


Estd : 1986

||Jai Sri Gurudev||

Sri Adichunchanagiri Shikshana Trust (R.)

SJC INSTITUTE OF TECHNOLOGY

An Autonomous Institution under VTU from 2024-25

AICTE Approved, Accredited by NAAC with A+ Grade & NBA (CSE, ISE, ECE, ME, CV & AE), Gold Rated by QS I-Gauge

P.B. No.20, B.B Road, Chikkballapur - 562 101, Karnataka

www.sjcit.ac.in

Hearty Welcome To
NBA Expert Team

INTRODUCTION

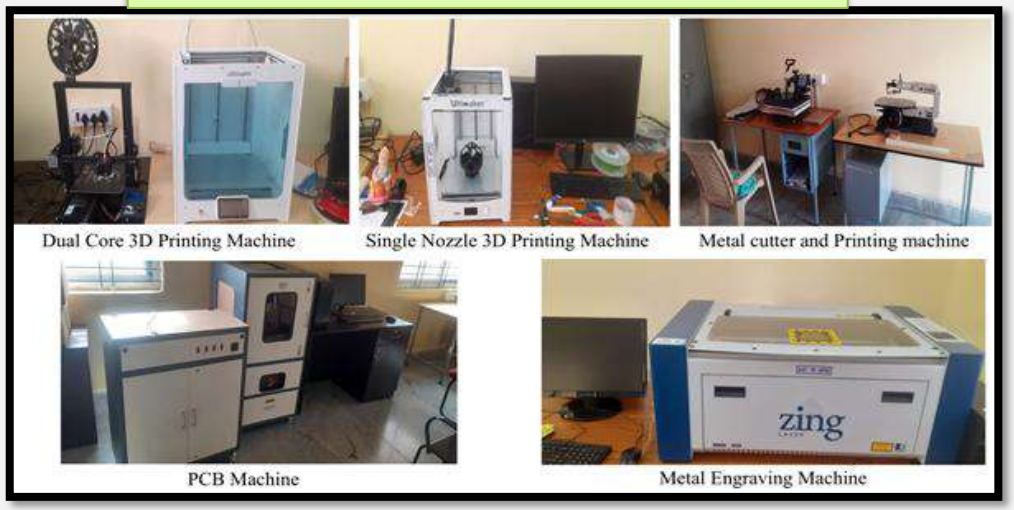
MILESTONE

- **2024** SJCIT With Autonomous Status
- **2022** NBA Compliance & Extended of 3 years
- **2022** NAAC Accredited with A+ Grade
- **2018** NBA Accredited for 3 years
- **2017** NAAC Accredited with B++ Grade
- **2004 & 08** NBA Accredited for the period of 3 years
- **2002** PG Programme Machine Design started with 18 Intake
- **1996-98** Intake Increased to 120
- **1991-92** Intake Increased to 60
- **1986** SJCIT Established & Mechanical Engg. Programme Started with 40 Intake

Bosch Rexroth Centre of Competence in Automation Technologies

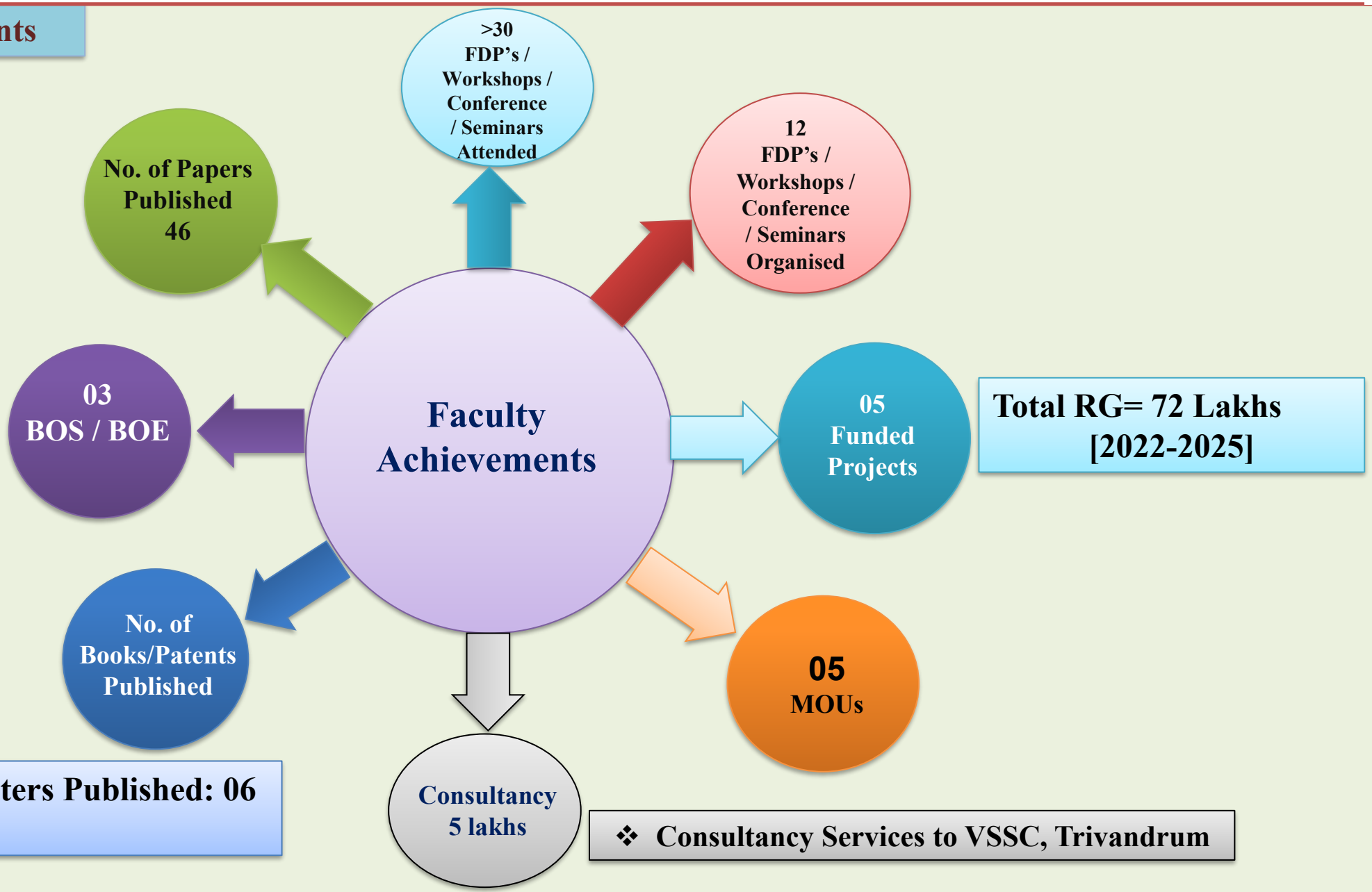
Bosch Artesian Carpentry Skill Development Centre

MSME Supported 3D Printing Lab



Research Funding of
Rs. 2cr from 2015-2025

Faculty Achievements



Total RG= 72 Lakhs [2022-2025]

No. of Books/Chapters Published: 06
No. of Patents :04

❖ Consultancy Services to VSSC, Trivandrum

Students Achievement

Tejas V
3rd Rank
Mechanical Engineering
2021

Subhodip Mitra
7th Rank
Mechanical Engineering
2019

No. of UG Ranks: 04

No. of PG Ranks: 08

No. of Students Funded Projects=09
NAIN: 05
KSCST:04
Amount: 15,28,600/-

No. of Startup Registered: 01

Registration ID Card

fssai

Registration ID:	21222047000039
Valid Upto:	22-01-2023
Name:	Naveen N N
Address:	Chikkaballapur Town, Chikballapur, Chikkaballapura, Karnataka - 562101
KOB:	General Manufacturing
Govt ID Card:	N/A

Issuing Authority: Chikkaballapura Issued On: 23-01-2022

[Disclaimer:This Registration ID card is issued only for the provisions laid down under Food Safety and Standards Act, 2006 and hence, shall not be used for any other purpose.]

CRITERIA 2: PROGRAM CURRICULUM AND TEACHING – LEARNING PROCESSESS

Students Achievement

Students Funded Project Details

Funding Agency	Title of the Project	Sanctioned Amount in Rs	Students List	Guide Name	Academic Year
KSCST (Karnataka State Council for Science & Technology)	Development of Areca Nut Tree Climbing And Harvesting Machine With Pesticide Sprayer	**8000/-**	Manoj B G Keerthi U Kiran I M	Prof. Palakshaiah	2021-22
	Soft Robotics Based Voice Controlled Prosthetic Hand	**6000/-**	Prajwal R Sham Sundar G K Shreeharsha A Yathish Gowda K R	Dr. H M Mallaradhya	2021-22
NAIN & IT-BT (New Age Incubation Centre)	Design and Development of Semi-Automatic Manhole Cleaning Machine	2,73,900/-	Suraj Mahato Vinutha H V Pawan Chand Rahul Kumar Abhishek Reddy Anu Reddy J Gangothri V	Dr. Veeresh Chandra M S	2020-21
	Automated Overhead Tank Cleaning Machine	2,56,650/-	Naveen N N Mohan Kumar B S Rakshitha N R	Prof. Subbareddy D N	2020-21
	Low Cost Manually Operated Seed Sowing Machine	2,65,000/-	Naveen N N Mohan Kumar B S Rakshitha N R	Prof. Subbareddy D N	2020-21

Students Achievement in Sports

VTU State Level Inter Collegiate Events - 2021-2022

Jagath Kumar C [1SJ18ME041]
Silver Medal, Judo

Chethan M [1SJ19ME404]
Gold Medal , Wrestling

Girish Kumar [1SJ18ME034]
Bronze Medal, Wrestling

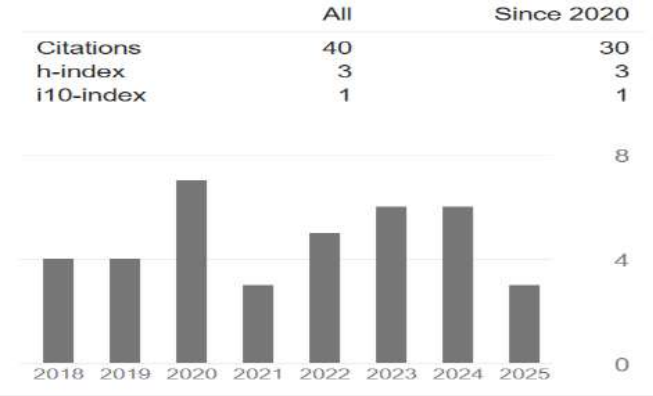
Chandan Gowda T N [1SJ20ME404]
Bronze Medal, Wrestling

Mr. Likhith Gowda Kabaddi player & a student of SJC Institute of Technology Chickballapur has represented Indian team under the Age 22 in 4th Indo-Nepal School Sports Games held at **Pokhara Nepal** during May 2019

My Profile

Dr. Thyagaraj N R
Professor & Head
Department of Mechanical Engineering
SJCIT, Chickballapur

hodmed@sjcit.ac.in 9972012848



Qualification	**B.E. (Mechanical Engineering), M.Tech (Machine Design)** **PhD (Fiber Reinforced Composites), Visvesvaraya Technological University**				
Experience	**Teaching - 18**				
Area of Interest	Conventional and Non-conventional Composites, Finite Element Analysis, MMC's				
Patents	**02**	**Publications**	**22**	**Scopus Indexed**	**14**
Funded Projects	**05** **Amount: 29.75 Lakhs**	**VTU CRC SCHEME- 12Lakhs, AICTE ATAL FDP-3.5 Lakhs (2024-25),** **VGST ECRA Scheme -10Lakhs (2023-24), VTU-TEQIP-3 Lakhs (2018-19), IEI- 0.75 Lakhs(2016-17)**			
Projects Guided	**UG- 20**	**PG-15**	**Research Scholars**	**05**	
Professional bodies Membership details	The Institution of Engineers (India) AMIE, Indian Institute of Foundry Men (IIF), MISCA (Indian Science Congress Association)				
University Assignments	BOE Member- VTU, BOS/BOE Member - VVCE, Doctoral Committee Member				
Awards Received	**"Best Researcher Award"** in IRESFO-2021, Indian Excellence Award from Jattayu Staffing Force Pvt ltd.				
No. of Books Published	**02 [Finite Element Method, Composite Material Technology]**				
No. of Conferences/Seminars /Workshops Attended	**32**	**Invited Talks**	**06**		

CRITERIA 1: VISION MISSION AND PROGRAM EDUCATIONAL OBJECTIVES

Institute

Vision

Preparing Competent Engineering and Management Professionals to Serve the Society

Mission

- Providing Students with a Sound Knowledge in Fundamentals of their branch of Study
- Promoting Excellence in Teaching, Training, Research and Consultancy
- Exposing Students to Emerging Frontiers in various domains enabling Continuous Learning
- Developing Entrepreneurial acumen to venture into Innovative areas
- Imparting Value based Professional Education with a sense of Social Responsibility

Department

Vision

Building Technically Competent Mechanical Engineers to Serve the Society

Mission

- Imparting strong fundamental knowledge in Mechanical Engineering and allied fields.
- Fostering a culture of collaboration and propagating Industry Institute interactions to enhance advances in latest technologies.
- Creating State -of -Art facilities benefitting students and faculty to carryout Research, Innovation, and Consultancy.
- Providing conducive environment for both students and faculty to engage in lifelong learning activities.
- Inculcating Professional ethics, Leadership qualities and Entrepreneurial skills among students.

