

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: 2
Application No: 11137	Date of Submission: 31-10-2025

PART A- Profile of the Institute

A1.Name of the Institute: Jai Shriram Engineering College	
Year of Establishment : 2009	Location of the Institute: Tirupur Tamil Nadu
A2. Institute Address: Dharapuram Road, Avinasipalayam, Tirupur	
City:Coimbatore	State:Tamil Nadu
Pin Code:638660	Website:www.jayshriram.edu.in
Email:principal@jayshriram.edu.in	Phone No(with STD Code):0421-2313335
A3. Name and Address of the Affiliating University (if any):	
Name of the University : Anna University Chennai	City: Chennai
State : Tamil Nadu	Pin Code: 600025
A4. Type of the Institution: Self-Supported Institute	
A5. Ownership Status: Self financing	

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

- No. of UG programs: 8
- No. of PG programs: 4

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	Engineering & Technology	PG	Applied Electronics	2012	--	Electronics and Communication Engineering
2	Engineering & Technology	UG	Artificial Intelligence and Data Science	2021	--	Artificial Intelligence and Data Science
3	Engineering & Technology	UG	Civil Engineering	2010	--	Civil Engineering
4	Engineering & Technology	UG	Computer Science and Engineering	2009	--	Computer Science and Engineering
5	Engineering & Technology	PG	Computer Science and Engineering	2012	--	Computer Science and Engineering
6	Engineering & Technology	UG	Electrical and Electronics Engineering	2009	--	Electrical and Electronics Engineering
7	Engineering & Technology	UG	Electronics & Communication Engineering	2009	--	Electronics and Communication Engineering
8	Engineering & Technology	UG	Fashion Technology	2020	--	Fashion Technology

9	Engineering & Technology	UG	Information Technology	2024	--	Information Technology
10	Engineering & Technology	UG	Mechanical Engineering	2009	--	Mechanical Engineering
11	Engineering & Technology	PG	Structural Engineering	2014	--	Civil Engineering
12	Management	PG	Master of Business Administration	2010	--	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
Fashion Technology	No	Fashion Technology	UG
Mechanical Engineering	No	Mechanical 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	2009 / --	60	No	NA	60	2009	07/08/TN/E&T/2009/81	Applying first time	--	--	0	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 :	Dr. R. J. Golden Renjith Nimal
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	60	44	31	21	18	26	17
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	9	3	4	8	13	5
N3=Separate division if any	0	0	0	0	0	3	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	53	34	25	26	42	22

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	44	0	73.33
2023-24 (CAYm2)	60	31	0	51.67

Average [(ER1 + ER2 + ER3) / 3] = 75.00≡ 14.00

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).	68.00	73.00	65.00
B=No. of students who graduated from the program in the stipulated course duration	25.00	38.00	21.00
Success Rate (SR)= (B/A) * 100	36.76	52.05	32.31

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 40.37

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)	7.71	7.98	8.04
Y=Total no. of successful students	44.00	31.00	21.00
Z=Total no. of students appeared in the examination	44.00	31.00	21.00
API [X*(Y/Z)]	7.71	7.98	8.04

Average API[(AP1+AP2+AP3)/3] : 7.91

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)	7.55	7.81	7.63
Y=Total no. of successful students	33.00	25.00	25.00
Z=Total no. of students appeared in the examination	34.00	25.00	26.00
API [X * (Y/Z)]	7.33	7.81	7.34

Average API [(AP1 + AP2 + AP3)/3] : 7.49

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)	7.71	7.81	7.71
Y=Total no. of successful students	25.00	25.00	38.00
Z=Total no. of students appeared in the examination	25.00	25.00	38.00
API [X*(Y/Z)]:	7.71	7.81	7.71

Average API [(AP1 + AP2 + AP3)/3] : 7.74

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	68.00	73.00	65.00
X=No. of students placed	21.00	31.00	19.00
Y=No. of students admitted to higher studies	1.00	0.00	1.00
Z= No. of students taking up entrepreneurship	1.00	2.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	33.82	45.21	32.31

