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: 10697	**Date of Submission**: 19-06-2025

PART A- Profile of the Institute

A1.Name of the Institute: Guru Jambheshwar University of Science and Technology	
Year of Establishment : 1995	Location of the Institute: Guru Jambheshwar University of Science and Technology NH-10 Hisar
A2. Institute Address:Guru Jambheshwar University of Science and Technology NH-10 Hisar Haryana-125001(INDIA)	
City:Hissar	State:Haryana
Pin Code:125001	Website:www.gjust.ac.in
Email:nks54@gjust.org	Phone No(with STD Code):1662-263320
A3. Name and Address of the Affiliating University (if any):	
Name of the University : Not Applicable	City: Hissar
State : Haryana	Pin Code: 125001
A4. Type of the Institution: University	
A5. Ownership Status: State Government	

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

- No. of UG programs: **13**
- No. of PG programs: **7**

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 of Computer Application	1996	--	Computer Science and Engineering
2	Engineering & Technology	UG	Artificial Intelligence and Data Science	2024	--	Artificial Intelligence and Data Science
3	Engineering & Technology	UG	Civil Engineering	2018	--	Civil Engineering
4	Engineering & Technology	UG	Computer Science and Engineering	2001	--	Computer Science and Engineering
5	Engineering & Technology	PG	Computer Science and Engineering	1995	--	Computer Science and Engineering
6	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2021	--	Computer Science and Engineering
7	Engineering & Technology	UG	Electrical Engineering	2019	--	Electrical and Electronics Engineering
8	Engineering & Technology	UG	Electronics & Communication Engineering	2001	--	Electrical and Electronics Engineering
9	Engineering & Technology	UG	Electronics & Computer Engineering	2024	--	Electrical and Electronics Engineering
10	Engineering & Technology	UG	Electronics and Biomedical Engineering	2021	--	Biomedical Engineering
11	Engineering & Technology	PG	Environmental Science & Engineering	1995	--	Environmental Science and Engineering
12	Engineering & Technology	UG	Food Technology	2007	--	Food Technology
13	Engineering & Technology	UG	Information Technology	2001	--	Computer Science and Engineering
14	Engineering & Technology	PG	Masters in Computer Applications	1996	--	Computer Science and Engineering
15	Engineering & Technology	UG	Mechanical Engineering	2004	--	Mechanical Engineering
16	Engineering & Technology	PG	Mechanical Engineering	2006	--	Mechanical Engineering
17	Engineering & Technology	UG	Printing & Packing Engineering	2016	--	Printing Technology
18	Engineering & Technology	UG	Printing Technology	1996	--	Printing Technology
19	Engineering & Technology	PG	Printing Technology	2010	--	Printing Technology
20	Management	PG	Master of Business Administration	1995	--	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
Food Technology	No	Food Technology	UG
Computer Science and Engineering	Yes	Computer Science and Engineering	UG
Mechanical Engineering	No	Mechanical Engineering	UG
Electrical and Electronics Engineering	No	Electronics & Communication Engineering	UG
Computer Science and Engineering	Yes	Information Technology	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	2004 / --	60	No	NA	60	2004	1-44640956817	Granted accreditation for 6 years for the period (specify period)	01/07/2018	30/06/2025	2	4

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 :	PANKAJ KHATAK
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)	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (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	60	60	60	60	48	55	60
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	7	11	12	18	8	7
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	9	11	4	7	5	4	4
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	69	78	75	79	71	67	71

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]
2024-25 (CAY)	60	60	9	115.00
2023-24 (CAYm1)	60	60	11	118.33
2022-23 (CAYm2)	60	60	4	106.67

Average [(ER1 + ER2 + ER3) / 3] = 113.33≡ 100

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	(2020-21) LYG	(2019-20) LYGm1	(2018-19) 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).	78.00	68.00	71.00
B=No. of students who graduated from the program in the stipulated course duration	46.00	54.00	59.00