CRITERIA 1: VISION MISSION AND PROGRAM EDUCATIONAL OBJECTIVES

Program Educational Objectives(PEOs)

PEO 1

Graduates will apply their engineering knowledge and Problem-Solving abilities to lead successful career in various technical Organizations or as Entrepreneurs

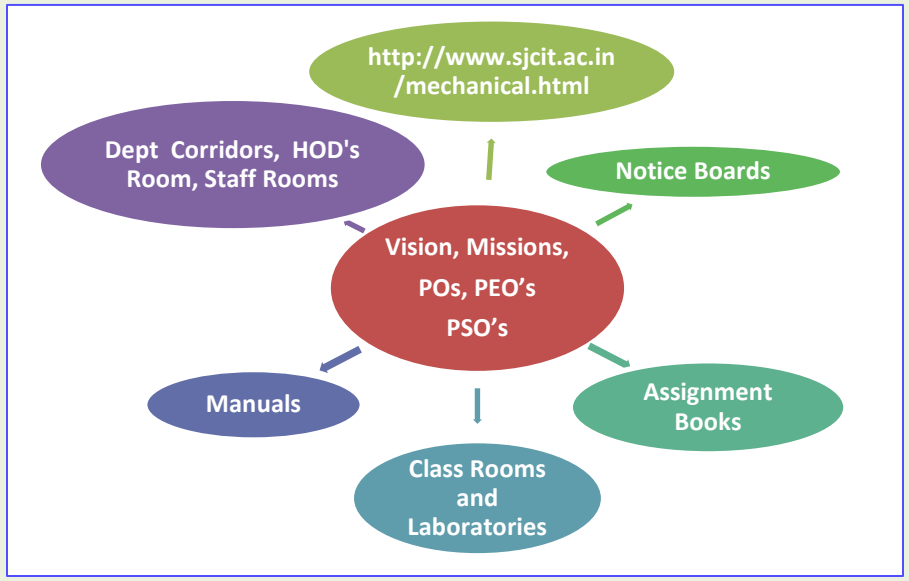
PEO 2

Graduates will be engaged in life-long learning activities and professional development through continuing education in mechanical engineering stream or in any other allied streams.

PEO 3

Graduates will exhibit effective communication skills, teamwork abilities, leadership qualities and ethical attitude.

Publishing of Vision, Mission and PEOs



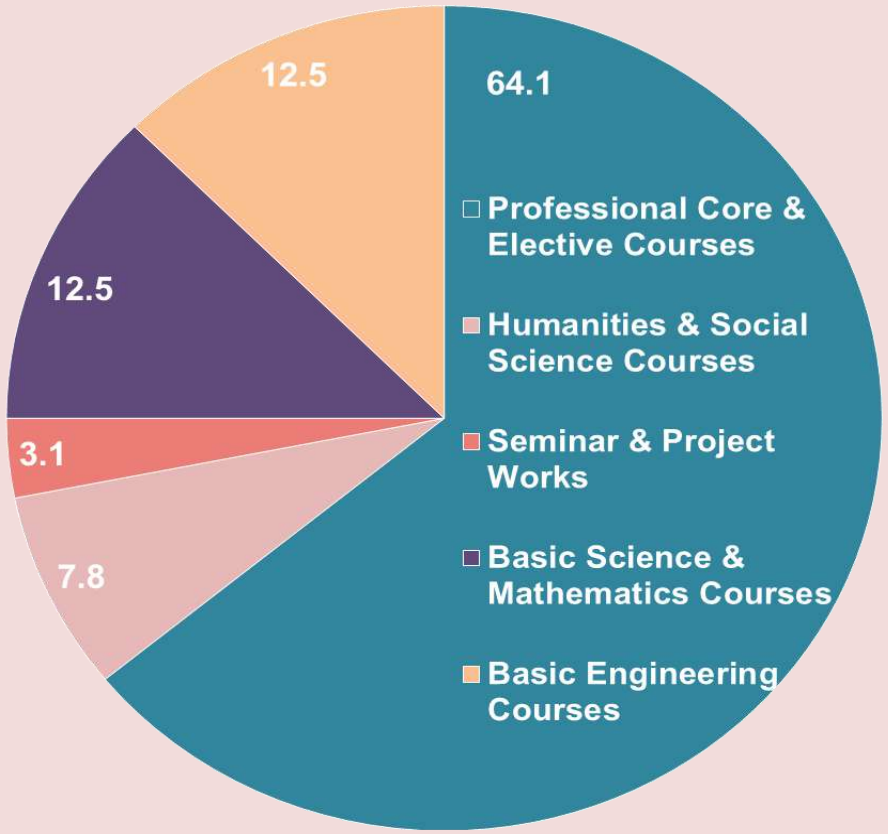
Consistency of PEOs with Mission Statements

