NATIONAL BOARD OF ACCREDITATION

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

Program Name : Chemical Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 11604	**Date of Submission**: 19-02-2026

PART A- Profile of the Institute

A1.Name of the Institute: Thapar Institute of Engineering and Technology (Deemed to be University)	
Year of Establishment : 1956-1994	Location of the Institute: Urban - Patiala
A2. Institute Address:THAPAR TECHNOLGY CAMPUS ,BHADSON ROAD	
City:Patiala	State:Punjab
Pin Code:147004	Website:WWW.THAPAR.EDU
Email:REGISTRAR@THAPAR.EDU	Phone No(with STD Code):0175-2393122
A3. Name and Address of the Affiliating University (if any):	
Name of the University :	City:
State :	Pin Code: 0
A4. Type of the Institution: Deemed University	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **19**
- No. of PG programs: **17**

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	1983	--	Computer Application
2	Engineering & Technology	PG	Artificial Intelligence	2025	--	Computer Science and Engineering
3	Engineering & Technology	UG	Artificial Intelligence and Data Science	2025	--	Computer Science and Engineering
4	Engineering & Technology	UG	Artificial Intelligence and Machine Learning	2024	2025	Computer Science and Engineering
5	Engineering & Technology	UG	Biomedical Engineering	2019	--	Electrical and Instrumentation Engineering
6	Engineering & Technology	UG	Biotechnology	2003	--	Biotechnology
7	Engineering & Technology	PG	Biotechnology	2012	--	Biotechnology
8	Engineering & Technology	PG	CAD/CAM	2000	2024	Mechanical Engineering
9	Engineering & Technology	UG	Chemical Engineering	1996	--	Chemical Engineering
10	Engineering & Technology	UG	Civil Engineering	1956	--	Civil Engineering
11	Engineering & Technology	UG	Civil Engineering with Computer Application	2023	--	Civil Engineering
12	Engineering & Technology	UG	Computer Engineering	1992	--	Computer Science and Engineering
13	Engineering & Technology	UG	Computer Science and Business System	2019	--	Computer Science and Engineering
14	Engineering & Technology	PG	Computer Science and Engineering	2005	--	Computer Science and Engineering

15	Engineering & Technology	UG	Computer Science and Engineering	2019	--	Computer Science and Engineering
16	Engineering & Technology	PG	Electric Vehicle Technology	2024	--	Electrical and Instrumentation Engineering
17	Engineering & Technology	UG	Electrical and Computer Engineering	2020	--	Electrical and Instrumentation Engineering
18	Engineering & Technology	UG	Electrical Engineering	1956	--	Electrical and Instrumentation Engineering
19	Engineering & Technology	UG	Electronics & Communication Engineering	1975	--	Electronics and Communication Engineering
20	Engineering & Technology	PG	Electronics & Communication Engineering	2000	2024	Electronics and Communication Engineering
21	Engineering & Technology	UG	Electronics & Computer Engineering	2015	--	Electronics and Communication Engineering
22	Engineering & Technology	UG	Electronics Engineering (VLSI Design and Technology)	2023	--	Electronics and Communication Engineering
23	Engineering & Technology	UG	Electronics Instrumentation & Control Engineering	1979	--	Electrical and Instrumentation Engineering
24	Engineering & Technology	PG	Environmental Science & Technology	2002	--	Energy and Environmental Engineering
25	Engineering & Technology	PG	Infrastructure Engineering	2011	2024	Civil Engineering
26	Engineering & Technology	PG	Mechanical Engineering	2024	--	Mechanical Engineering
27	Engineering & Technology	UG	Mechanical Engineering	1956	--	Mechanical Engineering
28	Engineering & Technology	UG	Mechatronics	2012	--	Mechanical Engineering
29	Engineering & Technology	PG	Power Systems	2006	2024	Electrical and Instrumentation Engineering
30	Engineering & Technology	UG	Robotics and Artificial Intelligence	2023	--	Mechanical Engineering
31	Engineering & Technology	PG	Software Engineering	2000	2024	Computer Science and Engineering
32	Engineering & Technology	PG	Structural Engineering	1971	--	Civil Engineering
33	Engineering & Technology	PG	Thermal Engineering	2010	2024	Mechanical Engineering
34	Engineering & Technology	PG	Transportation Engineering	2024	--	Civil Engineering
35	Engineering & Technology	PG	VLSI Design	2003	--	Electronics and Communication Engineering
36	Management	PG	Masters in Business Administration	2007	--	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
Chemical Engineering	No	Chemical Engineering	UG

