27	Dr. Srimant Kumar Mishra	XXXXXXX34D	M.Tech	NIT Rourkela	Production	05/07/2019	5	Associate Professor	Associate Professor		Regular	No	25/07/2024	No
28	Dr. Somabhai H. Suthar	XXXXXXX10C	Ph.D	IIT Kharagpur	Industrial	07/10/2019	6.3	Professor	Professor		Regular	Yes		No
29	Mr. Bijaya Samvedam	XXXXXXX20Q	M.Tech	BPUT, Rourkela	Production	19/08/2019	6.5	Assistant Professor	Assistant Professor		Regular	Yes		No
30	Dr. Neeraja Pilli	XXXXXXX76N	Ph.D	GIET University	Production	11/07/2019	6.6	Assistant Professor	Associate Professor	01/07/2024	Regular	Yes		No
31	Dr. Deepak Kumar	XXXXXXX75R	Ph.D	CUTM	Industrial	05/05/2021	4.8	Assistant Professor	Assistant Professor		Regular	Yes		No
32	Dr. Venkatesa Perumal Venugopal	XXXXXXX35G	Ph.D	Techno Global University	Design	03/06/2020	5.7	Associate Professor	Associate Professor	03/06/2020	Regular	Yes		No
33	Mr. Ashok Kumar Mohapatra	XXXXXXX11J	M.Tech	BPUT, Rourkela	Thermal	25/06/2018	7.7	Assistant Professor	Assistant Professor		Regular	Yes		No
34	Mr. Ansuman Pradhan	XXXXXXX54C	M.Tech	CUTM	Design and Manufacturing	19/06/2023	2.7	Assistant Professor	Assistant Professor		Regular	Yes		No

Table No.C2: Faculty details of Allied Departments for the past 3 years including CAY.

C2. Student-Faculty Ratio (SFR)

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):
UG1=1st UG program
UGn=nth UG program
B= No. of Students in UG 2nd year (ST)
C= No. of Students in UG 3rd year (ST)
D= No. of Students in UG 4th year (ST)
No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):
PG1=1st PG program.
PGm=mth PG program
A= No. of Students in PG 1st year
B= No. of Students in PG 2nd year
Student Faculty Ratio **(SFR)** = S/F
S= No. of students of all programs in the Department including all students of allied departments/clusters.
No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)
Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.
F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

No. of UG Programs in the Department1 No. of PG Programs in the Department4

Table No.C2.1: Student-faculty ratio.

Description	**CAY(2025-26)**	**CAYm1 (2024-25)**	**CAYm2 (2023-24)**
UG1.B	66	66	66
UG1.C	66	66	66
UG1.D	66	66	132
UG1: Mechanical Engineering	**198**	**198**	**264**
PG1.A	18	18	18
PG1.B	18	18	18
PG1: Heat Power & Thermal Engineering	**36**	**36**	**36**
PG2.A	18	0	0
PG2.B	0	0	0
PG2: Industrial Safety Engineering	**18**	**0**	**0**
PG3.A	18	18	18
PG3.B	18	18	18
PG3: Machine Design	**36**	**36**	**36**
PG4.A	18	18	18
PG4.B	18	18	18
PG4: Manufacturing Technology	**36**	**36**	**36**
DS=Total no. of students in all UG and PG programs in the Department	324	306	372
AS=Total no. of students of all UG and PG programs in allied departments	0	0	0
S=Total no. of students in the Department (DS) and allied departments (AS)	**S1=** 324	**S2=** 306	**S3=** 372

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
DF=Total no. of faculty members in the Department	25	24	29
AF= Total no. of faculty members in the allied Departments	0	0	0
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	**F1=** 25	**F2=** 24	**F3=** 29
FF=The faculty members in F who have a 100% teaching load in the first-year courses	3	3	3
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 14.73**	**SFR2= 14.57**	**SFR3= 14.31**
Average SFR for 3 years	**SFR= 14.54**		

C3. Faculty Qualification

- Faculty qualification index (FQI) = 2.5 * [(10X +4Y)/RF] where
- X=No. of faculty members with Ph.D. degree or equivalent as per AICTE/UGC norms.
- Y=No. of faculty members with M. Tech. or ME degree or equivalent as per AICTE/ UGC norms.
- RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section C2 of this documents: (RF=S/20).

Table No.C3.1: Faculty qualification.