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 75.48

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(2023-24)	CAYm2(2022-23)	CAYm3 (2021-22)
Mean of CGPA or mean percentage of all successful students(X)	6.65	6.62	6.92
Y=Total no. of successful students	67.00	52.00	56.00
Z=Total no. of students appeared in the examination	69.00	64.00	67.00
API [X*(Y/Z)]	6.46	5.38	5.78

Average API[(AP1+AP2+AP3)/3] : 5.87

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 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
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)	6.66	5.82	6.54
Y=Total no. of successful students	63.00	32.00	46.00
Z=Total no. of students appeared in the examination	63.00	68.00	50.00
API [X * (Y/Z)]	6.66	2.74	6.02

Average API [(AP1 + AP2 + AP3)/3] : 5.14

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 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
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)	6.36	6.57	6.95
Y=Total no. of successful students	32.00	46.00	54.00
Z=Total no. of students appeared in the examination	32.00	46.00	54.00
API [X*(Y/Z)]:	6.36	6.57	6.95

Average API [(AP1 + AP2 + AP3)/3] : 6.63

B9. Placement, Higher Studies, and Entrepreneurship

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

Item	LYG (2020-21)	LYGm1(2019-20)	LYGm2(2018-19)
FS*=Total no. of final year students	78.00	68.00	67.00
X=No. of students placed	42.00	45.00	46.00
Y=No. of students admitted to higher studies	3.00	5.00	3.00
Z= No. of students taking up entrepreneurship	1.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	58.97	73.53	73.13

Average Placement Index = (P_1 + P_2 + P_3)/3: 68.54 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	HEM CHANDER GARG	XXXXXXX39K	Ph.D	THAPAR UNIVERSITY, PATIALA	TRIBOLOGY	16/09/2004	20.8	Associate Professor	Professor	16/09/2010	Regular	Yes		No
2	PANKAJ SHARMA	XXXXXXX22J	Ph.D	NIT, KUK	PRODUCTION	03/09/2004	20.8	Assistant Professor	Professor	14/03/2017	Regular	Yes		No

3	VISHAL GULATI	XXXXXXX83A	Ph.D	NIT, KUK	CAD/CA M.PRODUCT DEVELOPMENT, ISF	03/09/2004	20.8	Assistant Professor	Professor	06/04/2017	Regular	Yes	No
4	MUNISH GUPTA	XXXXXXX61F	Ph.D	NIT, KUK	THERMAL	26/08/2004	20.9	Assistant Professor	Professor	26/08/2020	Regular	Yes	No
5	PANKAJ KHATAK	XXXXXXX69F	Ph.D	GJUST, HISAR	THERMAL AND TRIBOLOGY	27/08/2004	20.8	Assistant Professor	Professor	27/08/2020	Regular	Yes	Yes
6	PUNEET KATYAL	XXXXXXX94B	Ph.D	NIT, KUK	DESIGN AND TRIBOLOGY	30/08/2006	18.8	Assistant Professor	Professor	30/08/2022	Regular	Yes	No
7	MAHESH KUMAR	XXXXXXX77D	Ph.D	NIT, KUK	THERMAL ENGINEERING	22/09/2006	18.8	Assistant Professor	Professor	02/09/2022	Regular	Yes	No
8	KAMALDEEP	XXXXXXX98R	Ph.D	SLIET, LONGOWAL	PRODUCTION TECHNOLOGY	07/09/2006	18.8	Assistant Professor	Assistant Professor		Regular	Yes	No
9	RAKESH KUMAR	XXXXXXX59N	Ph.D	GJUST, HISAR	THERMAL ENGINEERING	23/07/2014	10.10	Assistant Professor	Assistant Professor		Regular	Yes	No
10	JAGDIP CHAUHAN	XXXXXXX18C	M.Tech	PEC, CHANDIGARH	PRODUCTION ENGINEERING	28/07/2014	10.9	Assistant Professor	Assistant Professor		Regular	Yes	No
11	RAJENDER SINGH	XXXXXXX83E	M.Tech	PEC, CHANDIGARH	PRODUCTION ENGINEERING	23/07/2014	10.10	Assistant Professor	Assistant Professor		Regular	Yes	No
12	SANDEEP JINDAL	XXXXXXX83J	Ph.D	MMDU, MULLANA AMBALA	PRODUCTION ENGINEERING	11/09/2018	6.8	Assistant Professor	Assistant Professor		Regular	Yes	No
13	HIMANSHU MANCHANDA	XXXXXXX87P	Ph.D	GJUST, HISAR	THERMAL ENGINEERING	11/08/2014	10.9	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes	No
14	PARAMJEET LAMBA	XXXXXXX31E	M.Tech	GJUST, HISAR	THERMAL ENGINEERING	13/08/2013	11.9	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes	No
15	SONU MATHUR	XXXXXXX52M	Ph.D	GJUST, HISAR	CAD/CAM	13/08/2014	10.9	Assistant Professor	Assistant Professor		Contractual Fulltime	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 Department1
Table No.C2.1: Student-faculty ratio.