Mechanical Engineering	No	Mechanical Engineering	UG
Electrical and Instrumentation Engineering	No	Electrical Engineering	UG
Computer Science and Engineering	No	Computer 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 ARROV/ DETAILS
1	Chemical Engineering	UG	1996 / --	40	Yes	2017	60	2017	F.No. North-West/1-44638926274/2025/E(

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

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. Avinash Chandra
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	60	60
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	48	38	35	13	30	23	48
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	0	0	1	0	0	0
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	1	0	1	0	2	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	49	38	36	14	32	23	48

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	48	1	81.67
2024-25 (CAYm1)	60	38	0	63.33
2023-24 (CAYm2)	60	35	1	60.00

Average [(ER1 + ER2 + ER3) / 3] = 68.33≡ 11.00

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).	60.00	60.00	60.00
B=No. of students who graduated from the program in the stipulated course duration	29.00	22.00	45.00
Success Rate (SR)= (B/A) * 100	48.33	36.67	75.00

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 53.33

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)
X=(Mean of 1st 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 1st year/10)	6.35	6.54	6.20
Y=Total no. of successful students	38.00	36.00	13.00
Z=Total no. of students appeared in the examination	38.00	36.00	13.00
API [X*(Y/Z)]	6.35	6.54	6.20

Average API[(AP1+AP2+AP3)/3] : 6.36

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)	6.97	6.75	7.30
Y=Total no. of successful students	36.00	14.00	32.00
Z=Total no. of students appeared in the examination	36.00	14.00	32.00
API [X * (Y/Z)]	6.97	6.75	7.30

Average API [(AP1 + AP2 + AP3)/3] : 7.01

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)	7.16	7.48	7.83
Y=Total no. of successful students	14.00	30.00	23.00

Z=Total no. of students appeared in the examination	14.00	32.00	23.00
API [X*(Y/Z)]:	7.16	7.01	7.83

Average API [(AP1 + AP2 + AP3)/3] : 7.33

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	60.00	60.00	60.00
X=No. of students placed	13.00	15.00	30.00
Y=No. of students admitted to higher studies	3.00	3.00	3.00
Z= No. of students taking up entrepreneurship	0.00	0.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	26.67	30.00	56.67