Average Placement Index = (P_1 + P_2 + P_3)/3: 37.11 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. R. J. Golden Renjith Nimal	XXXXXXXX38N	Ph.D	Anna University	Manufacturing Engineering	01/09/2021	4.1	Associate Professor	Professor	16/06/2025	Regular	Yes		Yes
2	Dr. M. Sucharitha	XXXXXXXX76B	Ph.D	Acharya Nagarjuna University	Industrial Engineering & Management	16/06/2025	0.4	Associate Professor	Associate Professor		Regular	Yes		No
3	Dr. R. Thirumalai	XXXXXXXX45H	Ph.D	Anna University	Manufacturing Engineering	09/08/2022	2.8	Professor	Professor		Regular	No	30/04/2025	No
4	Mr. R. Mahendran	XXXXXXXX23K	M.E.	Anna University	CAD/ CAM	07/06/2012	13.4	Assistant Professor	Assistant Professor		Regular	Yes		No
5	Mr. L. Nirmal Raj	XXXXXXXX74R	M.Tech	PRIST University	Manufacturing Technology	29/07/2016	9.3	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Mr. S. Karthikeyan	XXXXXXXX57C	M.E.	Anna University	CAD CAM Engineering	16/05/2017	8.5	Assistant Professor	Assistant Professor		Regular	Yes		No
7	Mr. B. Anand	XXXXXXXX79C	M.E.	Anna University	Engineering Design	02/01/2021	4.9	Assistant Professor	Assistant Professor		Regular	Yes		No
8	Mr. J. Melvin Jones	XXXXXXXX87A	M.E.	Anna University	Thermal Engineering	11/03/2021	4.7	Assistant Professor	Assistant Professor		Regular	Yes		No
9	Mr. P. Marshal Raj	XXXXXXXX57K	M.E.	Anna University	Energy Engineering	01/07/2022	3.3	Assistant Professor	Assistant Professor		Regular	Yes		No
10	Mr. P. A. Nigal Ashik	XXXXXXXX64R	M.E.	Anna University	Thermal Engineering	04/09/2019	6.1	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Mr. R. Gowtham	XXXXXXXX62H	M.E.	Anna University	Engineering Design	16/06/2025	0.4	Assistant Professor	Assistant Professor		Regular	Yes		No
12	Mr. J. Mozas Santhos Kumar	XXXXXXXX06P	M.E.	Anna University	IC Engines	25/08/2025	0.2	Assistant Professor	Assistant Professor		Regular	Yes		No
13	Dr. S. Nithiyanandam	XXXXXXXX11E	Ph.D	Anna University	Manufacturing Engineering	17/06/2016	9.4	Professor	Professor		Regular	Yes		No
14	Mr. N. Manoj	XXXXXXXX27G	M.E.	Anna University	CAD/ CAM	11/07/2016	9.3	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 Department0
Table No.C2.1: Student-faculty ratio.

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	66	64	64
UG1.C	64	64	66
UG1.D	64	66	66
UG1: Mechanical Engineering	194	194	196
DS=Total no. of students in all UG and PG programs in the Department	194	194	196
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= 194	S2= 194	S3= 196
DF=Total no. of faculty members in the Department	13	11	11
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= 13	F2= 11	F3= 11
FF=The faculty members in F who have a 100% teaching load in the first-year courses	1	1	1
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 16.17	SFR2= 19.40	SFR3= 19.60
Average SFR for 3 years	SFR= 18.39		

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)	3	10	9.00	19.44
2024-25(CAYm1)	3	8	9.00	17.22
2023-24(CAYm2)	3	8	9.00	17.22

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	2.00	2.00	1.00	6.00	10.00
2024-25	1.00	2.00	2.00	1.00	6.00	8.00
2023-24	1.00	2.00	2.00	1.00	6.00	8.00
Average	RF1=1.00	AF1=2.00	RF2=2.00	AF2=1.00	RF2=6.00	AF2=8.67

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	Mr.V.R.Indar Sarath	Vice President (Retired)	Wheels India Ltd, Chennai	ME3393 - Manufacturing Processes (Odd Semester)	26.00
2	Mr.V.R.Indar Sarath	Vice President (Retired)	Wheels India Ltd, Chennai	ME3811 - Project Work (Even Semester)	28.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.V.R.Indar Sarath	Vice President (Retired)	Wheels India Ltd, Chennai	ME3393 - Manufacturing Processes (Odd Semester)	27.00
2	Mr.V.R.Indar Sarath	Vice President (Retired)	Wheels India Ltd, Chennai	ME3811 - Project Work (Even Semester)	28.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr.V.R.Indar Sarath	Vice President (Retired)	Wheels India Ltd, Chennai	ME3393 - Manufacturing Processes (Odd Semester)	27.00
2	Mr.V.R.Indar Sarath	Vice President (Retired)	Wheels India Ltd, Chennai	ME3811 - Project Work (Even Semester)	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	6	12	3
2	No. of peer reviewed conference papers published	11	10	2
3	No. of books/book chapters published	2	2	0