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
UG1.B	66	66	66
UG1.C	66	66	66
UG1.D	66	66	66
UG1: Mechanical Engineering	**198**	**198**	**198**
PG1.A	20	20	20
PG1.B	20	20	20
PG1: Mechanical Engineering	**40**	**40**	**40**
DS=Total no. of students in all UG and PG programs in the Department	238	238	238
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=** 238	**S2=** 238	**S3=** 238
DF=Total no. of faculty members in the Department	15	15	15
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=** 15	**F2=** 15	**F3=** 15
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= 15.87**	**SFR2= 15.87**	**SFR3= 15.87**
Average SFR for 3 years	**SFR= 15.87**		

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)]
2024-25(CAY)	12	3	11.00	30.00
2023-24(CAYm1)	12	3	11.00	30.00
2022-23(CAYm2)	11	4	11.00	28.64

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
2024-25	1.00	7.00	2.00	0.00	7.00	5.00
2023-24	1.00	7.00	2.00	0.00	7.00	5.00

| 2022-23 | 1.00 | 6.00 | 2.00 | 1.00 | 7.00 | 5.00 |
| Average | RF1=1.00 | AF1=6.67 | RF2=2.00 | AF2=0.33 | RF2=7.00 | AF2=5.00 |

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. Prem Sagar	Temporary/Visiting Faculty	TITS, Bhiwani	Solar Energy Engineering	60.00
2	Dr. Neeti Arora	Temporary/Visiting Faculty	GJU S&T	Fluid Mechanics	120.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Neeti Arora	Temporary/Visiting Faculty	GJU S&T	Fluid Mechanics	120.00

(CAYm3)

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)
1	No. of peer reviewed journal papers published	21	29	51
2	No. of peer reviewed conference papers published	2	1	13
3	No. of books/book chapters published	2	1	4

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
Prof. Pankaj Khatak		Centralized	AICTE-IDEA Lab	AICTE	On Going (06/06/2022 onwards)	55.00
						Amount received (Rs.):55.00

(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
Prof. Puneet Katyal		Mechanical Engg.	SWAN-System for water analyzing and nurturing	PDUIIC	1 Year	595000.00
						Amount received (Rs.):595000.00

(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
Prof. Pankaj Khatak		Centralized	AICTE-IDEA Lab	AICTE	On Going (06/06/2022 onwards)	55.00
						Amount received (Rs.):55.00

Total Amount (Lacs) Received for the Past 3 Years: 595110.00
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)

(CAYm2)

(CAYm3)

Total amount (Lacs) received for the past 3 years:
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. Rakesh Kumar	Efficacy of nanofluids on condensation-evaporation process for milk heating in an electric still	1 Year	1.08	1.00	1 publication
			Amount received (Rs.): 1.08		

(CAYm2)