PEO/MISSION	M1	M2	M3	M4	M5
PEO1	3	2	3	2	3
PEO2	3	2	2	3	2
PEO3	2	3	2	2	3

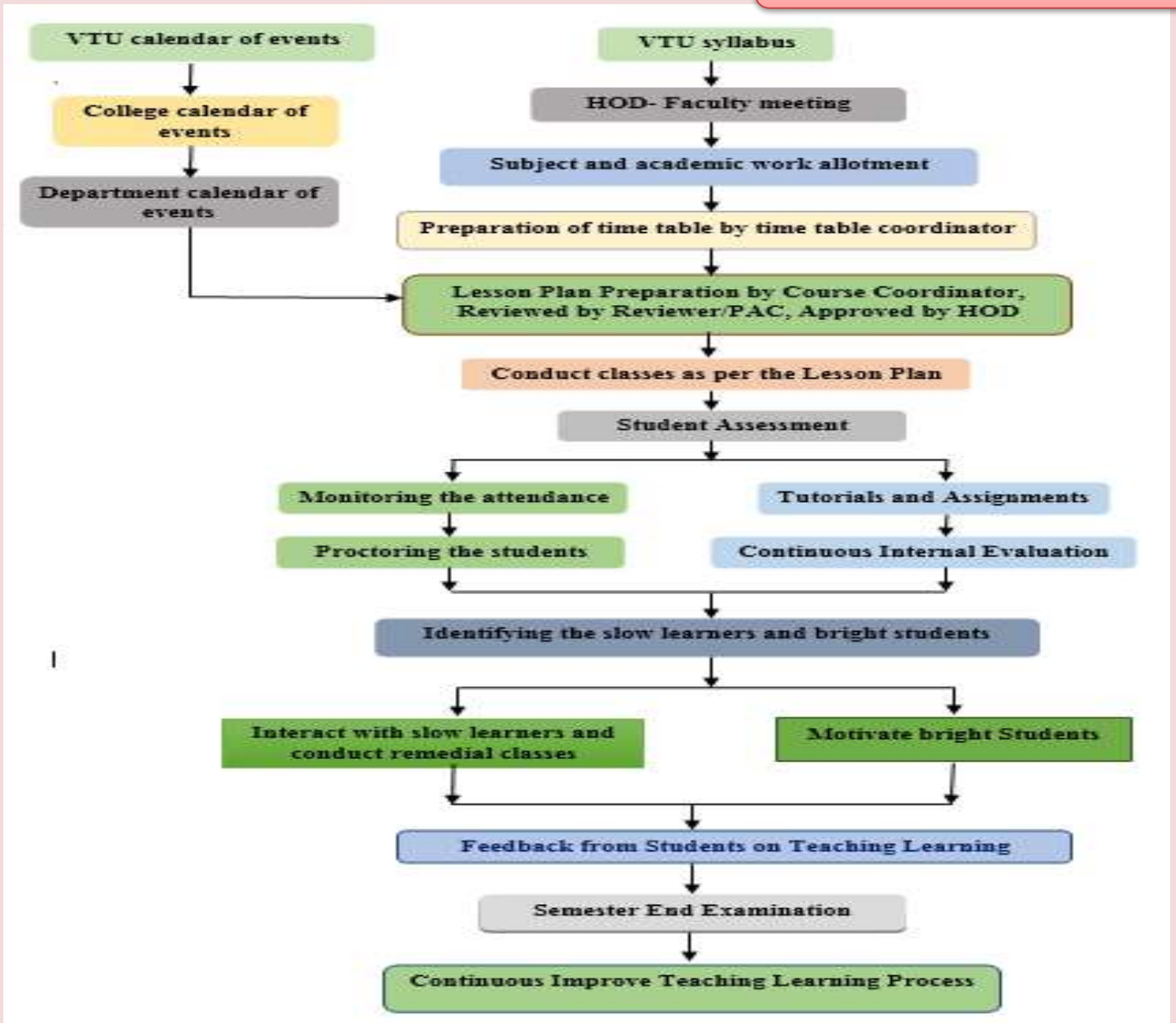
CRITERIA 2: PROGRAM CURRICULUM AND TEACHING – LEARNING PROCESSESS

% of Course Components in Curriculum

- **Choice Based Credit System (CBCS) 2021 & 2022 scheme**

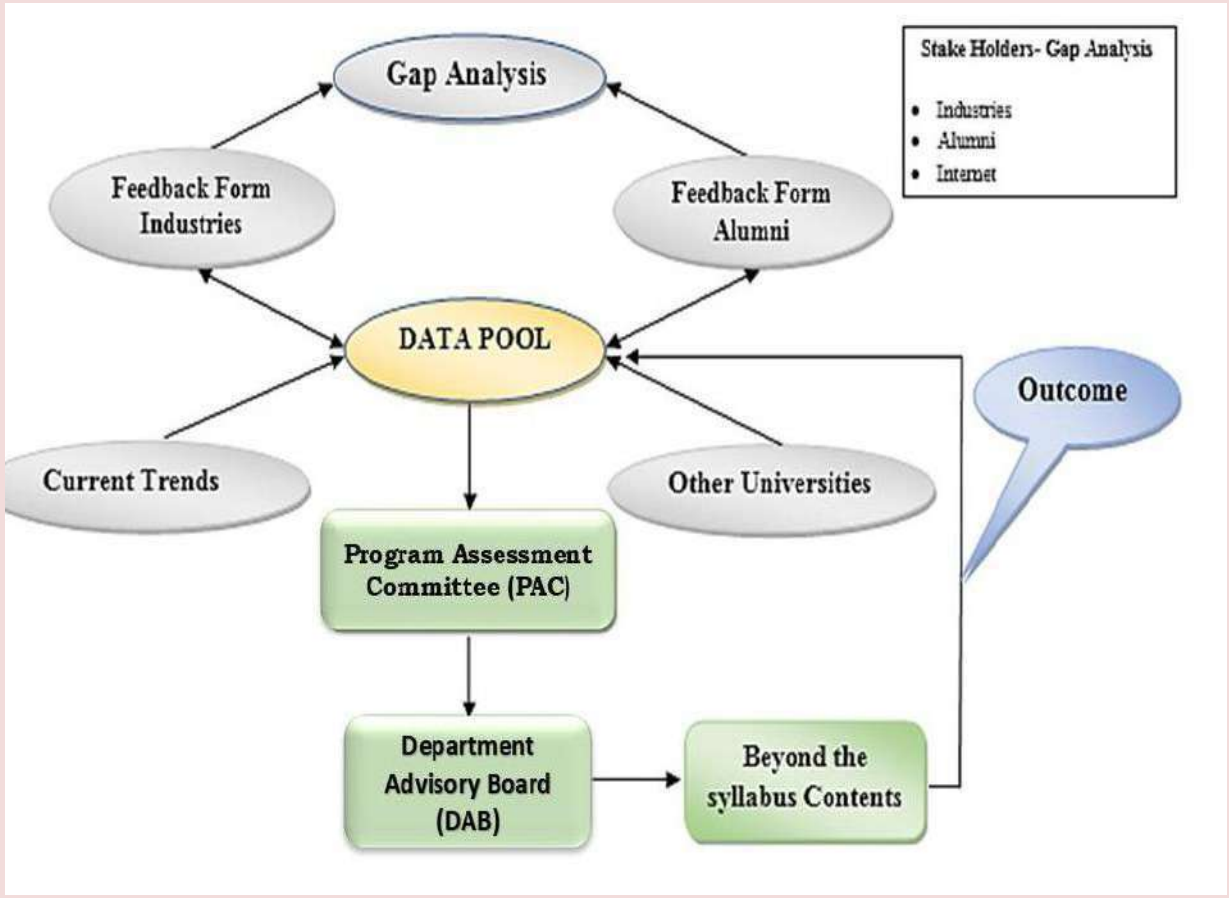


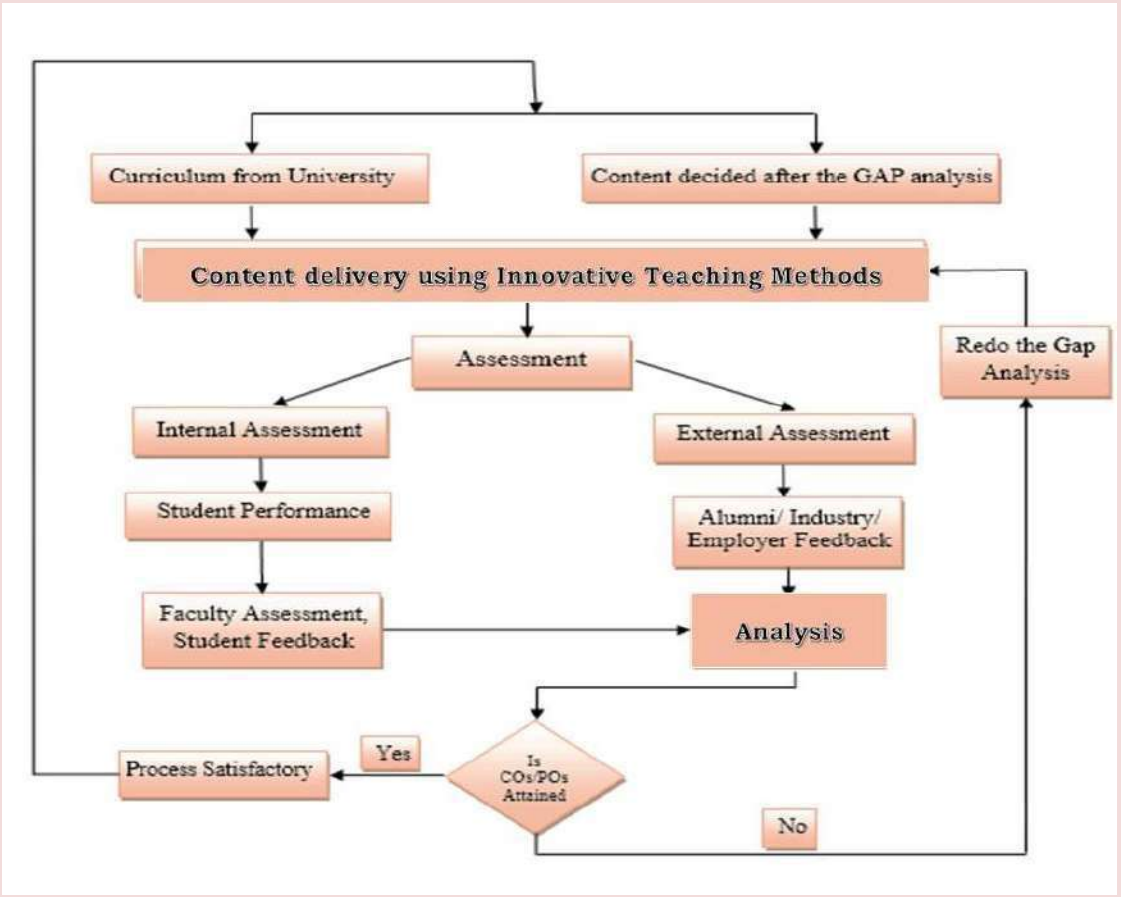
Teaching Learning Process



CRITERIA 2: PROGRAM CURRICULUM AND TEACHING – LEARNING PROCESSESS

Process used for identifying gaps to attain POs and PSOs



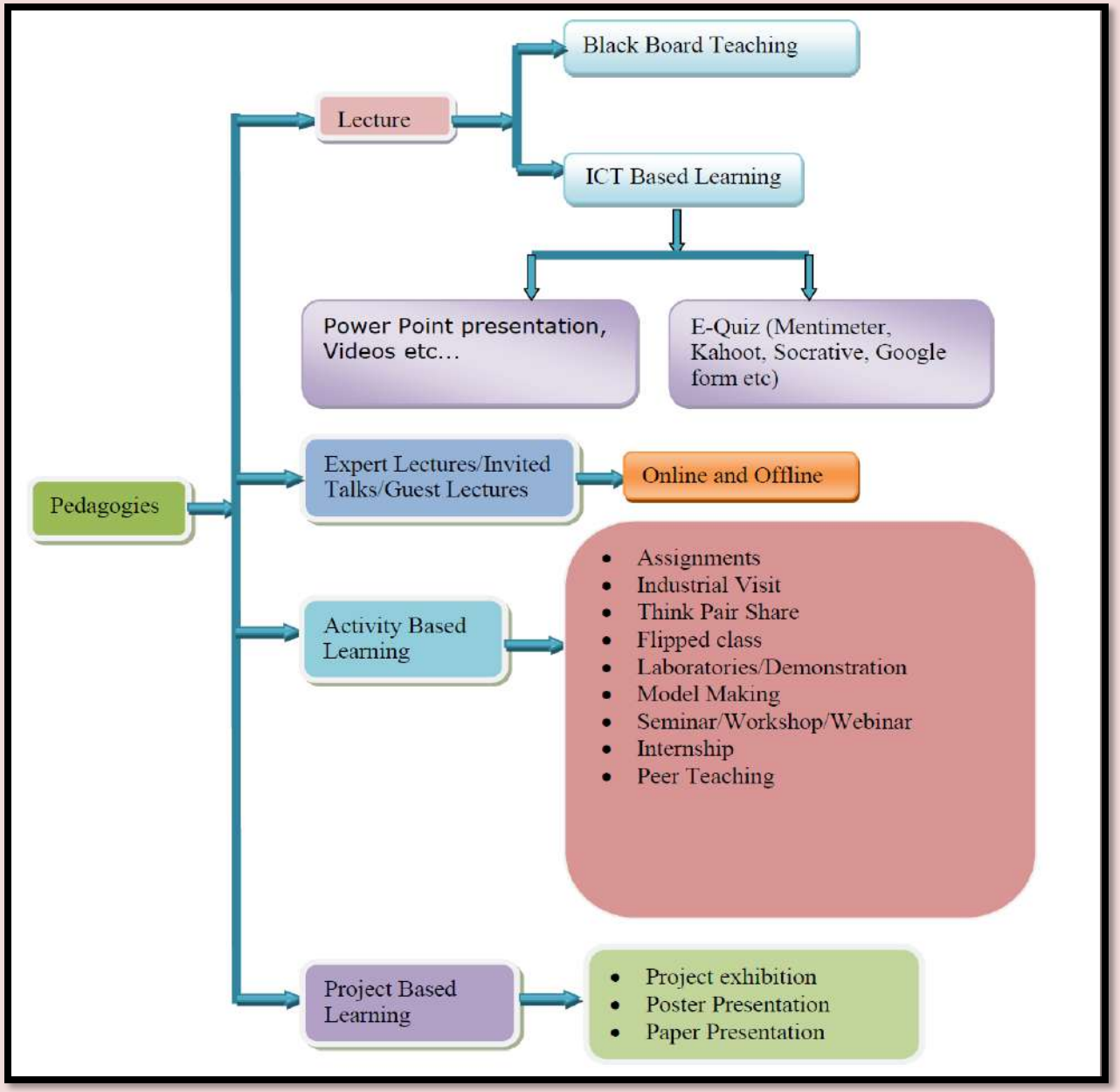


PSO1: Graduates will be able to apply engineering skills in design, manufacturing and analysis of mechanical systems.

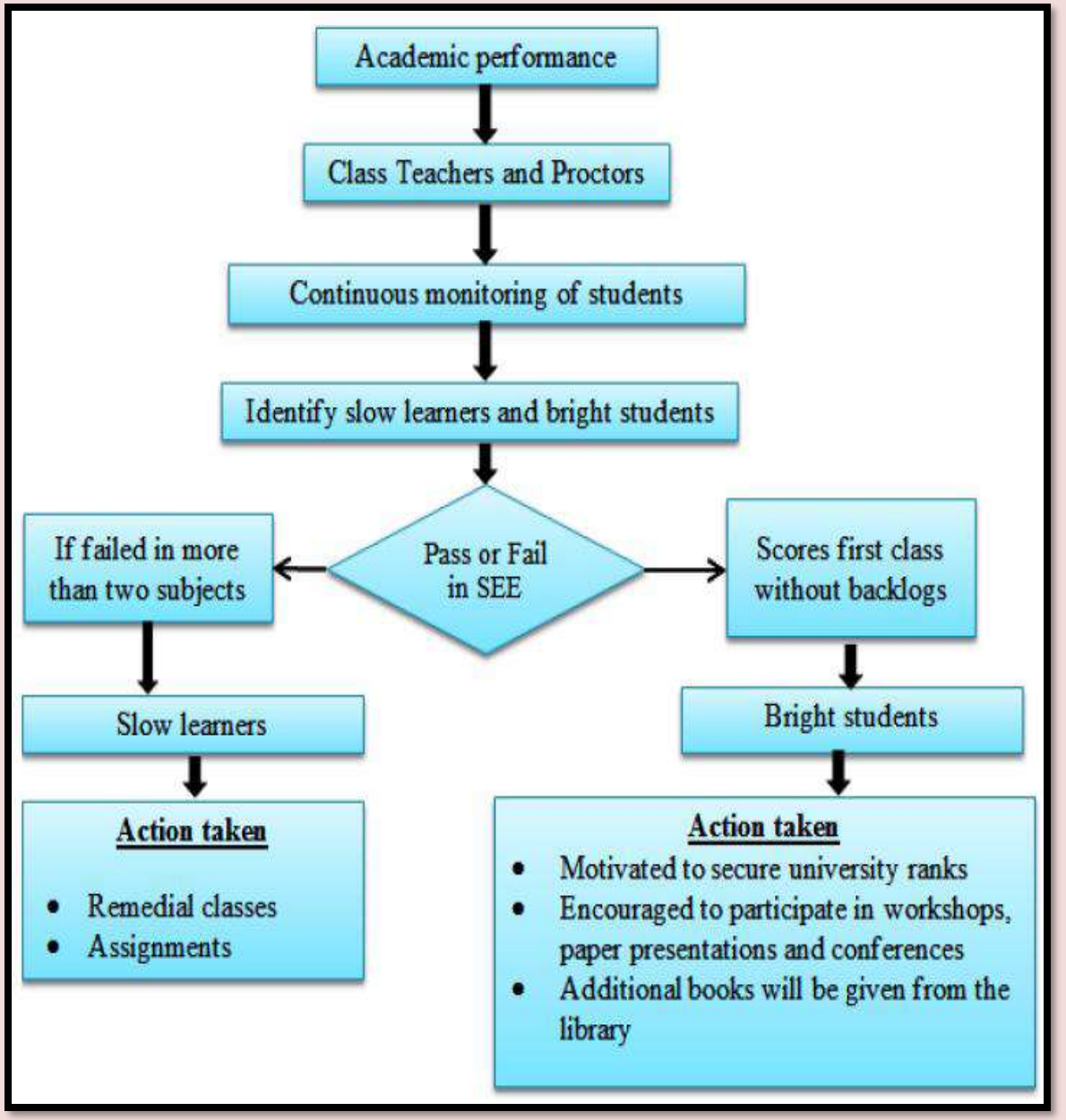
PSO2: Graduates will be able to utilize modern technical tools to provide solutions for various complex mechanical engineering problems