Average Placement Index = (P_1 + P_2 + P_3)/3: 37.78 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)
1	Dr. Rajeev Mehta	XXXXXXX15B	Ph.D	TIET, Patiala	Polymers	03/07/2000	25.7	Assistant Professor	Professor	01/07/2014	Regular	Yes
2	Dr. Haripada Bhunia	XXXXXXX99E	Ph.D	IIT kharagpur	Polymers	11/12/2003	22.2	Lecturer	Professor	07/07/2015	Regular	Yes
3	Dr. Raj Kumar Gupta	XXXXXXX36K	Ph.D	TIET, Patiala	Process Modeling & Simulation	30/04/1999	26.9	Lecturer	Professor	10/07/2017	Regular	Yes
4	Dr. Sanghamitra Barman	XXXXXXX20Q	Ph.D	IIT kharagpur	Catalysis	15/07/2008	17.7	Lecturer	Professor	08/12/2023	Regular	Yes
5	Dr. Sanjeev Kumar Ahuja	XXXXXXX25C	Ph.D	TIET, Patiala	Process Modeling & Simulation	24/10/2000	25.3	Lecturer	Professor	08/12/2023	Regular	Yes
6	Dr. Avinash Chandra	XXXXXXX17H	Ph.D	IIT Kanpur	CFD	21/05/2012	13.8	Assistant Professor	Professor	02/07/2025	Regular	Yes
7	Dr. Neetu Singh	XXXXXXX69F	Ph.D	UPTU Lucknow	Seperation Processes	03/06/2013	12.8	Assistant Professor	Professor	02/07/2025	Regular	Yes
8	Dr Jai Prakash Kushwaha	XXXXXXX07P	Ph.D	IIT Roorkee	Seperation Processes	06/05/2011	14.9	Assistant Professor	Associate Professor	13/03/2018	Regular	Yes
9	Dr. Sudhir Kumar Singh	XXXXXXX37J	Ph.D	IIT Kanpur	Thermodyamics	01/06/2012	13.8	Assistant Professor	Associate Professor	13/03/2018	Regular	Yes
10	Dr. Parminder Singh	XXXXXXX38P	Ph.D	Panjab University	Nanofluids	02/07/2007	18.7	Lecturer	Associate Professor	29/04/2025	Regular	Yes
11	Dr. Rakesh Kumar Gupta	XXXXXXX84K	Ph.D	TIET, Patiala	CFD	23/07/2009	16.6	Lecturer	Assistant Professor		Regular	Yes
12	Dr. Vivek Pawar	XXXXXXX25G	Ph.D	IIT Hyderbad	Catalysis	01/07/2022	3.7	Assistant Professor	Assistant Professor		Regular	Yes
13	Dr. Himali	XXXXXXX74J	Ph.D	IIT	Drug Delivery	01/07/2022	3.7	Assistant	Assistant		Regular	Yes

	Horo			Guwahati				Professor	Professor			
14	Dr. Lovepreet Singh	XXXXXXX32B	Ph.D	NIT Hamirpur	Nanotechnology	24/02/2025	0.11	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes

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 Department0

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

Description	**CAY(2025-26)**	**CAYm1 (2024-25)**	**CAYm2 (2023-24)**
UG1.B	60	60	61
UG1.C	60	61	60
UG1.D	61	60	60
UG1: Chemical Engineering	**181**	**181**	**181**
DS=Total no. of students in all UG and PG programs in the Department	181	181	181
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=** 181	**S2=** 181	**S3=** 181
DF=Total no. of faculty members in the Department	14	13	13
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=** 14	**F2=** 13	**F3=** 13
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 12.93**	**SFR2= 13.92**	**SFR3= 13.92**
Average SFR for 3 years	**SFR= 13.59**		

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)	14	0	9.00	38.89
2024-25(CAYm1)	13	0	9.00	36.11
2023-24(CAYm2)	12	1	9.00	34.44

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	7.00	2.00	3.00	6.00	3.00
2024-25	1.00	5.00	2.00	4.00	6.00	4.00
2023-24	1.00	3.00	2.00	6.00	6.00	4.00
Average	RF1=1.00	AF1=5.00	RF2=2.00	AF2=4.33	RF2=6.00	AF2=3.67

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. Sanjeev Bedi	Professor	Mechanical and Mechatronics Engineering, University of Waterloo, Ontario, Canada	Experiential Learning Activities (and Internships (Planning and execution)	80.00
2	prof. dr. A.J. (Aard) Groen	Professor	Innovation & Entreprenuship, University of Groningen, Netherlands	Innovation & Entreprenuship	80.00
3	Dr. Roop Mahajan	Professor	Department of Mechanical Engineering, Virginia Polytechnic Institute and State University	Capstone project	80.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Sanjeev Bedi	Professor	Mechanical and Mechatronics Engineering, University of Waterloo, Ontario, Canada	Experiential Learning Activities (and Internships (Planning and execution)	80.00
2	prof. dr. A.J. (Aard) Groen	Professor	Innovation & Entreprenuship, University of Groningen, Netherlands	Innovation & Entreprenuship	80.00
3	Dr. Roop Mahajan	Professor	Department of Mechanical Engineering, Virginia Polytechnic Institute and State University	Capstone project	80.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Sanjeev Bedi	Professor	Mechanical and Mechatronics Engineering, University of Waterloo, Ontario, Canada	Experiential Learning Activities (and Internships (Planning and execution)	80.00
2	prof. dr. A.J. (Aard) Groen	Professor	Innovation & Entreprenuship, University of Groningen, Netherlands	Innovation & Entreprenuship	80.00
3	Dr. Roop Mahajan	Professor	Department of Mechanical Engineering, Virginia Polytechnic Institute and State University	Capstone Project	80.00