C7. Sponsored Research Project

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

(CAYm1)

(CAYm2)

(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. R. J. Golden Renjith Nimal	Mr. S. Karthikeyan	Mechanical Engineering	Design and Development of Automated Fettling Systems	Barani Ferrocast India Private Limited	4 months	4.20
						Amount received (Rs.):4.20

Total Amount (Lacs) Received for the Past 3 Years: 4.20**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
Mr. S. Karthikeyan		Mechanical	CAD Modelling & Kinematic Analysis of Conveyor System	Integra Automation, Coimbatore	2 Months	0.25
Mr. S. Karthikeyan		Mechanical	Finite Element Analysis of Pump Housing	Barani Ferrocast Pvt. Ltd., Coimbatore	3 Months	0.35
Mr. R. Mahendran		Mechanical	Prototype Development of Textile Roller Assembly	Lakshmi Machine Works (LMW), Coimbatore	2 Months	0.45
Mr. R. Mahendran		Mechanical	3D Modelling & Simulation of 2 T Hydraulic press	Barani Hydraulics India Private Limited, Coimbatore	1 Month	0.27
Mr. J. Melvin Jones		Mechanical	Design & Fabrication of Sensor Mounting Bracket	Barani Hydraulics India Private Limited, Coimbatore	1 Month	0.41
Mr. J. Melvin Jones		Mechanical	Conversion of Wood Pattern into PLA Material using 3D Printing	Shiniunicorns Solar Technologies, Coimbatore	3 Months	0.25
						Amount received (Rs.):1.98

(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
Mr. S. Karthikeyan		Mechanical	Structural Analysis of Foundry Patterns	Barani Ferrocast Pvt. Ltd., Coimbatore	3 Months	0.31
Mr. S. Karthikeyan		Mechanical	Dynamic Simulation of Textile Machine Parts	Shiva Textiles Pvt. Ltd., Tirupur	1 Month	0.20
Mr. S. Karthikeyan		Mechanical	Development of Compact Hydraulic Press	Barani Hydraulics India Private Limited, Coimbatore	2 Months	0.55
Mr. R. Mahendran		Mechanical	Reverse Engineering of Gearbox Components	Integra Automation, Coimbatore	2 Months	0.23
Mr. R. Mahendran		Mechanical	Thermal Simulation of Induction Furnace	Sri Amman Steels, Coimbatore	1 Month	0.36
						Amount received (Rs.):1.65

(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
Mr. S. Karthikeyan		Mechanical	Kinematic Modelling of Textile Loom Mechanism	Shiva Mills Ltd., Tirupur	1 Month	0.56
Mr. S. Karthikeyan		Mechanical	3D CAD Design of Pump Impeller	Texmo Industries, Coimbatore	1 week	0.72
Mr. R. Mahendran		Mechanical	Design & Analysis of Valve Body	Barani Hydraulics India Private Limited, Coimbatore	1 week	0.70
Mr. R. Mahendran		Mechanical	Prototype of Low-Cost Conveyor Drive System	Integra Automation, Coimbatore	1 week	0.68
						Amount received (Rs.):2.66

Total amount (Lacs) received for the past 3 years: 6.29

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.

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. R. J. Golden Renjith Nimal	Development of a Semi-Automatic Edible Wafer Cup Making Machine with Temperature Control System	7 months	1.09	1.15	Functional prototype developed; demonstrated automation, temperature control, and PLC programming concepts to students
Mr. S. Karthikeyan	Design and Development of a Solar-Powered Electric Golf Cart	5 months	2.36	2.41	Working model developed; illustrated solar energy integration, battery management systems, and IoT applications
Mr. R. Mahendran	Design and Performance Analysis of a Parabolic Trough Solar Concentrator for Steam Generation	2 months	0.79	0.81	Functional system developed; showcased solar thermal principles and heat transfer analysis to students
Mr. L. Nirmal Raj	Design and Development of a Hybrid VTOL Drone for Agricultural Monitoring	2.5 months	0.17	0.22	VTOL prototype developed; demonstrated aerodynamics, flight control, and UAV technology applications
Mr. B. Anand	Development of a Multi-Crop, Precision Seed Sowing Machine with Variable Rate Technology	3 months	0.41	0.52	Working prototype developed; illustrated precision agriculture and variable rate control systems
Mr. J. Melvin Jones	Development of a Large-Scale Fused Deposition Modeling (FDM) 3D Printer for Prototyping Applications	4 months	1.27	1.30	Large-scale printer developed; enabled hands-on learning in additive manufacturing and rapid prototyping
			Amount received (Rs.): 6.09		