CRITERIA 2: PROGRAM CURRICULUM AND TEACHING – LEARNING PROCESSESS

Pedagogical Initiatives

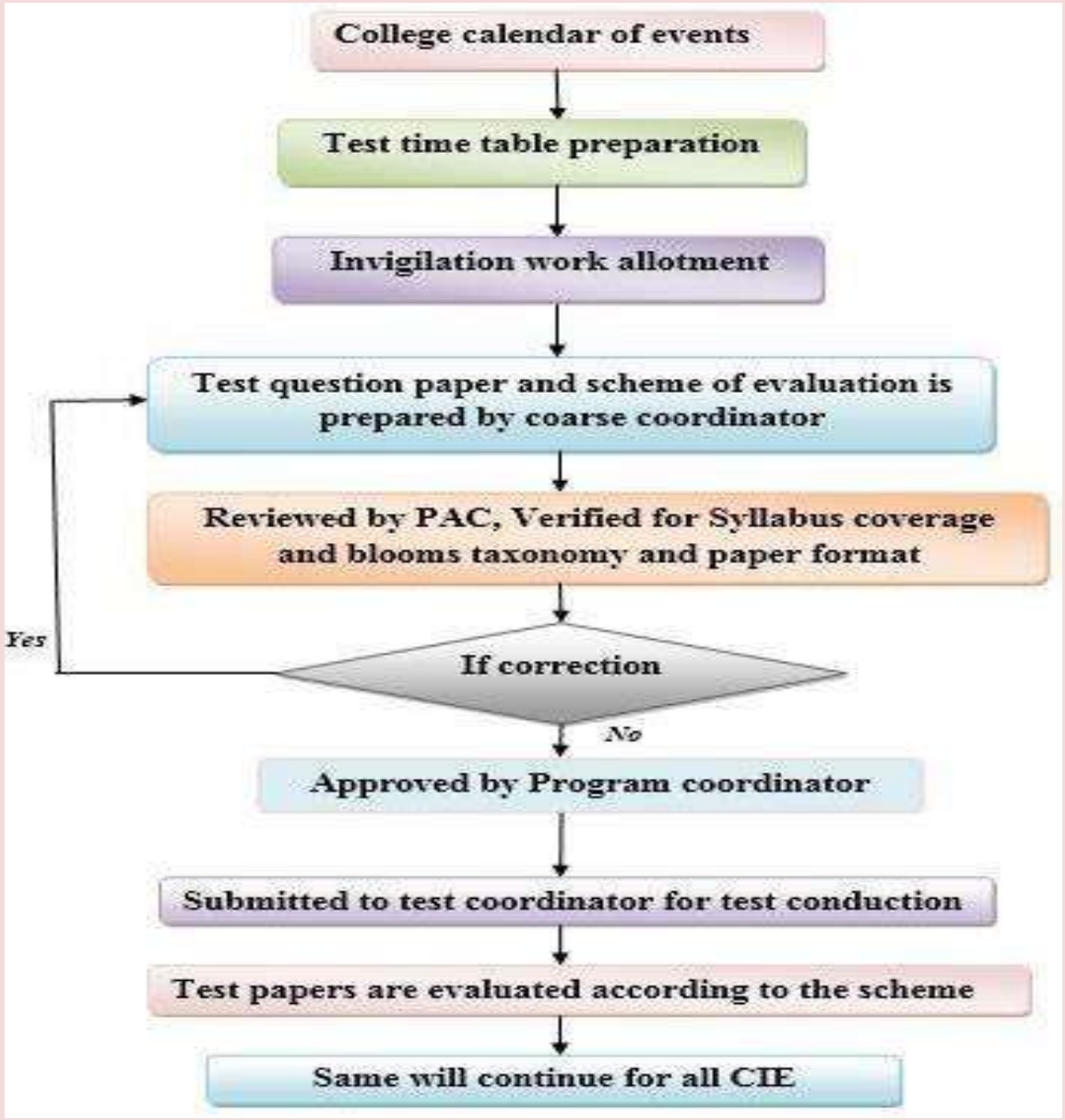


Slow Learners and Bright students

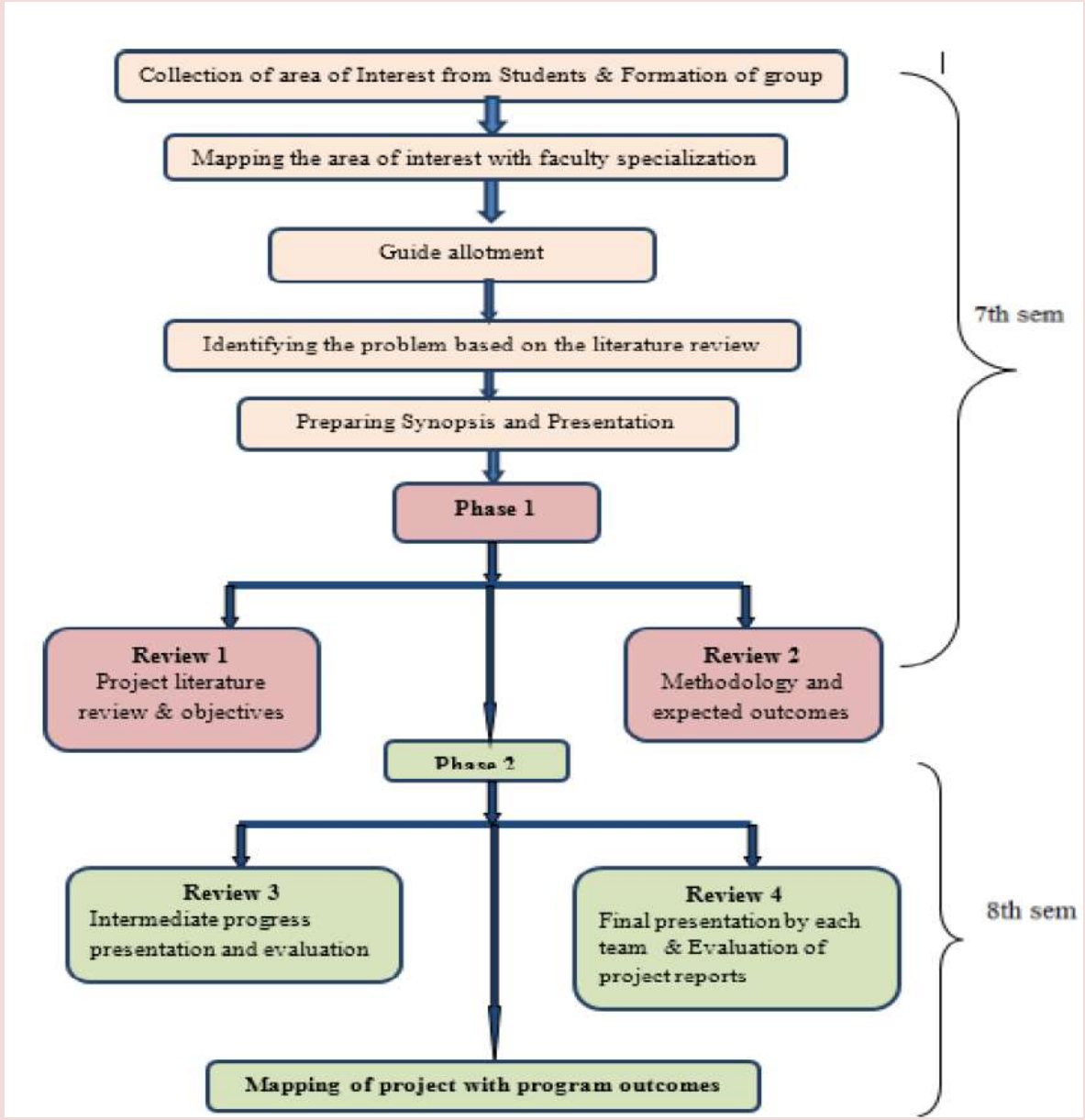


CRITERIA 2: PROGRAM CURRICULUM AND TEACHING – LEARNING PROCESSESS

Conduction of Internal Assessment

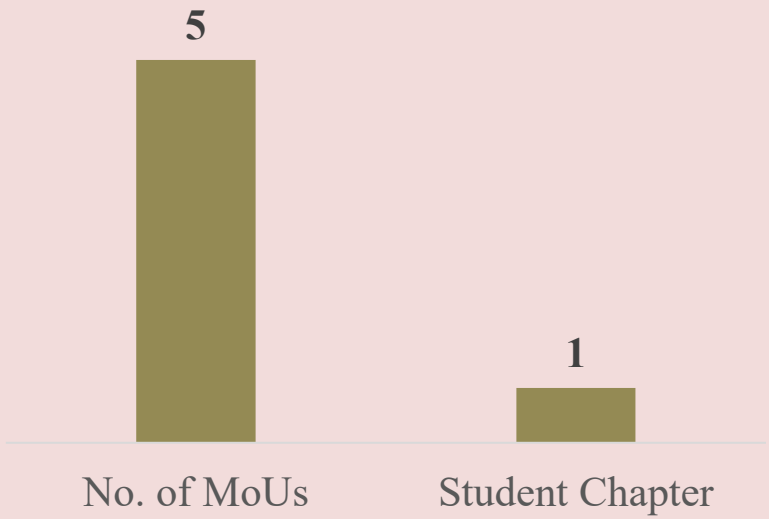


Process for Project Evaluation



CRITERIA 2: PROGRAM CURRICULUM AND TEACHING – LEARNING PROCESSESS

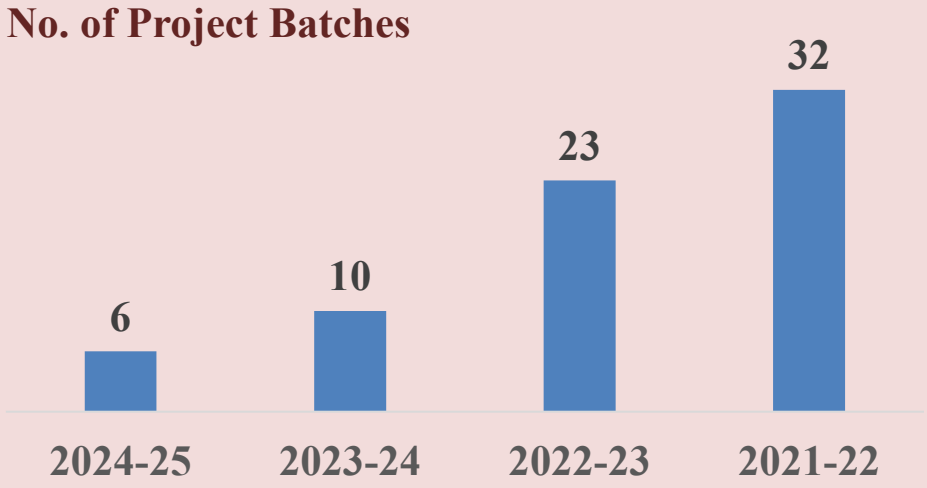
MOU's



Industrial Visits

Academic Year	No. of Industrial Visits
2024-25	3
2023-24	1
2022-23	2
2021-22	3

Project Details



Students Internship

Academic Year	No. of Internships
2024-25	23
2023-24	43
2022-23	92
2021-22	98

CRITERIA 2: PROGRAM CURRICULUM AND TEACHING – LEARNING PROCESSESS

COLLABORATIONS (Industrial/Institutional) - MOU

- Bhabha Atomic Research Centre: - Technology Transfer
- Jindal Aluminium Limited, Jindal nagar, Tumkur road, Bangalore:-Internship/Project work/Jobs
- Rexroth Bosch Ltd, Bangalore:-Training program and designing courses for students
- Karnataka Science and Technology Academy:-Training program and designing courses for students
- Engineer Materials Inc., Bengaluru:- Training program and Internships for students

Professional Student Chapter

- ISHRAE Student Chapter
- The Material Advantage Student Chapter [ASM Student Chapter]

CRITERIA 2: PROGRAM CURRICULUM AND TEACHING – LEARNING PROCESSESS

Sample Photographs

Industrial Visits

CRITERIA 3 : PROGRAMME OUTCOMES AND COURSE OUTCOMES

Course Outcomes(COs)-Programme Outcomes (PO's)

Course Outcomes (COs)	
Control Engineering [18ME32]- C302	
C202. 1	**Elucidate** the fundamentals of control systems and interpret mathematical model of the physical systems.
C202. 2	**Determine** the response and error in response of first and second order systems subjected to standard input signals
C202. 3	**Apply** the concept of Laplace transforms to find transfer function of complex physical system using block diagram and signal flow graph and obtain transfer function
C202. 4	**Analyse** a linear feedback control system for stability using Hurwitz criterion, Routh's criterion root Locus technique, Polar plots, Nyquist and Bode plots in complex domain

Programme Outcomes (POs)			
PO1	**Engineering Knowledge**	**PO7**	**Environment & Sustainability**
PO2	**Problem Analysis**	**PO8**	**Ethics**
PO3	**Design & Development of Solutions**	**PO9**	**Individual & Team Work**
PO4	**Conduct investigation of Complex Problems**	**PO10**	**Communication**
PO5	**Modern Tool Usage**	**PO11**	**Project Management & Finance**
PO6	**Engineering & Society**	**PO12**	**Life Long Learning**