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	28	21	15
2	No. of peer reviewed conference papers published	8	3	1
3	No. of books/book chapters published	7	4	3

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. Parminder Singh	NIL	Chemical Engineering	Computational simulation of nanofluid unsteady flow and heat transfer in thin films on stretching surfaces	Sun Packaging Pvt. Ltd.	Sept. 2024-Sept 2026	5.25
Dr. Avinash Chandra	Dr. Sharad saxena	Chemical Engineering	Code development in MATLAB/ PYTHON to determine the heat flux response of high temperature epoxy sensors	Centre for Fire Explosive and Environment Safety (CFEES), DRDO, New Delhi	Feb 21, 2025 to Feb 20, 2026	8.02
Dr. Haripada Bhunia	Dr. Raj Kumar Gupta Dr. Sudhir Kumar Singh	Chemical Engineering	Development of radiation induced glycidyl methacrylate grafted polyamide-6 nanocomposites for CO2 capture	DAE-BRNS	June 2022 to June 2025	20.28
						Amount received (Rs.):33.55

(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. Haripada Bhunia	Dr. Sudhir Kumar Singh	Chemical Engineering	Development of biodegradable polyethylene using organic additives	CSIR	July 2023 to March 2026	26.87
						Amount received (Rs.):26.87

(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. Rajeev Mehta	Dr. Tarun Nanda	Department of Chemical Engineering	Enhanced energy absorption of interpenetrating polymer network of polyborodimethylsiloxane and polyurethane foams	Terminal Ballistics Research Laboratory (TBRL), Defence Research and Development Organization (DRDO), Chandigarh, India [ARMREB/CDSW/2021/238]	Aug 2021-Aug 2024	81.22
Dr. Shruti Sharma	Dr. Rajeev Mehta, Dr. Sandeep Sharma	Civil Engineering Department	Sustainable Nano-Engineered Smart Self-Healing Concrete Utilizing Graphene and Its Derivatives	DST SERB	June 2022-June 2025	29.83
						Amount received (Rs.):111.05

Total Amount (Lacs) Received for the Past 3 Years: 171.47

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. Avinash Chandra	NIL	Chemical Engineering	Analytical Services	KHILARI INFRASTRUCTURE PRIVATE LIMITED	2 months	1.84
Dr. J.P. Kushwaha	NIL	Chemical Engineering	Analytical Services	THERMAX BIOENERGY SOLUTIONS PRIVATE LIMITED	2 months	2.21
Dr. Sudhir K. Singh	NIL	Chemical Engineering	Analytical Services	THERMAX BIOENERGY SOLUTIONS PRIVATE LIMITED	2 months	3.74
Dr. Parminder Singh	NIL	Chemical Engineering	Analytical Services	THERMAX BIOENERGY SOLUTIONS PRIVATE LIMITED	2 months	2.79
						Amount received (Rs.):10.58

(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. Raj Kumar Gupta	NIL	Chemical Engineering	Soil Testing Study Report	Morepen Laboratories Limited	1 Month	1.00
Dr. Raj Kumar Gupta	NIL	Chemical Engineering	Pharmaceutical Samples Testing	Morepen Labs	2 month	2.47
Dr. Avinash Chandra	NIL	Chemical Engineering	DIGISTATE	Verbio	4 month	1.14
Dr. Parminder Singh	NIL	Chemical Engineering	Testing of Waste Water	PPCB	4 month	1.01
Dr. Parminder Singh	NIL	Chemical Engineering	Testing of Waste Water	Rana sugar	3 month	1.18
						Amount received (Rs.):6.80