(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
			Amount received (Rs.): 0		

Total amount (Lacs) received for the past 3 years : 6.09

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	Manufacturing Technology Laboratory	4	• Centre Lathes • Shaper • Arc welding unit • Surface grinding machine • Cylindrical grinding machine • Radial drilling machine • Lathe Tool Dresser	06	Mr.K. Baskaran	Lab Technician	I.T.I

2	Thermal Engineering Laboratory	4	• Cut model of two stroke petrol engine • Cut model of four stroke diesel engine • Single cylinder, four stroke diesel engine • Back and forth motion engine • Red	06	Mr. N. Balamurali	Lab Instructor	DME
3	Heat Transfer Laboratory	4	• Refrigeration test rig • Stefan boltzmann apparatus • Lagged pipe apparatus • Heat transfer by forced and natural convection apparatus • Boiling apparatus	03	Mr. N. Balamurali	Lab Instructor	DME
4	Strength of Materials Laboratory	4	• Universal testing machine • Torsion testing machine • Impact testing machine • Brinell hardness testing machine • Rockwell hardness testing machine • Castin	06	Mr. N. Balamurali	Lab Instructor	DME
5	CAD and CAD/CAM Laboratory	1	• Computer (60) (Ram-4 GB, 512MB SSD, Dual Core processor) • Analysis software • CADM software • AUTO CAD • CNC Lathe • CNC Milling	09	Mr.K. Baskaran	Lab Instructor	I.T.I
6	Metrology and Dynamics Laboratory	4	• Motorised gyroscope • Governor apparatus governors • Whirling of shaft apparatus • Dynamic balancing machine • Torsion pendulum apparatus	03	Mr.G. Prabhu	Lab Instructor	I.T.I
7	Mechatronics Laboratory	4	• Pneumatic linear actuation system trainer kit • Hybrid control-based dc drives • 8051 micro controller trainer kit • With stepper motor • Process control trainer kit	03	Mr.G. Prabhu	Lab Instructor	I.T.I
8	Fluid Machinery Laboratory	4	• Venturi meter • Orifice meter • Rotameter • Centrifugal pumps • Reciprocating pump • Pelton wheel turbine • Francis turbine • Kaplan turbine	03	Mr. N. Balamurali	Lab Instructor	DME
9	Engineering Practice Laboratory	4	• Central Lathe • Arc welding unit • Drilling machines • Gas welding unit • Carpentry tools • Sheet metal fabrication • Conduit bending • Pipe bending	30	Mr.K. Baskaran	Lab Instructor	I.T.I

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Manufacturing Technology	• Always follow operating procedures, never operate lathes, milling machines and other machinery unless you are appropriately trained and supervised. • Arrange tools and materials neatly. Remove scrap and waste regularly to avoid tripping hazards and accidental cuts. • Focus fully on the task at hand, avoid playing and distractions while operating machines. • Inform the lab supervisor if any machine is malfunctioning and use emergency stop switches for immediate shutdown during unsafe conditions.
2	Thermal Engineering Laboratory	• Use proper tools like tongs and insulated handles when working with boilers and heated pipes to avoid direct contact. • Do not touch hot surfaces such as boilers, engines, pipes lines in laboratory in working. • Check pressure gauges, safety valves and relief valves before starting and end of experiment.
3	Heat Transfer Laboratory	• Ensure water flow before operating heat exchangers and condensers • Ensure the safety from hot surfaces such as heaters, pipes, fins and heat exchangers during experimentation. • Follow the recommended limits for fluids flow and temperatures, overheating can cause pressure buildup and equipment failure.
4	Strength of Materials Laboratory	• Ensure testing specimens mounting position and alignment of before apply loading to prevent sudden slip and fracture. • Stay away from moving parts and avoid placing hands near the specimen while loading to prevent injuries. • Operate equipment only as instructed and within safe load limits to avoid machine failure and accidents.