CRITERIA 3 : PROGRAMME OUTCOMES AND COURSE OUTCOMES

CO-PO-PSO Course Articulation Matrix

Course code	course	CO statement After successful completion of the course student willable to		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO2
18ME72[C402]	Control Engineering	CO1	**Elucidate** the fundamentals of control systems and interpret mathematical model of the physical systems.	3	2	1	-	-	-	-	-	1	1	-	1	2	-
		CO2	**Determine** the response and error in response of first and second order systems subjected to standard input signals	2	3	1	-	-	-	-	-	1	1	-	1	3	1
		CO3	**Apply** the concept of Laplace transforms to find transfer function of complex physical system using block diagram and signal flow graph and obtain transfer function	1	2	2	1	-	-	-	-	1	1	-	1	3	1
		CO4	**Analyse** a linear feedback control system for stability using Hurwitz criterion, Routh's criterion root Locus technique, Polar plots, Nyquist and Bode plots in complex domain	1	2	2	1	3	-	-	-	1	1	-	1	2	1
CO. AVG (C402)				1.75	2.25	1.5	1	3	-	-	-	1	1	-	1	2.5	1

The correlation level — **Substantial** — **Moderate** — **Low**

CRITERIA 3 : PROGRAMME OUTCOMES AND COURSE OUTCOMES

Average of Program level CO – PO Articulation matrix

Batch	Average											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12
2018-2022	2.73	2.30	2.10	2.00	2.25	1.70	2.00	2.00	1.82	1.87	1.97	1.64
2019-2023	2.73	2.31	2.09	1.96	2.25	1.70	1.93	2.00	1.82	1.87	1.97	1.64
2020-2024	2.73	2.30	2.10	2.00	2.25	1.70	2.00	2.00	1.82	1.87	1.97	1.64

Average Program level CO – PSO Articulation matrix

Batch	Average Target	
	PSO1	PSO2
2018-2022	2.19	2.29
2019-2023	2.16	2.30
2020-2024	2.19	2.29

CRITERIA 3 : PROGRAMME OUTCOMES AND COURSE OUTCOMES

Assessment Tools for Course Outcomes Evaluation

Sl. No	Direct Assessment Tools	
	Assessment Method	**Frequency**
1	Internal Assessment Test (IA)	Three times in a semester as per the schedule
2	Semester End Examinations(SEE)	End of the Semester
3	Lab Assessment(Internal)	➢ Lab Record Evaluation- Weekly ➢ Lab Internal - once per Semester (End of each semester)
4	Practical examinations	End of the Semester
5	Seminar	Once (Semester end internal evaluation)
6	Project evaluation	➢ Two reviews in the Phase-I/ Phase-II semester ➢ Once (semester end university exam will be conducted)
Indirect Assessment Tools		
	Assessment Method	**Frequency**
1	Course End Survey (DHI Software)	End of the semester

CRITERIA 3 : PROGRAMME OUTCOMES AND COURSE OUTCOMES

Sample CO-Attainment of Courses

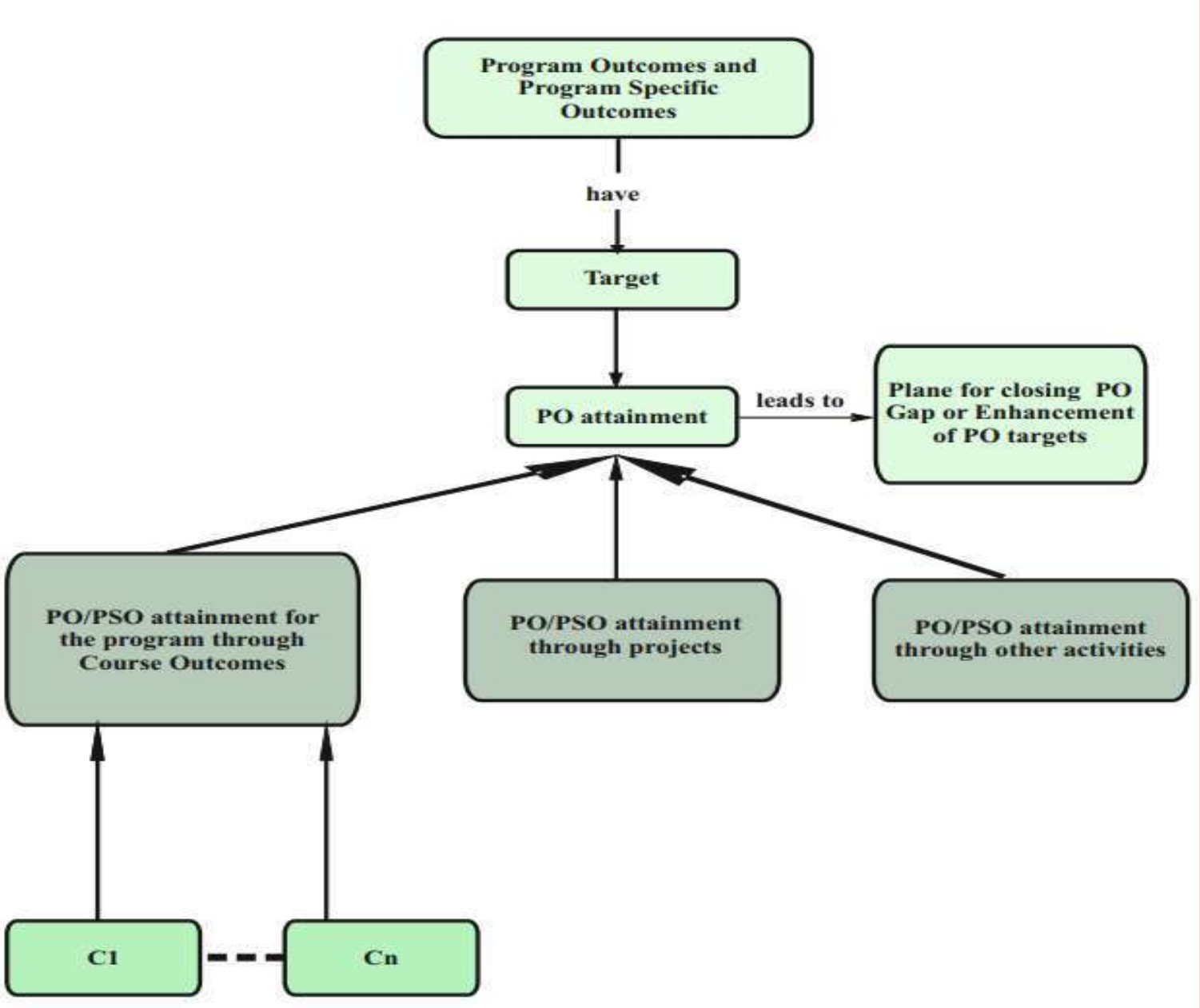
CO Attainment Threshold values

Threshold Values for Attainment Calculation							Final CO Attainment			
Attainment level	3	%	2	%	1	%	(Percentage Contribution, %)			
Internal Assessment	>=	70	>=	60	>=	50	CIE	40	SEE	50
SE Examination	>=	50	>=	45	>=	35	-		CES	10

SL. NO	Course Code	CO1	CO2	CO3	CO4	CO5	CO6
1	C204	2.1	2.2	2.3	2.2		
2	C212	2.3	2.4	3	2.5	2.7	
3	C304	2.9	2.6	2.8	2.9	2.9	
5	C313	2.9	2	2.8	2.8	2.8	
7	C401	3	2.3	2.9	2.7		
8	C412	2.7	2.9	2.9	2.9	2.6	

CRITERIA 3 : PROGRAMME OUTCOMES AND COURSE OUTCOMES

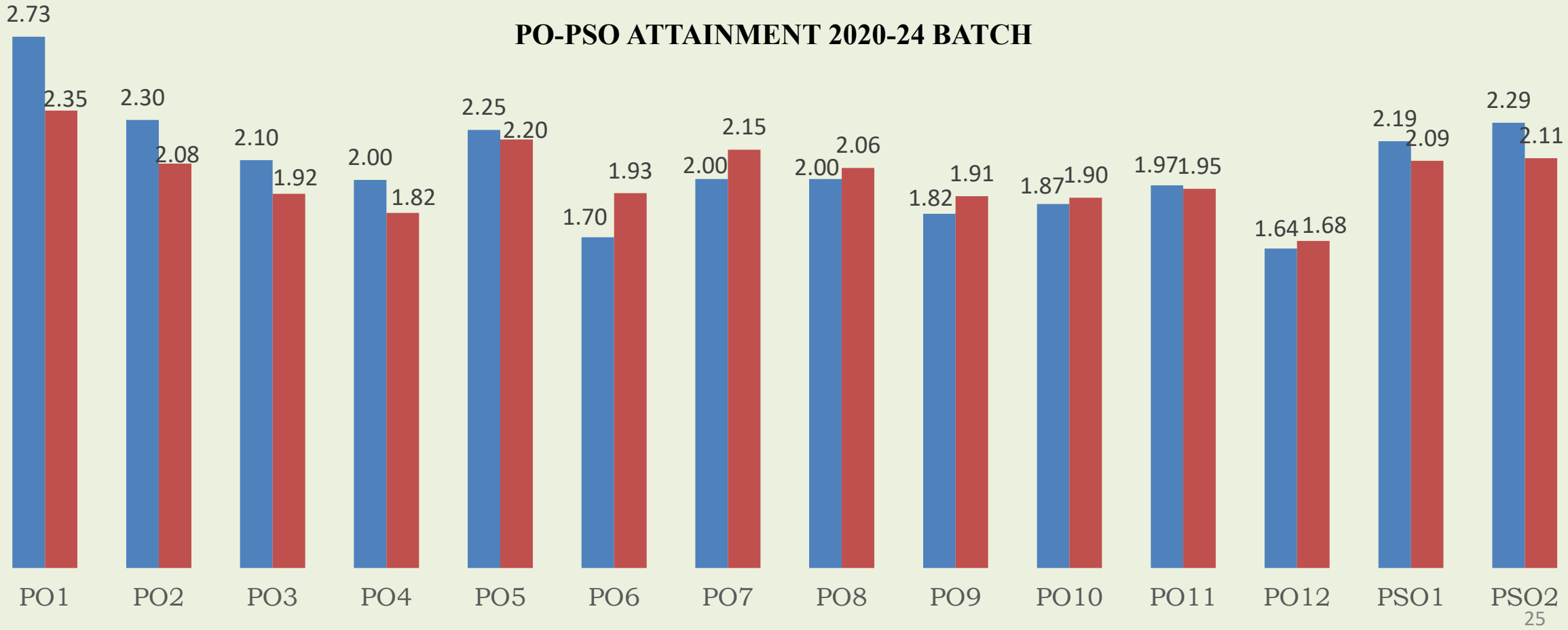
Program Outcomes Evaluation



CRITERIA 3 : PROGRAMME OUTCOMES AND COURSE OUTCOMES

PO-PSO ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO-PO-PSO Articulation	2.73	2.30	2.10	2.00	2.25	1.70	2.00	2.00	1.82	1.87	1.97	1.64	2.19	2.29
PO-PSO ATTAINMENT	2.35	2.08	1.92	1.82	2.20	1.93	2.15	2.06	1.91	1.90	1.95	1.68	2.09	2.11



Students Enrollment Ratio

SL .NO	Year	N1	N	Enrolment Ratio
1	2025-26	30	28	93.33
2	2024-25(CAY)	30	28	93.33
3	2023-24(CAYm1)	30	29	96.67
4	2022-23(CAYm2)	30	10	33.33
Average Enrollment Ratio				74.44

CRITERIA 4: STUDENTS PERFORMANCE

Students Who Have Successfully Graduated With & Without Backlogs

Year of Entry	Total no. of students admitted (N1 + N2 + N3)	Without Backlog					With Backlog			
		I Year	II Year	III Year	IV Year		I Year	II Year	III Year	IV Year
2024-25	29 (28+0+1)	5					23			
2023-24	35 (29+4+2)	8	5				22	26		
2022-23	31 (10+21+0)	2	7	4			9	27	28	
2021-22	26 (10+14+2)	6	14	8	8		11	23	23	23
2020-21	43 (25+12+6)	8	5	5	5		31	43	41	41
2019-20	96 (71+19+6)	34	22	14	14		79	94	92	92
2018-19	131(104+21+6)	38	42	37	36		81	100	98	98

Success Rate

Without Backlogs

Item	2021-22	LYGm1 (2020-21)	LYGm1 (2019-20)	LYGm2 (2018-19))
Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable	26	44	96	131
Number of students who have graduated without backlogs in the stipulated period	8	5	14	36
Success Index (SI)	**0.31**	**0.11**	**0.15**	**0.27**
Average SI	**0.18**			

With Backlogs

Item	2021-22	LYGm1 (2020-21)	LYGm1 (2019-20)	LYGm2 (2018-19))
Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable	26	44	96	131
Number of students who have graduated without backlogs in the stipulated period	23	41	92	98
Success Index (SI)	**0.89**	**0.95**	**0.96**	**0.75**
Average SI	**0.88**			

CRITERIA 4: STUDENTS PERFORMANCE

Academic Performance

Third Year

Academic Performance	2024-25	2023-24	2022-23	2021-22
Mean of CGPA or Mean Percentage of all successful students (X)	6.83	7.65	6.78	6.40
Total no. of successful students (Y)	28	23	41	92
Total no. of students appeared in the examination (Z)	28	23	43	95
API = X* (Y/Z)	6.83	7.65	6.46	5.598
Average API	**6.56**			