(CAYm3)

Total amount (Lacs) received for the past 3 years: 17.38

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
Dr. Neetu Singh	Development of eco-sustainable toilets for mineralization of human urinal waste	2 years	6.50	6.50	Sustainable Sanitation System
			Amount received (Rs.): 6.50		

(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
			Amount received (Rs.): 0		

(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. Vivek Pawar	Biofuel production via hydroxyalkylation of furfural with 2-methyfuran	2 years	7.40	5.40	Renewable biofuel production using biomass-derived materials and cost-effective catalysts, supporting sustainable energy initiatives.
Dr. Himali Horo	Development and evaluation of biopolymer coated zinc oxide nanomaterials	2 years	6.30	6.30	Developed a targeted hollow ZnO nanocarrier demonstrating high drug loading, controlled release
Dr. Neetu Singh	Synthesis of Three-Dimensional Graphene Foams	1 year	0.70	0.70	Development of a simple and cost-effective method to produce 3D graphene f
			Amount received (Rs.): 14.40		

Total amount (Lacs) received for the past 3 years : 20.90

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	Fluid and Particle Mechanics	4	• Centrifugal Pump • Cyclone Separator • Drag Coefficient Apparatus • Packed Bed ... Fluidized	2 hours per ba	Dr. Sandeep S	Technical Offic	Ph.D. & M.S
2	Bioprocess Engineering	4	• BOD Incubator and Shaker • Laminar flow Chamber • Microscope (Radical 21240) ... Fermenter	2 hours per ba	Dr. Sandeep S	Technical Offic	Ph.D. & B.Tec
3	Process Instrumentation and Control	4	• Two Tank Non-Interacting and Interacting Systems • Control Valves System ... Multiprocess Control System	2 hours per ba	Dr. Sandeep S	Technical Offic	Ph.D. & B.Tec
4	Chemical Reaction Engineering	4	• Isothermal Batch Reactor • Plug Flow Reactor • Continuously Stirred Tank Reactor (CSTR) ... CSTR in	2 hours per ba	Dr. Sandeep S	Technical Offic	Ph.D. & B.Tec
5	Mass Transfer	4	• Batch drying unit (Tray dryer) • Bubble cap distillation column • Steam distillation setup ... Water	2 hours per ba	Dr. Sandeep S	Technical Offic	Ph.D. & M.S
6	Energy Technology	4	• Abel's Flash Point Apparatus • Redwood Viscometer • Saybolt Viscometer ... Muffle Furnace ... Hot	2 hours per ba	Dr. Sandeep S	Technical Offic	Ph.D. & M.S
7	Industrial Pollution Abatement	4	COD Digester Particulate Matter Sampler (PM 2.5) High Volume Sampler (PM 10) ... BOD	2 hours per ba	Dr. Sandeep S	Technical Offic	Ph.D. & M.S
8	Process Modelling and Simulation	4	ASPEN Engineering Suit	2 hours per ba	Dr. Sandeep S	Technical Offic	Ph.D. & B.Tec
9	Process Engineering Simulation Software	4	MATLAB, EXCEL and ANSYS	2 hours per ba	Dr. Sandeep S	Technical Offic	Ph.D. & M.S
10	Numerical Methods in Chemical Engineering	4	Excel and MATLAB	2 hours per ba	Dr. Sandeep S	Technical Offic	Ph.D. & B.Tec

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Fluid and Particle Mechanics	• Fire extinguisher • First aid box • Safety gloves