(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
Prof. Pankaj Khatak	Development of 3D printing based socket for bionic hand	6 months	0.85	0.80	Research work
Prof. Mahesh Kumar	Experimental investigations on stepped solar still with different modifications	6 months	1.08	1.00	Research work
			Amount received (Rs.): 1.93		

Total amount (Lacs) received for the past 3 years : 3.01

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	Machine Shop	14	Lathe Machine; Hydraulic Power Hacksaw; Bench Grinder;Shaper Machine; Milling Machine;Pillar Drilling Machine;Radial Drilling Machine;High Speed Precision	24	Sh. Kuldeep Singh	Workshop Instructor	CTI
2	Foundry & Forging Shop	14	Oil Fired Furnace (Forging); Oil Fired Furnace (Foundry); Floor Molding Arrangement	24	Sh. Sachin	Workshop Instructor	CTI
3	Carpentry Shop	14	Wood Turning Lathe; Universal Wood Working Machine	24	Sh. Ishwar	Workshop Instructor	CTI
4	Fitting Shop	14	Pillar Drilling Machine; Power Hacksaw	24	Sh. Krishan Hooda	Workshop Instructor	CTI
5	Welding Shop	14	Electric Arc Welding Setup; TIG Welding Setup; MIG Welding Setup; Oxy-Acetylene Welding Setup	24	Sh. Rajender Kumar	Workshop Instructor	CTI
6	Heat Transfer Lab	24	Heat Transfer through Composite Wall Apparatus; Heat Pipe Apparatus; Heat Transfer in Natural Convection Apparatus;Stefan Boltzmann Apparatus; Emissivity	6	Sh. Amrik Singh	Workshop Instructor	B.Tech
7	CAD Lab	20	20 Workstations, Projector	12	Sh. Vijay	Lab Technician	B.Tech
8	CNC Lab	24	CNC Turning Centre; CNC Machining Centre; CNC Wire Cut EDM; 3D-Printer	10	Sh. Vijay	Lab Technician	B.Tech
9	Internal Combustion Engine Lab	24	Cut-Section Model of 4-Stroke Diesel Engine Exhaust Gas Analyzer Four Stroke Single Cylinder Diesel Engine Test Rig with Electrical Dynamometer Four Stroke Four	6	Sh. Amrik Singh	Workshop Instructor	B.Tech
10	Fluid Mechanics Lab	24	Orifice & Mouthpiece Apparatus Notch Tank Apparatus Jet on Vane Apparatus Combined Pipe Friction Measurement Apparatus Venturimeter and Orifice Meter Apparatus	6	Sh. Mandeep	Workshop Instructor	Diploma
11	Hydraulic Machine Lab	24	Pelton Wheel Turbine Test Rig Francis Turbine Test Rig Multispeed (Single Stage) Centrifugal Pump Test Rig Reciprocating Pump Test Rig	6	Sh. Mandeep	Workshop Instructor	Diploma
12	Mechanics of Solids Lab	24	Universal Testing Machine Impact testing Machine Ericssion Cupping Testing Machine Torsion Testing Machine Vickers Hardness Testing Machine Rockwell	10	Sh. Joginder Patar	Technical Assistant Grade-	M.Phil
13	Kinematics of Machines Lab	24	Inversions of Four Bar Kinematic Chain Inversions of Single Slider Crank Chain Inversions of Double Slider Crank Chain Cam and Follower Arrangements Gear and	6	Sh. Harish	Lab Attendant	M.A.
14	Dynamics of Machines Lab	24	Universal Governor Apparatus Motorized Gyroscope Apparatus Static and Dynamic Balancing Apparatus Gyro Models (Different Types)	6	Sh. Harish	Lab Attendant	M.A.
15	Refrigeration & Air Conditioning Lab	24	Refrigeration Cum Heat Pump Test Rig Vapor Absorption Test Rig Cut Model of Reciprocating & Rotary Compressor Heat Transfer Test Rig Refrigeration & A/C	6	Sh. Joginder Patar	Technical Assistant Grade-	M.Phil
16	Tribology Lab	20	Journal Bearing Test Rig Wear and friction Monitor Four Ball Tester Surface Roughness tester	4	Sh. Sunil	Lab Attendant	Diploma