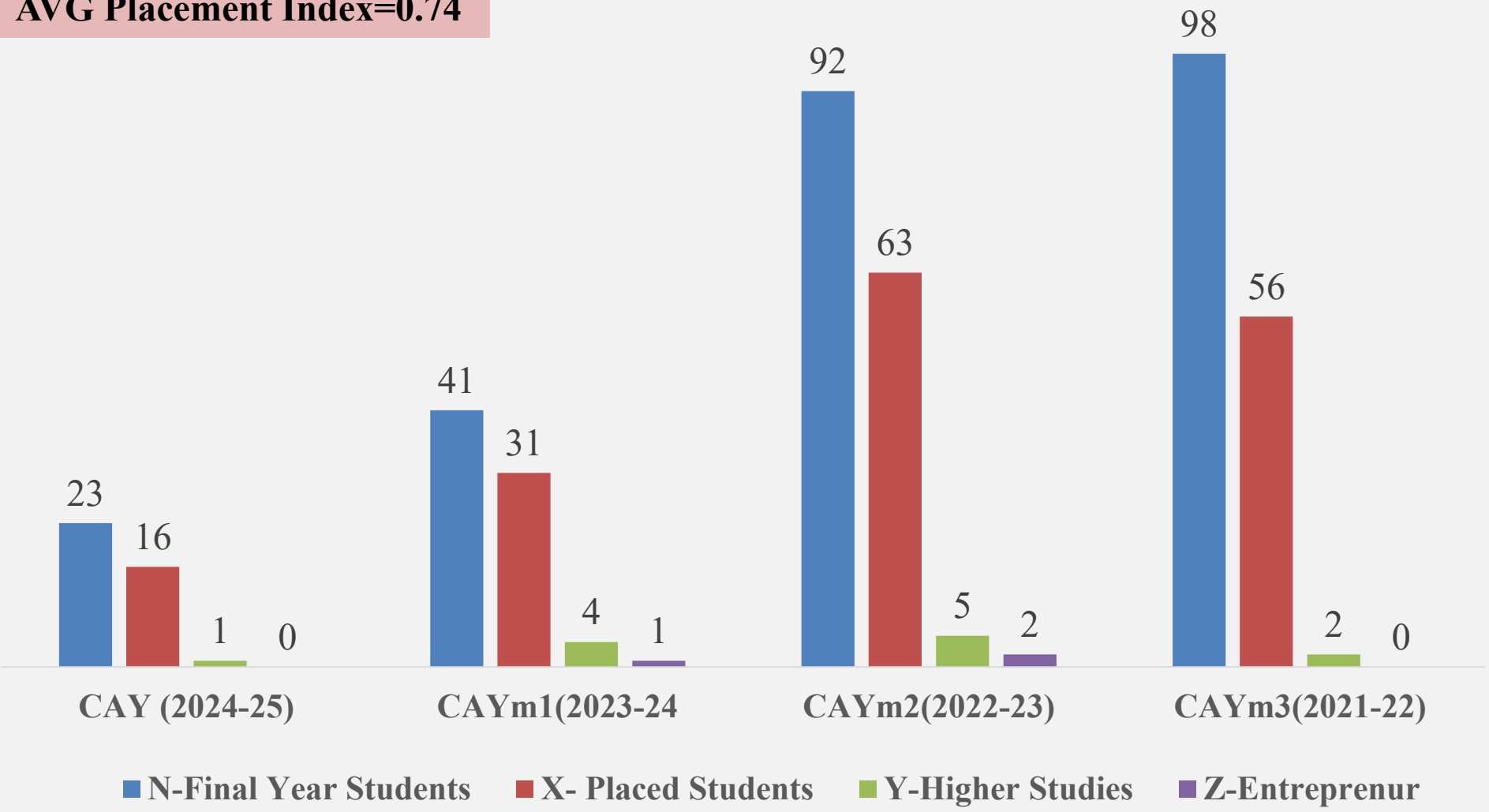
Second Year

Academic Performance	2024-25	2023-24	2022-23	2021-22
Mean of CGPA or Mean Percentage of all successful students (X)	6.88	7.19	7.61	6.27
Total no. of successful students (Y)	26	27	23	42
Total no. of students appeared in the examination (Z)	26	28	23	42
API = X* (Y/Z)	6.88	6.93	7.61	6.27
Average API	**6.93**			

CRITERIA 4: STUDENTS PERFORMANCE

Placement, Higher Studies and Entrepreneurship

AVG Placement Index=0.74



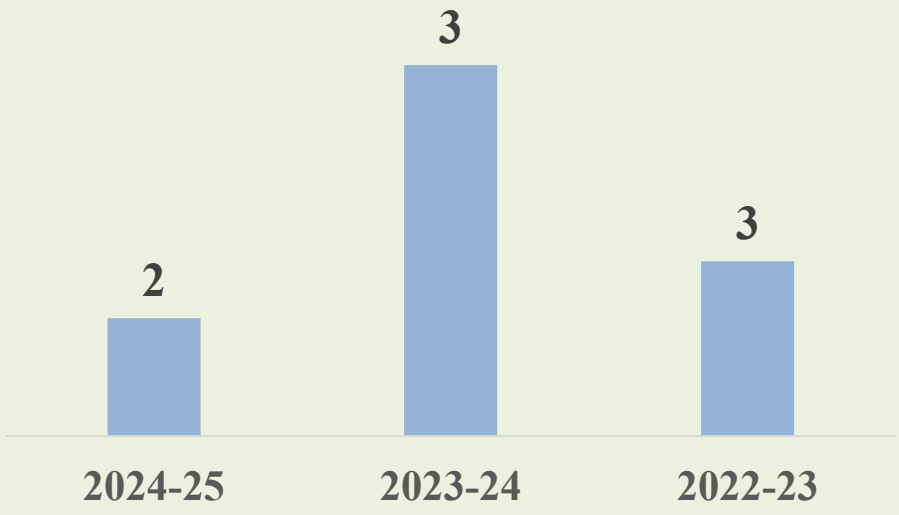
Highest CTC	
2024-25	7.5LPA
2023-24	3.78LPA
2022-23	7.02LPA
2021-22	8LPA

CRITERIA 4: STUDENTS PERFORMANCE

Professional Societies/Chapters

Sl. No	Name of Professional Societies/Chapters	Year of Establishment	Academic Year	No. Of students Enrolled
1	ISHRAE (Indian Society of Heating Refrigeration and Air conditioning Engineers)	2008	2023-24	15
			2022-23	17
			2021-22	32
2	ASM (American Society of Metals)	2018	2020-21	-
			2019-20	16
			2018-19	31

Events are organized by Professional Societies/Student Chapters



CRITERIA 4: STUDENTS PERFORMANCE

Participation of Students in Inter-Institute events

Sl. No.	Students Name	USN	Tittle	Date	Details
1	Abhilash G A Hemanth Kumar V R Kirankumar S B	1SJ18ME004 1SJ18ME040 1SJ18ME050	Development of Battery Operated Weed Remover	27 & 28 May 2022	NCDCM-22 **JSSATE,** Bengaluru
2	Abhishek Reddy M	1SJ18ME006	Design and Development of Option able Operating Hybrid Two Wheeler Vehicle	27 & 28 May 2022	NCDCM-22 **JSSATE,** Bengaluru

No. of Technical Papers Presented by Students in Conference

CRITERIA 4: STUDENTS PERFORMANCE

Sample Photographs

Paper Presentation Certificates

IRJMETS

International Research Journal Of Modernization in Engineering Technology and Science

(Peer-Reviewed, Open Access, Fully Refereed International Journal)

e-ISSN: 2582-5208

Ref: IRJMETS/Certificate/Volume 4/Issue 07/40700112854 Date: 23/07/2022

Certificate of Publication

This is to certify that author "Naveen NN" with paper ID "IRJMETS40700112854" has published a paper entitled "ADVANCEMENTS IN ELECTRONIC SKIN" in International Research Journal Of Modernization In Engineering Technology And Science (IRJMETS), Volume 4, Issue 07, July 2022

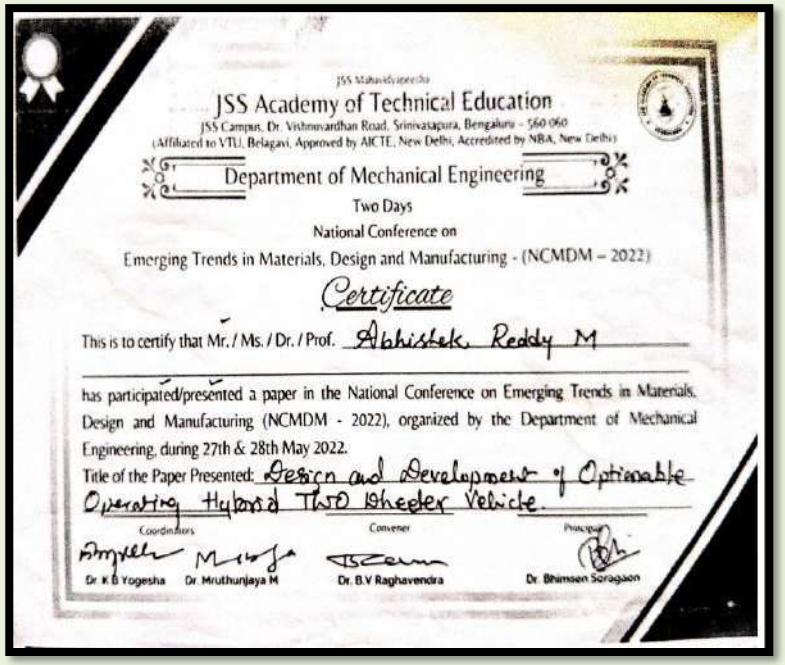
Editor in Chief

IRJMETS Impact Factor 6.752

We Wish For Your Better Future

www.irjmets.com

Google ISSUU Academia.edu



JSS Academy of Technical Education

JSS Campus, Dr. Vishnuvardhan Road, Srinivasagura, Bengaluru - 560 060

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NBA, New Delhi)

Department of Mechanical Engineering

Two Days

National Conference on

Emerging Trends in Materials, Design and Manufacturing - (NCMDM – 2022)

Certificate

This is to certify that Mr. / Ms. / Dr. / Prof. Abhishek Reddy M

has participated/presented a paper in the National Conference on Emerging Trends in Materials, Design and Manufacturing (NCMDM - 2022), organized by the Department of Mechanical Engineering, during 27th & 28th May 2022.

Title of the Paper Presented: Design and Development of Optimable Operating Hybrid Two Wheeler Vehicle.

Coordinators Convener Principal

Dr. K B Yogesha Dr. Mruthunjaya M Dr. B.V Raghavendra Dr. Bhimsen Soragaon

|| Jai Sri Gurudev ||

Sri Adichunchanagiri Shikshana Trust (R)

SJC INSTITUTE OF TECHNOLOGY

VTU Affiliated AICTE Approved, Accredited by NBA and NAAC with A+ Grade, Gold Rated by QS I-Gauge

Chickballapur - 562 101, Karnataka

CERTIFICATE OF PARTICIPATION

This certificate is awarded to Mr. Kushal Y.S. bearing USN 1SJ19ME026 of Mechanical Engineering Department, for exhibiting / presenting the project entitled Vertical Axis wind turbine to generate electric power guided by Prof. Venkataraj M. in the Project Open House and National Conference on "Innovations in Engineering, Science & Technology", Manthana - 2023 at SJC Institute of Technology, Chickballapur on 24th May 2023.