Year	X	Y	RF	FQ = 2.5 x [(10X + 4Y) / RF)]
2025-26(CAY)	12	13	16.00	26.88
2024-25(CAYm1)	12	12	15.00	28.00
2023-24(CAYm2)	12	17	18.00	26.11

C4. Faculty Cadre Proportion

- Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
- RF1= No. of Professors required = 1/9 * No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per C2 of this documents:.
- RF2= No. of Associate Professors required = 2/9 * No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:.
- RF3= No. of Assistant Professors required = 6/9 * No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:.
- Faculty cadre and qualification and experience should be as per AICTE/UGC norms.

Table No.C4.1: Faculty cadre proportion details.

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2025-26	1.00	4.00	3.00	4.00	10.00	17.00
2024-25	1.00	4.00	3.00	4.00	10.00	16.00
2023-24	2.00	6.00	4.00	4.00	12.00	19.00
Average	RF1=1.33	AF1=4.67	RF2=3.33	AF2=4.00	RF2=10.67	AF2=17.33

C5. Visiting/Adjunct Faculty/Professor of Practice

Table No. C5.1: List of visiting/adjunct faculty/professor of practice and their teaching and practical loads.

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Siba Sankar Mahapatra	Professor	NIT Rourkela	Manufacturing Science-II	25.00
2	Dr. Pandaba Patro	Reader	VSSUT Burla	Heat Transfer	28.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Suraj Kumar Mukti	Associate Professor	NIT Raipur	Quality Control and Reliability	27.00
2	Mr. M. Sambavayya	Managing Partner	MEGA NDT, Visakhapatnam	NDT	25.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Siba Sankar Mahapatra	Professor	NIT Rourkela	Manufacturing Science-II	26.00
2	Dr. Manoj Kumar Moharana	Associate Professor	NIT Rourkela	Heat Transfer	27.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	8	13	14
2	No. of peer reviewed conference papers published	5	8	5
3	No. of books/book chapters published	12	9	6

C7. Sponsored Research Project

Table No. C7.1: List of sponsored research projects received from external agencies.

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Kali Charan Rath	Dr. Sasank Sekhar Panda	Mechanical Engineering	COLLABORATIVE FRAMEWORKS IN ADDITIVE MANUFACTURING: ACADEMICS AND INDUSTRIAL APPROACH	NCAM, Hyderabad	03 months	3.00
						Amount received (Rs.):3.00

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Ajit Kumar Senapati		Mechanical Engineering	DST-FIST project	DST	5 years (Project Sanction 13th October 2019)	10.40
						Amount received (Rs.):10.40

(CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Ajit Kumar Senapati		Mechanical Engineering	DST-FIST project	DST	5 years	10.40
						Amount received (Rs.):10.40

Total Amount (Lacs) Received for the Past 3 Years: 23.80

Note*:

- Only sponsored research projects will be considered. Infrastructure-based projects will not be considered here.

C8. Consultancy Work

Table No. C8.1: List of consultancy projects received from external agencies.

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Jaya Krishna Sanku	Dr. Sivasankaran Venugopal Mr. Nalinikanta Panda	Mechanical Engineering	CAD–CAM Based Design for New Product Development of CNC-Machined Wooden Decorative Products.	The Taste of Decor Sambalpur	6 Month	0.48
Dr. Kali Charana Rath	Dr. Srinivesan Kumaresan Mr. Shakti Prasanna Khadanga	Mechanical Engineering	Solar Cooling Box	Purewatt Renewables Private Ltd.	1 Year	2.00
Dr. Basant Kumar Palai	Mrs. Neeraja Pilli	Mechanical Engineering	Material fabrication and testing	Research Scholar	1 Month	0.22
Dr. Gopal Krushna Mohanta	Mr. Vikash Kumar Kenguva	Mechanical Engineering	Hands-on training	BITS Gunupur	1 Month	0.35
Dr. Manas Ranjan Panda	Mr. Sraban Kumar	Mechanical Engineering	Material testing & Characterization	Baba Inspection and Training Services	1 Month	0.32
						Amount received (Rs.):3.37