2	Bioprocess Engineering	• First aid box • Safety gloves • Safety goggles
3	Process Instrumentation and Control	• Safety shower • First aid box
4	Chemical Reaction Engineering	• Fire extinguisher • First aid box • Safety shower • High Temperature gloves • Safety goggles
5	Mass Transfer	• First aid box • Safety gloves
6	Energy Technology	• Fire extinguisher • First aid box • High Temperature gloves • Safety goggles • Safety shower
7	Industrial Pollution and Abatement	• Fire extinguisher • First aid box • Safety gloves • Safety goggles
8	Process Modeling and Simulation	• First aid box
9	Research Lab 1	• Fire extinguisher • First aid box • Safety gloves • Safety goggles
10	Research Lab 2	• Fire extinguisher • First aid box • Safety gloves • Safety shower • Safety goggles

D3. Project Laboratory/Research Laboratory

Table No. 7.5.1: List of project laboratory/research laboratory /Centre of Excellence.

S.N.	Name of the Laboratory
1	**Research lab 1(Polymers):** VARIM (Vacuum Assisted Resin Infusion Molding), Haake Polylab Torque Rheometer

VARIM (Vacuum Assisted Resin Infusion Molding)

Haake Polylab Torque Rheometer

2

Research lab 2 (General): UV chamber, Hot Air Oven, Cooling centrifuge, Vacuum Oven, Impact Tester, Water Bath Shaker.

UV Chamber

Impact Tester

Water Bath Shaker

Cooling Centrifuge

Hot Air Oven

Vacuum Oven

3

Instrument room 1: BET Surface Area Analyser, UV-Visible Spectrophotometer.

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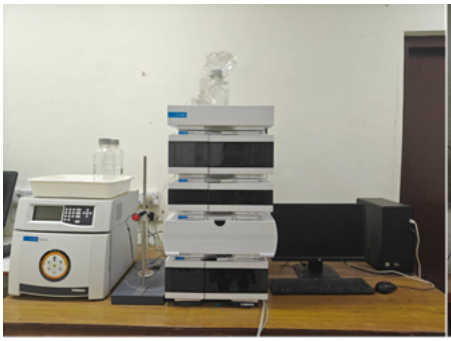
BET Surface Area Analyser

UV-Visible Spectrophotometer.

Instrument room 2: Gel Permeation Chromatography-High Performance Liquid Chromatography (GPC-HPLC), Differential Scanning Calorimetry (DSC)

4



Gel Permeation Chromatography-High Performance Liquid Chromatography (GPC-HPLC)

Differential Scanning Calorimetry (DSC)

5

Instrument room 3: Thermo-Gravimetric Analyser (TGA), Temperature Swing Adsorption and gas chromatograph setup, Pressure swing adsorption study setup, Universal Testing Machine (UTM).

Thermo-Gravimetric Analyser (TGA),

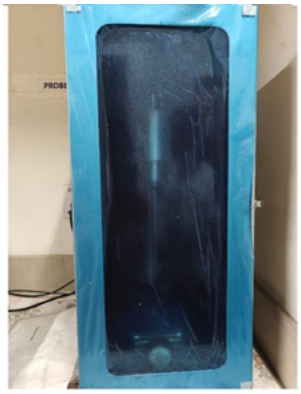
Temperature Swing Adsorption and gas chromatograph setup

Pressure swing adsorption study setup

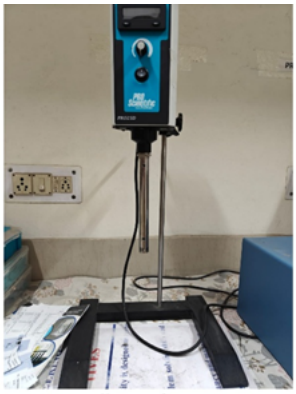
UTM

6

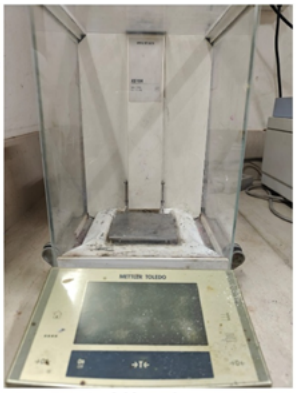
Instrument room 4: Probe Sonicator, Homogenizer, Weighing Balance