Dr. G Narayana
Prof. & HoD - CED
Convener

Dr. G T Raju
Principal
Organizing Chair

Project Exhibition Photographs

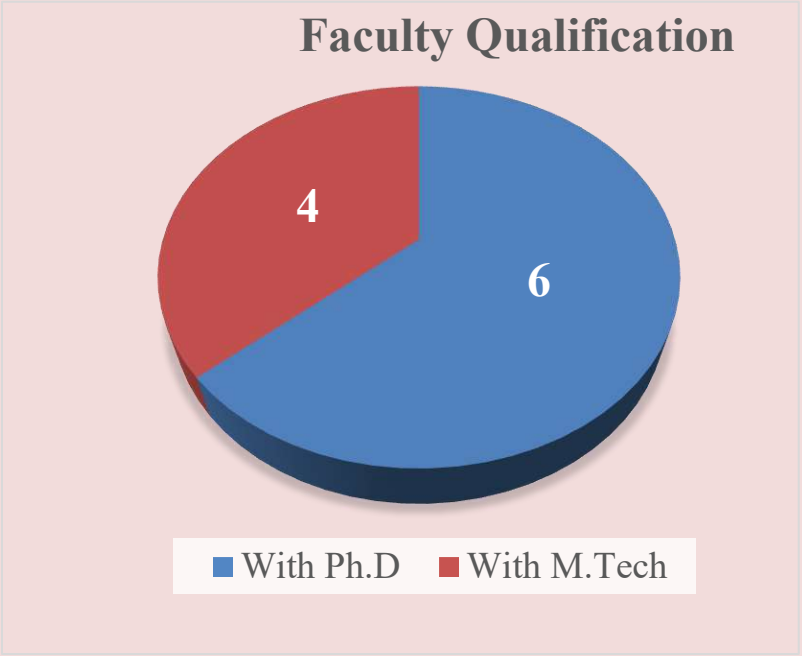
CRITERIA 5: FACULTY INFORMATION AND CONTRIBUTION

Student-Faculty Ratio (SFR)

Year	2025-26	CAY 2024-25	CAYm1 (2023-24)	CAYm2 (2022-23)
Total No. of Students in the Department **(S=UG+PG)**	**117**	**150**	**249**	**348**
No. of Faculty in the Department **(F)**	**08**	**09**	**11**	**16**
Student Faculty Ratio **(SFR)**	**14.62**	**16.66**	**22.63**	**21.75**
Average SFR	**20.34**			

Avg. Student Faculty Ratio: 20.34

Avg. Faculty Experience: 16 Years



CRITERIA 5: FACULTY INFORMATION AND CONTRIBUTION

Faculty Cadre proportion

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
2025-26	1	2	1	3	5	5
2024-25	1	2	1	2	5	7
2023-24	1	2	2	2	8	8
2022-23	1	3	3	2	11	11
Average Numbers	RF1=1	AF1=2.25	RF2=1.75	AF2=2.25	RF3=7.25	AF3=7.75

Faculty Qualification

Years	X	Y	F	FQ=2.5 x [(10X +4Y)/F)]
2025-26	6	4	6	31.66
2024-25	7	4	7	30.71
2023-24	8	5	12	**20.83**
2022-23	9	8	17	**17.94**
Average Assessment				**23.16**

Faculty Retention=53%

CRITERIA 5: FACULTY INFORMATION AND CONTRIBUTION

Innovations by the Faculty in Teaching and Learning

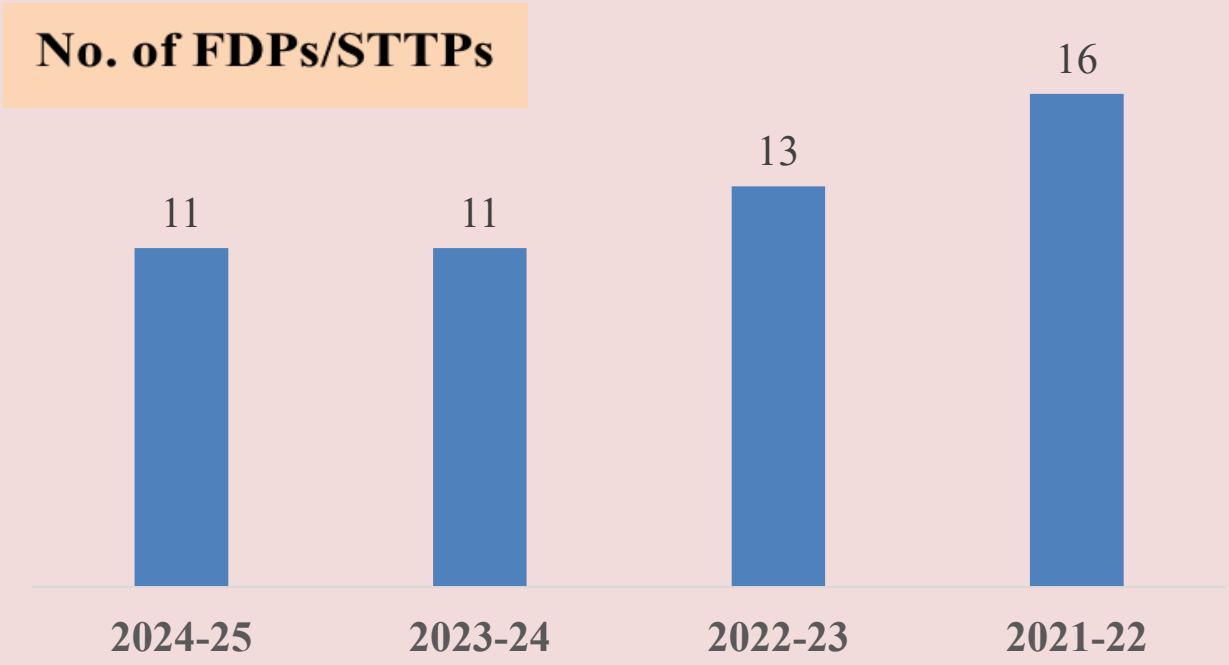
E-content Developed by Faculty Members

Name of The Faculty	Course Name	Content Links
Dr. Thyagaraj N R	Finite Element Method Channel Name: Ohhh!! Engineering	https://youtu.be/QbDZkEt0zHk?si=ClMFzpxR1zpr3bt9
Dr. Chandra Mohan H K	Kinematics of Machines(VTU E learning)	https://youtu.be/3svnxHFLWvg?si=L8iYZrBFCpk0uR_e
Dr. K N Manjunath	Computer aided Engineering Drawing	https://youtu.be/RF2iHSxfJd0?si=3PkMRRNO8y9ABNC3

Name of The Faculty	Teaching Technique	Semester	Course Name	Date	POs/PSOs
Dr. Ravikumar T R	Experimental Learning	7th	Machine Design	20.02.2025	PO9,PO10, PO12.PSO2
Dr. Thyagaraj N R	Create Interactive Learning	7th	Control Engineering	13.12.2024	PO5, PO9,PO10, PO12.PSO2
Mr. Sridhar J	Environmental Awareness Programme Social Connect	6th	Societal Internship Societal Awareness	19.06.2024	PO8, PO9,PO10, PO12.PSO1
Dr. K N Manjunath	Peer to Peer Learning	2nd	Computer Aided Engineering Drawing	12.04.2023	PO5,PO8,PO9 PO10,PO12

CRITERIA 5: FACULTY INFORMATION AND CONTRIBUTION

Faculty development/training activities/STTPs



Research Publications

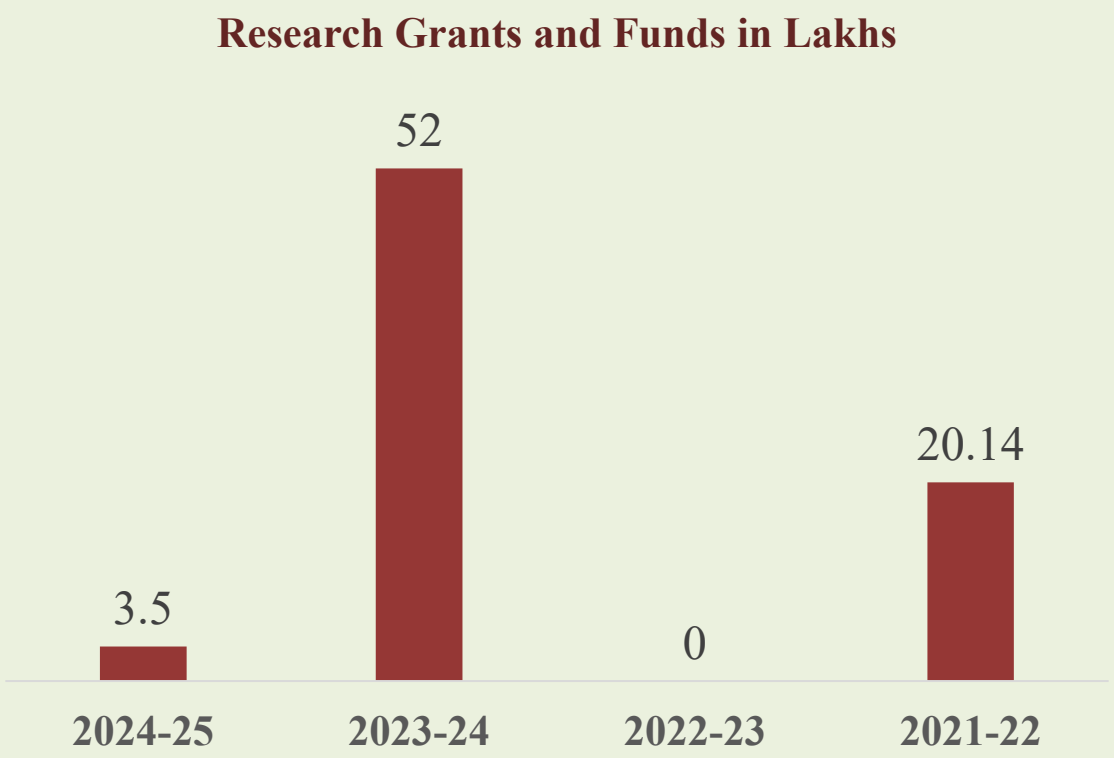
Year	Q1	Q2	Q3	Q4	Proceedings	ABCD Index	Scientific. Net	ICI Journals	Academia Publishing/IJSR
2024-2025	2	3	4						2
2023-2024		2	6		1		3	3	
2022-2023		6	1	2	1	1			
2021-2022		4	4	2					

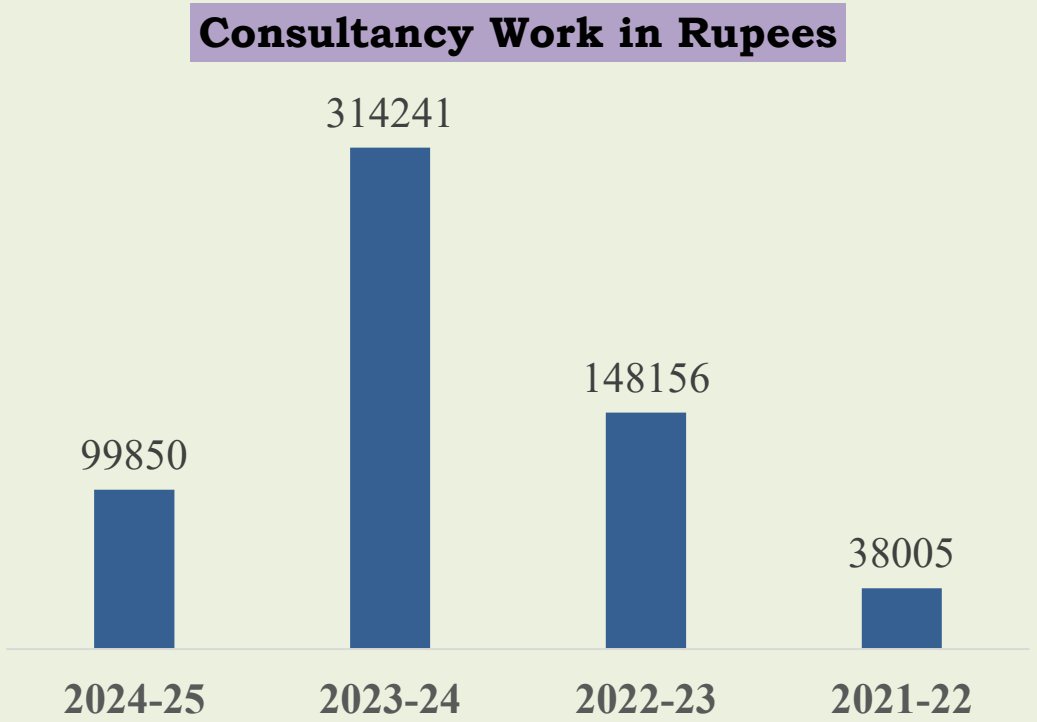
No. of Books/Book Chapters: 06

CRITERIA 5: FACULTY INFORMATION AND CONTRIBUTION

Sponsored Research

Research, Consultancy and Patents





No. of Patents Published/Granted: 04

CRITERIA 5: FACULTY INFORMATION AND CONTRIBUTION

Funded Project Details

Funding Agency	Title of the Project	Amount sanctioned in Rs	PI/CO-PI	Academic Year
VTU (VTU-CRC)	Development and Characterization of Innovative Battery Thermal Management for EVs	12,00,000/-	Dr. Thyagaraj N R Dr. Ravikumar M	2024-25
ATAL-AICTE (Six Days)	Advanced Materials Processing and Characterization Techniques(Basic Level FDP)	3,50,000/-	Dr. Thyagaraj N R Dr. K N Manjunatha	2024-25
Vision Group on Science and Technology	Design, Development and Analysis of Hybrid Composites Made Up of Conventional and Non-Conventional Fibers for Automobile Body Panels	10,00,000/-	Dr. Thyagaraj N R Dr. Mallardhaya H M	2024-25
MSME	Design, Development and Commercialization of a Low Cost exoskeleton for people suffering from Knee Osteoarthritis	15,00,000/-	Prof. Harish S	2023-24
SERB-DST	Cellulose nanofiber networked sida acuta Particle Based Bio composites	15,00,000/-	Dr. Chandramohan H K	2023-24