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Jaya Krishna Sanku	Dr. Sivasankaran Venugopal Mr. Nalinikanta Panda	Mechanical Engineering	CAD–CAM Based Design for New Product Development of CNC-Machined Wooden Decorative Products.	The Taste of Decor Sambalpur	6 Month	0.40
Mr. Santosh Kumar Tripathy	Mr. Mala Harish	Mechanical Engineering	Material Testing & Characterization	NDT consultancy Training Centre	1 Month	0.41
Dr. Kali Charana Rath	Dr. Srinivesan Kumaresan Mr. Shakti Prasanna Khadanga	Mechanical Engineering	Solar Cooker	Purewatt Renewables Private Ltd.	1 Year	1.50
Dr. Sivasankaran Venugopal	Mrs. Neeraja Pilli	Mechanical Engineering	Material fabrication and testing	Research Scholar	1 Month	0.17
Dr. Gopal Krushna Mohanta	Mr. Vikash Kumar Kenguva	Mechanical Engineering	Hands-on training	BITS Gunupur	1 Month	0.45
Dr. Manas Ranjan Panda	Mr. Sraban Kumar	Mechanical Engineering	Material testing & Characterization	Baba Inspection and Training Services	1 Month	0.38
						Amount received (Rs.):3.31

(CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Jaya Krishna Sanku	Dr. Sivasankaran Venugopal Mr. Nalinikanta Panda	Mechanical Engineering	CAD–CAM Based Design for New Product Development of CNC-Machined Wooden Decorative Products.	The Taste of Decor Sambalpur	6 Month	0.32
Mr. Santosh Kumar Tripathy	Mr. Mala Harish	Mechanical Engineering	Material Testing & Characterization	NDT consultancy Training Centre	1 Month	0.28
Dr. Kali Charana Rath	Dr. Srinivesan Kumaresan Mr. Shakti Prasanna Khadanga	Mechanical Engineering	Solar Air Heater	Suryabala Energy Solutions Pvt. Ltd	6 Month	1.10
Dr. Venkatesa Perumal Venugopal	Mrs. Neeraja Pilli	Mechanical Engineering	Material fabrication and testing	Research Scholar	1 Month	0.20
Dr. Gopal Krushna Mohanta	Mr. Vikash Kumar Kenguva	Mechanical Engineering	CNC training	BITS Gunupur	1 Month	0.35
Dr. Manas Ranjan Panda	Mr. Sraban Kumar	Mechanical Engineering	Material testing & Characterization	Baba Inspection and Training Services	1 Month	0.31
						Amount received (Rs.):2.56

Total amount (Lacs) received for the past 3 years: 9.24

Note*:

- Only consultancy projects will be considered. Infrastructure-based projects will not be considered here.

C9. Institution Seed Money or Internal Research Grant to its Faculty for Research Work

Table No. C9.1: List of faculty members received seed money or internal research grant from the Institution.

(CAYm1)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Mr. Santosh Kumar Tripathy	Design, Modeling and product development of Go-Cart	1 year	1.50	1.50	Successfully completed the model, participated in the competition, and won a prize.
Mr. Santosh Kumar Tripathy	Design, Modeling and analysis of Squad Bike	2year	1.00	1.00	On going project
Dr. Sasank Shekhar Panda	Composite Material and Characterization	2 year	1.00	1.00	On going project
			Amount received (Rs.): 3.50		

(CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. Kali Charan Rath	Parametric Optimization of CMT Welds for AA6082–AA7075 Using RSM	2 year	1.50	2.30	Work completed and published the paper in indexed journal in 2025.
			Amount received (Rs.): 1.50		

(CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. Kali Charan Rath	Performance Analysis of AA6082–AA7075 Dissimilar Joints	2 year	1.60	2.20	Work completed and published the paper in standard journal in 2025.
			Amount received (Rs.): 1.60		

Total amount (Lacs) received for the past 3 years : 6.60

PART D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department)

D1. Adequate and Well-Equipped Laboratories, and Technical Manpower

Table No.D1.1: List of laboratories and technical manpower.