Probe Sonicator



Homogenizer



Weighing Balance

Chemical Reaction Engineering Lab: The students have actively worked in the Chemical Reaction Engineering (CRE) Laboratory and have participated in various national and international events

Student Name	Event Participated	Date
Aayush Bathwal	Bharatiya Antariksh Hackathon 2024 (ISRO)	July 04, 2024

7	Ridhi Saran	MATLAB Onramp (MathWorks)	August 05, 2024
	Samriddhi Mehta	SCHEMCON 2024	September 20-21, 2024
	Krishnan Abhishek	SCHEMCON 2024	September 20-21, 2024
	Riddhi Saran	CHEMCON 2024 (IIChE)	December 27-30, 2024
	Aayush Bathwal	CHEMCON 2024 (IIChE)	December 27-30, 2024
	Mrinali Khanna	CHEMCON 2024 (IIChE)	December 27-30, 2024
	Sonal Bhayana	CHEMCON 2024 (IIChE)	December 27-30, 2024
	Mrinali Khanna	CHEMCON 2024 (IIChE)	December 27-30, 2024
	Sonal Bhayana	CATSYMP-24 / CSCME-2025	February 24-26, 2025
	Krishnan Abhishek	CHEMCON 2024 (IIChE)	December 27-30, 2024
	Aayush Bathwal; Sonal Bhayana; Gitik Gupta; Mehar Kapoor; Jiya Kumar	Azeotropy 2025	March 22, 2025
	Ritika Arora	Vidya: STEM for Social Goodwill	Feb 8-13, 2024
	Aayush Bathwal	SUSTAIN-A-THON 2024 (IOCL)	June 05, 2024
	Mridul Dobhal	World Environment Day Presentation	June 05, 2024
	Mridul Dobhal	Next–Gen Oncology 2024	June 26-27, 2024

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)	2895	145	148	43	88
2024-25(CAYm1)	3210	160	169	49	91
2025-26(CAY)	3390	170	196	60	99

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	3000000000	2950000000	1200000000	1110171000	2000000000	1801854000	2500000000	2448668000

Library	75000000	71500000	55000000	54198000	50000000	46316000	40000000	30822000
Laboratory equipment	800000000	730000000	900000000	860759000	200000000	192803000	80000000	78862000
Teaching and non-teaching staff salary	2760000000	2710000000	2350000000	2346570000	2100000000	2087843000	1850000000	1827908000
Outreach Programs	11000000	10903000	10000000	9901000	9500000	9105000	9000000	8950000
R&D	180000000	175200000	150000000	142550000	130000000	129312000	120000000	111200000
Training, Placement and Industry linkage	25000000	24500000	24000000	23406000	15000000	14182000	8000000	7437000
SDGs	20000000	18750000	17500000	17066000	14000000	13617000	12000000	11550000
Entrepreneurship	10000000	9850000	9000000	8960000	8500000	8440000	8000000	7840000
Others, specify	2400000000	2365520000	2350000000	2314155000	2000000000	1861793000	1100000000	1050522000
Total	**9281000000**	**9066223000**	**7065500000**	**6887736000**	**6527000000**	**6165265000**	**5727000000**	**5583759000**

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	7210973	6580013	7374077	7052559	1567164	1510770	824388	812661
Software	225343	216780	196642	183123	156716	145276	185487	183839
SDGs	180274	169007	143385	139829	109701	106700	123658	119021
Support for faculty development	24877858	24427172	19254533	19226430	16455224	16359964	19063976	18836321
R & D	1622469	1579203	1229013	1167972	1018657	1013266	1236582	1145900
Industrial Training, Industry expert,	225343	220836	196642	191775	117537	111128	82439	76637
Miscellaneous Expenses*	306466	317256	303156	317815	329104	344110	463718	467531
Total	**34648726**	**33510267**	**28697448**	**28279503**	**19754103**	**19591214**	**21980248**	**21641910**