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Machine Shop	First aid kits, Fire extinguisher, All the machines in the labs are earthed.
2	Welding Shop	First aid kits, Fire extinguisher, All the machines in the labs are earthed.
3	Tribology Lab	First aid kits, Fire extinguisher, All the machines in the labs are earthed.
4	Foundry & Forging Shop	First aid kits, Fire extinguisher,
5	Carpentry Shop	First aid kits, Fire extinguisher,
6	Fitting Shop	First aid kits, Fire extinguisher, All the machines in the labs are earthed.
7	Internal Combustion Engine Lab	First aid kits, Fire extinguisher,
8	CNC Lab	First aid kits, Fire extinguisher, All the machines in the labs are earthed.
9	CAD Lab	First aid kits, Fire extinguisher,
10	Fluid Mechanics Lab	First aid kits, Fire extinguisher, All the machines in the labs are earthed.
11	Fluid Machines Lab	First aid kits, Fire extinguisher, All the machines in the labs are earthed.

12	Mechanics of Solids Lab		First aid kits, Fire extinguisher, All the machines in the labs are earthed.
13	Kinematics of Machines Lab		First aid kits, Fire extinguisher,
14	Dynamics of Machines Lab		First aid kits, Fire extinguisher,
15	Refrigeration & Air Conditioning Lab		First aid kits, Fire extinguisher, All the machines in the labs are earthed.
16	Heat Transfer Lab		First aid kits, Fire extinguisher, All the machines in the labs are earthed.

D3. Project Laboratory/Research Laboratory

Innovation Lab in PDUIIC aimed at **fostering innovation, product development, research activities, and entrepreneurship**. These facilities are equipped with advanced instruments, prototyping tools, and collaborative spaces to encourage students and faculty to work on interdisciplinary projects, industry-sponsored research, and startups.

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
2022-23(CAYm2)	630	32	29	6	76
2023-24(CAYm1)	630	32	29	7	77
2024-25(CAY)	810	40	29	9	62

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 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Infrastructure Built-Up	1040483000	99418000	318500000	40609000	343000000	60339000	321500000	76651000
Library	15810000	8151000	11675000	11208000	13925000	9161000	13925000	8469000
Laboratory equipment	110785000	43915000	40470000	27380000	42875000	18484000	38770000	20034000
Teaching and non-teaching staff salary	1842246000	1274800000	1625800000	1264301000	1628215000	1034925000	1483300000	993812000
Outreach Programs	2422500	1576500	1435000	515000	1350000	400000	1350000	103000
R&D	2560000	1468000	2560000	1717000	1520000	1484000	1520000	1433000
Training, Placement and Industry linkage	1425000	606000	1375000	389000	1500000	321000	1620000	262000
SDGs	2422500	1576500	1435000	515000	1350000	400000	1350000	103000
Entrepreneurship	4569000	1474000	6096000	1637000	16413000	1130000	30660000	14966000
Others, specify	0	0	0	0	0	0	0	0
Total	**3022723000**	**1432985000**	**2009346000**	**1348271000**	**2050148000**	**1126644000**	**1893995000**	**1115833000**

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 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Laboratory equipment	1800000	1770636	1200000	1158412	600000	35835	600000	102500
Software	200000	0	300000	0	480000	0	450000	0
SDGs	200000	145834	140000	0	120000	117757	70000	0
Support for faculty development	3125000	2629099	620000	434336	135000	127433	59000	52239
R & D	160000	150000	140000	119020	120000	100432	160000	64417
Industrial Training, Industry expert, Internship	40000	24136	0	0	0	0	0	0
Miscellaneous Expenses*	0	0	0	0	90000	12744	70000	47032
Total	**5525000**	**4719705**	**2400000**	**1711768**	**1545000**	**394201**	**1409000**	**266188**