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	Internal Combustion Engine and Heat Power Lab	30	AIR COMPRESSOR TEST RIG, MODEL OF CARBURETTOR, 4 C,4S PETROL ENGINE TEST RIG, 3C 4S DIESEL ENGINE TEST RIG, CLOSE	Through out th	Mr. Susanta Kumar Patna	Lab. Assistant	ITI

2	Workshop	30	High Speed Center Lathe, Standard Center Lathe, Standard Center Lathe, Standard Center Lathe,	Through out th	Mr. Sunil Kumar Jena, Mr	Foreman, Skilled Assistar	ITI , ITI
3	Fluid Mechanics and Hydraulic Machines Lab	30	BERNOULLI THEOREM APPARATUS , METACENTRIC HEIGHT APPARATUS, PITOT	Through out th	Mr. Hemata Kumar Adhika	Lab. Assistant	DIPLOMA
4	Refrigeration and Air Conditioning and Mechanical Measurement Lab	30	VAPOUR ABSORPTION REFRIGERATION TRAINER, AIR CONDITIONING TEST RIG , REFRIGERATION	Through out th	Mr. P. Mina Rao	Skilled Assistant	ITI
5	Production Lab	30	LATHE TOOL DYNAMOMETER, ACCESSORIES FORFITTING TOOLS(SINE BAR AND	Through out th	Mr. Kishore Kumar Tulo	Lab. Assistant	DIPLOMA
6	Material Testing Lab	30	DOUBLE DISC POLISHING MACHINE, BELT GRINDING MACHINE , UNIVERSAL TESTING	Through out th	Mr. Kishore Kumar Tulo	Lab. Assistant	DIPLOMA
7	Kinematics and Dynamics lab	30	CONNECTING ROD, COMPOUND PENDULUM, REVERTED GEAR TRAIN MODEL, SIMPLE GEAR	Through out th	Mr. P. Mina Rao	Skilled Assistant	ITI
8	CAD/CAM Lab	30	COMPUTER SYSTEMS, UPS (WITH BATTRIES), ANSYS SOFWARE, AUTOCAD SOFTWARE (V. 2010),	Through out th	Mr. Sai Kumar Nayak	Lab. Assistant	DIPLOMA
9	Research lab	10	Chamber furnace, working up to 1000 C, Horizontal shape chamber type Muffle Furnace max.temp1050	Through out th	Mr. Kishore Kumar Tulo	Lab. Assistant	DIPLOMA
10	Project Lab	10	Equipment use as per project requirements	Through out th	Mr. Sunil Kumar Jena	Foreman	ITI
11	HT Lab	30	Thermal Conductivity of Liquid , Composite Wall, Horizontal and Vertical Condenser, Calendric	Through out th	Mr. Nilakantha Sabar	Skilled Assistant	Diploma

D2. Safety Measures in Laboratories

Table No. D2.1: List of various safety measures in laboratories.

Sr. No	Laboratory Name	Safety Measures
1	Internal Combustion Engine Lab	1. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the Laboratory. 2. First Aid Box 3. Fire Extinguishers
2	Workshop	1. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the Laboratory. 2. First Aid Box 3. Fire Extinguishers. 4. Hand Gloves 5. Safety Shoes 6. Welding Goggles 7. Emergency exit
3	Fluid Mechanics and Hydraulic Machines Lab	1. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the Laboratory. 2. First Aid Box 3. Fire Extinguishers

4	Refrigeration and Air Conditioning and Mechanical Measurement Lab	1. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the Laboratory. 2. First Aid Box 3. Fire Extinguishers
5	Production Lab	1. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the Laboratory. 2. First Aid Box 3. Fire Extinguishers
6	Material Testing Lab	1. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the Laboratory. 2. First Aid Box 3. Fire Extinguishers
7	Kinematics and Dynamics lab	1. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the Laboratory. 2. First Aid Box 3. Fire Extinguishers
8	CAD/CAM Lab	1. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the Laboratory. 2. First Aid Box. 3. Fire Extinguishers. 4. Anti Virus.
9	Project Lab	1. Specific Safety Rules in the form of Do's and Don'ts are Displayed in the Laboratory. 2. First Aid Box 3. Fire Extinguishers. 4. Hand Gloves 5. Safety Shoes 6. Welding Goggles 7. Emergency exit

D3. Project Laboratory/Research Laboratory

The Department of Mechanical Engineering has established advanced Project Laboratories and Centres of Excellence (CoE) to promote experiential learning, industry-oriented skill development, and research-driven innovation. These facilities enable students to address complex engineering problems (WK4, WK5, WK6) and sustainable development goals (SDGs).

The key facilities include:

- Centre of Excellence in CAD/CAM
- Centre of Excellence in Non-Destructive Testing (NDT)
- Project & Research Laboratories

a) Centre of Excellence (CoE) in CAD/CAM

The Centre of Excellence in CAD/CAM is established to enhance students' competencies in computer-aided design, modeling, drafting, and manufacturing simulation using industry-standard software such as AutoCAD and CATIA. The CoE bridges the gap between theoretical knowledge and industrial practice, enabling students to solve complex engineering design problems.