5	CAD /CAM Laboratory	• Properly handle computer systems, peripherals and CNC controllers with care. • Use surge protectors and check that power cords, plugs and sockets are in good condition to avoid electrical hazards. • Install only authorized versions of CAD software to prevent malware infections and ensure compatibility. • Save work frequently, use strong passwords and avoid sharing sensitive designs without permission to prevent data loss.
6	Metrology and Dynamics Laboratory	• Use precision instruments like micrometers, dial gauges and dynamic equipment carefully to prevent damage and ensure accurate results. • During dynamics experiments avoid placing hands near to rotating and oscillating equipment to avoid accident. • Properly store the measuring instruments properly after use and maintain cleanliness to avoid rusting.
7	Mechatronics Laboratory	• Ensure all circuits are properly insulated and grounded and never touch live wires, terminals and moving actuators during operation. • Use proper voltage, current and pressure ratings for all experiments to avoid accident. • Read experiment procedures thoroughly, inspect sensors and actuators connections before starting the system to prevent failure.
8	Fluid Machinery Laboratory	• Ensure before operating pumps and turbines without water flow and load condition. • Check electrical connections, leaks before and during operating of valves, pipes and joints clearly. • Don't exceed the rated speed, pressure and discharge limits of machines.
9	Engineering practice Laboratory	• Avoid loose clothing, jewelry and open footwear inside the laboratory • Read all procedures and safety instructions before starting an experiment. If unsure, ask the instructor for clarification • Keep the work area neat and free of clutter. Clean spills and remove waste materials promptly to prevent accident.

D3. Project Laboratory/Research Laboratory

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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)	420	21	18	6	74
2024-25(CAYm1)	480	24	19	6	68
2025-26(CAY)	480	24	20	8	73

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
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Infrastructure Built-Up	27500000.00	7147260.00	6625000.00	6461202.00	5200000.00	4968387.81	1115000.00	1058662.00
Library	160000.00	125000.00	112500.00	100130.00	475000.00	448756.00	465000.00	454646.00
Laboratory equipment	4500000.00	4154093.00	4300000.00	4128217.00	2800000.00	2622710.00	1225000.00	1115757.00
Teaching and non-teaching staff salary	56848052.00	38848052.00	42575000.00	42073798.00	42500000.00	39569961.00	35600000.00	31030158.00
Outreach Programs	375000.00	309000.00	85000.00	79093.00	130500.00	125262.00	110000.00	96133.00
R&D	4000000.00	932254.00	3200000.00	2917411.00	1715000.00	1649747.00	875000.00	843228.00
Training, Placement and Industry linkage	2200000.00	1634000.00	1825000.00	1727814.00	275000.00	250190.00	385000.00	360776.00
SDGs	3700000.00	3550000.00	95000.00	90205.00	55000.00	49100.00	575000.00	525476.00
Entrepreneurship	50000.00	30500.00	75000.00	72000.00	45000.00	33231.00	34000.00	28400.00
Others, specify	50000000.00	33371576.00	46500000.00	45008247.00	31500000.00	30931749.00	26900000.00	26094896.91
Total	149333052.00	90101735.00	105392500.00	102658117.00	84695500.00	80649093.81	67284000.00	61608132.91

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	250000.00	64500.00	350000.00	280850.00	700000.00	612500.00	500000.00	466501.00
Software	160000.00	148989.00	0.00	0.00	0.00	0.00	0.00	0.00
SDGs	5000.00	2600.00	5000.00	3500.00	5000.00	3000.00	5000.00	2500.00
Support for faculty development	20000.00	20557.00	15000.00	12863.00	15000.00	14900.00	15000.00	7937.00
R & D	550000.00	140000.00	700000.00	719000.00	100000.00	76000.00	100000.00	26000.00
Industrial Training, Industry expert, Internship	250000.00	225043.00	160000.00	152267.00	80000.00	76093.00	40000.00	33163.00
Miscellaneous Expenses*	110000.00	31989.00	100000.00	108395.00	100000.00	88175.00	90000.00	84347.00
Total	1345000.00	633678.00	1330000.00	1276875.00	1000000.00	870668.00	750000.00	620448.00