Objectives

- To develop proficiency in 2D drafting and 3D modeling using AutoCAD and CATIA
- To enable students to design and analyze various components and systems
- To provide exposure to modern design tools and digital manufacturing workflows
- To enhance industry readiness and employability skills
- To support innovation, prototyping, and product development activities

Software and Facilities Available

- AutoCAD for 2D drafting and basic design
- CATIA for advanced 3D modeling, assembly, and surface design
- Rapid prototyping support (3D printing)

Activities Conducted

- Hands-on training sessions on AutoCAD and CATIA modules
- Mini projects
- Capstone projects involving product design and development
- Workshops
- Industry-oriented certification programs in CAD tools
- Consultancy and collaborative projects with industries

Alignment with Sustainable Development Goals (SDGs)

The CAD/CAM CoE contributes to the following SDGs:

- SDG 9 (Industry, Innovation and Infrastructure): Promotes advanced manufacturing and design innovation
- SDG 12 (Responsible Consumption and Production): Optimized designs
- SDG 11 (Sustainable Cities and Communities): Design of efficient infrastructure components
- SDG 13 (Climate Action): Energy-efficient product development and lifecycle design

Justification

The Centre of Excellence in CAD/CAM plays a crucial role in achieving Outcome-Based Education (OBE) by providing a platform for:

- Experiential and project-based learning through real-world design problems
- Application of modern engineering tools (AutoCAD, CATIA) aligned with industry standards
- Development of skills such as design and analysis
- Exposure to interdisciplinary and industry-oriented projects
- Enhancement of employability and entrepreneurial capabilities

The CoE enables students to address complex engineering problems (WK4–WK6) by integrating design thinking, simulation, manufacturing considerations and learning environment. The CAD/CAM CoE significantly strengthens the department's ability to deliver practice-oriented, industry-relevant education, ensuring that students are well-equipped with design competencies, modern tool expertise, and sustainable engineering practices.

b) Centre of Excellence in Non-Destructive Testing (NDT)

The Centre of Excellence in Non-Destructive Testing (NDT) is established to provide students with advanced knowledge and practical skills in material inspection, defect detection, and structural integrity assessment without causing damage to components. The CoE focuses on industry-relevant testing techniques widely used in sectors such as manufacturing, power plants, aerospace, and oil & gas industries.

Objectives

- To develop competency in non-destructive evaluation techniques
- To train students in quality assurance, inspection, and failure analysis
- To provide exposure to industry-standard NDT practices and safety procedures
- To enhance employability through skill-based certification programs
- To promote research in material characterization and defect analysis

Facilities Available

- Ultrasonic Testing (UT) equipment
- Magnetic Particle Testing (MPT) kits
- Liquid Penetrant Testing (LPT) kits
- Visual Testing (VT) tools
- Weld specimens and defect samples for practice
- Safety and calibration equipment

Activities Conducted

- Hands-on training sessions on UT, MPT, LPT, and VT techniques
- Certification-oriented programs in NDT methods
- Inspection of welded joints and structural components
- Workshops and guest lectures by industry experts
- Consultancy/testing services for local industries
- Research activities in defect characterization and predictive maintenance

Alignment with Sustainable Development Goals (SDGs)

- SDG 9 (Industry, Innovation and Infrastructure): Enhances industrial reliability and infrastructure safety
- SDG 12 (Responsible Consumption and Production): Reduces material wastage through early defect detection

Justification

The Centre of Excellence in NDT provides a strong platform for Outcome-Based Education (OBE) by enabling:

- Hands-on experiential learning in industrial inspection techniques
- Development of skills to solve complex engineering problems (WK4–WK6) related to safety and reliability
- Exposure to modern engineering tools and testing standards
- Integration of theory with real-world industrial applications
- Enhancement of industry readiness

The CoE ensures that students gain expertise in failure prevention, quality control, and safety-critical systems, which are essential for modern engineering practice. The NDT CoE strengthens the department's capabilities in quality assurance, inspection technology, and reliability engineering, preparing students to meet industry demands and global engineering challenges while promoting safe, sustainable, and efficient engineering practices.

c) Project & Research Laboratories

The Department has established dedicated Project and Research Laboratories to promote experiential learning, innovation, and interdisciplinary research. These laboratories provide students with opportunities to work on real-time engineering problems, enabling them to integrate theoretical knowledge with practical implementation.

The facilities support mini projects, major (capstone) projects, funded research, and consultancy activities.

Objectives

To develop the ability to solve complex engineering problems through hands-on learning

To promote research, innovation, and critical thinking

To encourage interdisciplinary and industry-oriented project work

To enhance skills in design, analysis, experimentation and prototyping

Facilities Available

The department provides project work facility equipped with modern tools and equipment to support hands-on learning and innovation. The facilities are strengthened with CAD/CAM and simulation, 3D printing, optimization technique, composite material preparation, material characterization, CNC machining, etc. for product development or project model preparation.

Activities Conducted

- Mini Projects

- Major/Capstone Projects
- Research Activities
- Skill Development Activities

Alignment with Sustainable Development Goals (SDGs)

The laboratories support projects aligned with:

- SDG 7 (Affordable and Clean Energy)
- SDG 9 (Industry, Innovation and Infrastructure)
- SDG 12 (Responsible Consumption and Production)
- SDG 13 (Climate Action)

PART E: First Year faculty and financial Resources

(Data to be filled in for the first year course faculty and budget allocation and utilization)

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1*0.8) + (NS2*0.2))/(No. of required faculty (RF4)); Percentage= ((NS1*0.8) +(NS2*0.2))/RF
2023-24(CAYm2)	1050	52	54	14	88
2024-25(CAYm1)	1020	51	55	18	93
2025-26(CAY)	1020	51	58	19	98

E2. Budget Allocation, Utilization, and Public Accounting at Institute Level

Table No. E2.1: Budget and actual expenditure incurred at Institute level.

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Infrastructure Built-Up	150000000.00	147854862.00	150000000.00	142151984.00	145000000.00	137854654.00	127500000.00	125422985.00
Library	6000000.00	5794560.00	5700000.00	5578532.00	5500000.00	5618532.00	5000000.00	4928765.00
Laboratory equipment	96200000.00	92384500.00	92500000.00	91490796.00	81200000.00	78759941.00	71000000.00	70457118.00
Teaching and non-teaching staff salary	730000000.00	717659800.00	720000000.00	709182748.00	565000000.00	545768609.00	540000000.00	514979902.00
Outreach Programs	5200000.00	5162546.00	5000000.00	4958236.00	4800000.00	4754986.00	4500000.00	4527598.00
R&D	12100000.00	11856982.00	11800000.00	11615656.00	10000000.00	9716403.00	9000000.00	9121601.00

Training, Placement and Industry linkage	10000000.00	9845632.00	9500000.00	9483651.00	9000000.00	9580615.00	9000000.00	9455699.00
SDGs	40000000.00	37490452.00	35500000.00	35256780.00	30000000.00	30212877.00	25000000.00	25204540.00
Entrepreneurship	10500000.00	9854600.00	10000000.00	9463546.00	9500000.00	9095173.00	9000000.00	8415484.00
Others, specify	250000000.00	227646480.00	220000000.00	208182161.00	200000000.00	195340665.00	180000000.00	179803514.00
Total	**1310000000.00**	**1265550414.00**	**1260000000.00**	**1227364090.00**	**1060000000.00**	**1026702455.00**	**980000000.00**	**952317206.00**

E3. Budget Allocation, Utilization, and Public Accounting at Program Specific Level

Table No. E3.1: Budget and actual expenditure incurred at program level.

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory equipment	1100000	1047500	1050000	945783	1400000	1365749	1700000	1689878
Software	0	0	0	0	0	0	0	0
SDGs	500000	407325	400000	312214	400000	385674	450000	407325
Support for faculty development	1300000	1289450	1200000	1188325	1500000	1469867	1500000	1489756
R & D	800000	789547	700000	685786	1000000	985659	800000	789547
Industrial Training, Industry expert, Internship	1500000	1479897	1450000	1434754	1900000	1644897	2650000	2578357
Miscellaneous Expenses*	2200000	2117685	2200000	2172664	2400000	2371759	2600000	2455695
Total	**7400000**	**7131404**	**7000000**	**6739526**	**8600000**	**8223605**	**9700000**	**9410558**