CRITERIA 5: FACULTY INFORMATION AND CONTRIBUTION

NPTEL Certificates

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

SRIDHAR J

for successfully completing the course

Power Plant Engineering

with a consolidated score of **61** %

Online Assignments	20.08/25	Proctored Exam	41.25/75

Total number of candidates certified in this course: **423**

Prof. Kaushik Ghosh, Professor (Chemistry)

Jul-Sep 2023

Prof. Ranjana Pathania, Professor (BSBE)

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

TOPPER

This certificate is awarded to

PALAKSHAIAH

for successfully completing the course

Fluid Mechanics

with a consolidated score of **76** %

Online Assignments	23.91/25	Proctored Exam	52.5/75

Total number of candidates certified in this course: **88**

Jul-Oct 2023

(12 week course)

Prof. T. V. Bharat, Head, Centre for Educational Technology, NPTEL Coordinator, IIT Guwahati

---

VIKRAM SARABHAI SPACE CENTRE

Mr. RAVIKUMAR TR

ASSISTANT PROFESSOR

SUSHANTH PUTHIYOTTIL

Approving Officer: JAYAKUMAR M , PROJDR , PSLV

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

कौशल भारत-कुशल भारत

This certificate is awarded to

DR CHANDRAMOHAN H K

for successfully completing the course

Advances in Additive Manufacturing of Materials: Current Status and Emerging Opportunities

with a consolidated score of **60** %

Online Assignments	17.81/25	Proctored Exam	42/75

Total number of candidates certified in this course: **350**

Prof. G. L. Sivakumar Babu, Chairman, Center for Continuing Education, IISc Bangalore

Jan-Apr 2025

(12 week course)

Prof. L. Umanand, NPTEL Coordinator, IISc Bangalore

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

कौशल भारत-कुशल भारत

This certificate is awarded to

VINOD KUMAR R

for successfully completing the course

Automation in Manufacturing

with a consolidated score of **66** %

Online Assignments	22.16/25	Proctored Exam	43.5/75

Total number of candidates certified in this course: **2629**

Jul-Oct 2025

(12 week course)

Dr. Salil Kashyap, Coordinator, Centre for Educational Technology, IIT Guwahati

---

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

TOPPER

This certificate is awarded to

THYAGARAJ N R

for successfully completing the course

Accreditation and Outcome Based Learning

with a consolidated score of **90** %

Online Assignments	21.54/25	Proctored Exam	68.25/75

Total number of candidates certified in this course: **857**

Aug-Oct 2022

(8 week course)

Prof. Debjani Chakraborty, Coordinator, NPTEL, IIT Kharagpur

Conducted Vibrational Analysis of BGS ARPIT Payload

CRITERIA 6: FACILITIES AND TECHNICAL SUPPORT

Facilities and Technical Support

Infrastructure Details

Class Rooms		
Particulars	**Total Number**	**Area**
No. of Class Rooms	06	84m²(each)
Seminar Hall	01	104m²
Meeting Room	01	70m²

Laboratory Facilities		
Particulars	**Total Number**	**Area**
CAD-CAM Lab	01 (115 Computers)	210m²
Machine Shop	01	360m²
Workshop-1 (Project Room)	01	180m²
Workshop-2	01	180m²
Energy Conversion Lab	01	180m²
Manufacturing Lab	01	180m²

Additional Facilities		
Particulars	**Total Number**	**Area**
Department Library	01	41.62m²
No. of Staff Rooms	06	120m²
No. of Computers	145	-

Laboratory Facilities		
Particulars	**Total Number**	**Area**
Fluid Mechanics Lab	1	275m²
Heat Transfer Lab	1	180m²
Material Testing Lab	1	180m²
Design Lab	1	90m²
Metrology & Measurement Lab	1	80m²
R&D Lab	1	110m²

Centre of Excellence	
	Automation Technologies (Hydraulics , Pneumatics and PLCs) (Supported by Rexroth Bosch)
	Artisan Training Centre (Carpentry) (Supported by Bosch)
	Flexible Manufacturing System (Built Under AICTE MODROB Scheme)

CRITERIA 6: FACILITIES AND TECHNICAL SUPPORT

Technical Supporting Staff Members

SL. NO	Name of the staff Member	Designation
1	Venkatesh Kumar B K	Welder
2	Lokesh Raju C V	Welder
3	Mohan Kumar K	Mechanic
4	Anand Kumar	Mechanic

SL. NO	Name of the staff Member	Designation
5	Ramesh N	Mechanic
6	Uday Venkatesh	Mechanic
7	Poornima	SDC
08	Ramesh B S	Office Attendant

Welder	02
Mechanic	04
Second Division Clerk/Typist	01
Office Attendant	01

Skill Enhancement Training Program for Non-Teaching Staff

CRITERIA 6: FACILITIES AND TECHNICAL SUPPORT

Research and Development Lab

BGS R&D Center	
Sl. No	**Major Equipment**
1	Computerized Fatigue Testing UTM
2	Vickers Hardness Testing machine (Micro & Macro)
3	Computerized Pin on Disc Wear Test Rig
4	Stress Corrosions cracking Test Rig
5	Planetary Ball Milling
6	Computerized Journal Bearing
7	Metallurgical Microscope
8	Spray Atomization and Deposition Facility
9	Heat Treatment Furnace of 1400^0c and 1000^0c
10	FFT Analyzer

Computerized Fatigue Testing UTM

Vickers Hardness Testing machine (Micro & Macro)

Planetary Ball Milling

Stress Corrosions cracking Test Rig

CRITERIA 6: FACILITIES AND TECHNICAL SUPPORT

Industry Supported Laboratory

Bosch Rexroth Centre of Competence in Automation Technologies

ATC (Carpentry)

FMS Lab

Flexible Manufacturing System established under MODROB Scheme " CIM and Automation Lab" during 2020-2021

CRITERIA 6: FACILITIES AND TECHNICAL SUPPORT

Lab Photos

CAD/CAM LAB

Metrology and Measurement Lab

Machine Shop Lab

CRITERIA 6: FACILITIES AND TECHNICAL SUPPORT

Lab Photos

Energy Conversion Lab

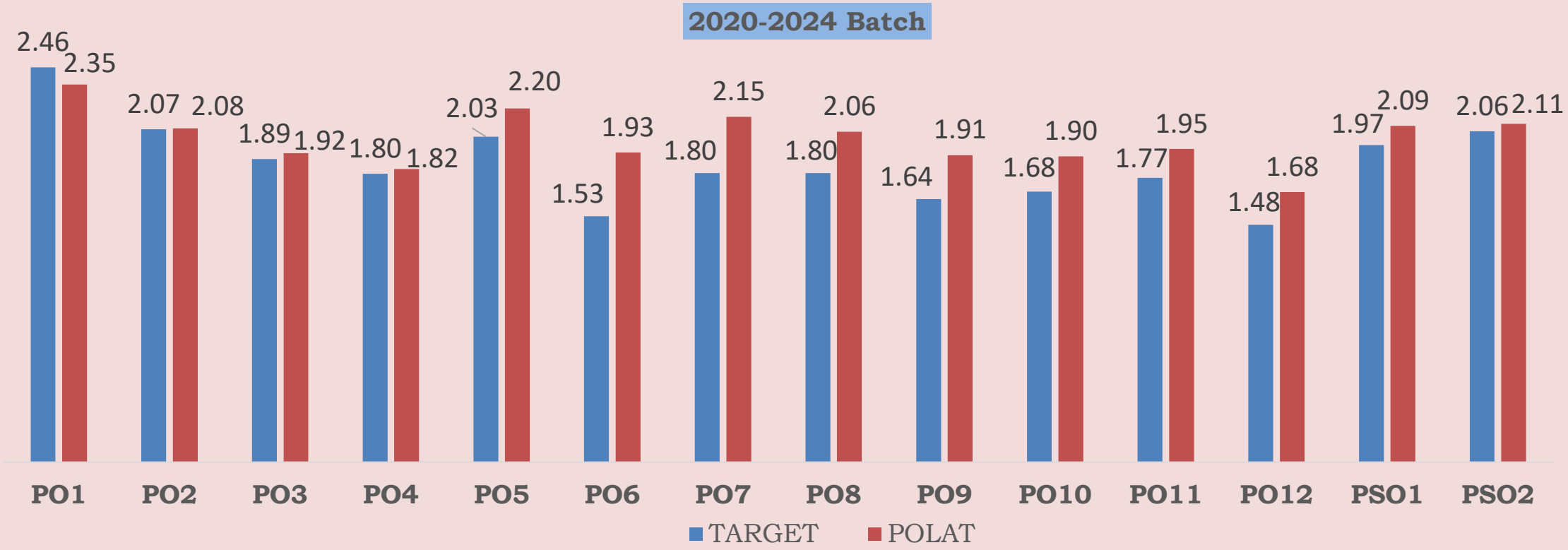
Fluid Mechanics Lab

Heat and Mass Transfer Lab

CRITERIA 7: CONTINUOUS IMPROVEMENT

PO-PSO ATTAINMENT (2023-24)

POs Attainment Levels and Actions for improvement



Sample Action plan for Academic Year: 2023-24

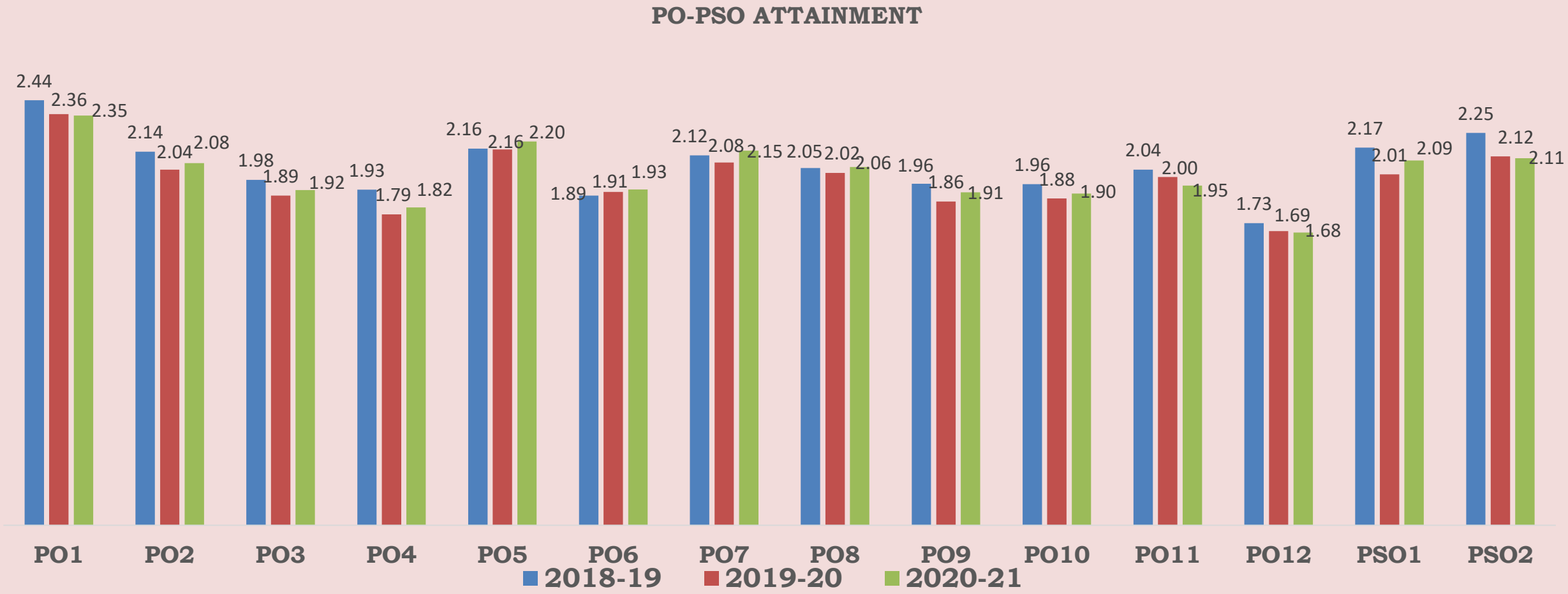
PO1	2.46	2.35	Target was not achieved, because the required set level was not met in the following courses like Engineering Mathematics, Basic Thermodynamics, Design of Machine Elements and Turbomachinery.
ACTION1: Plan the Remedial Classes for the observed courses to enhance the basic knowledge in engineering.			

CRITERIA 7: CONTINUOUS IMPROVEMENT

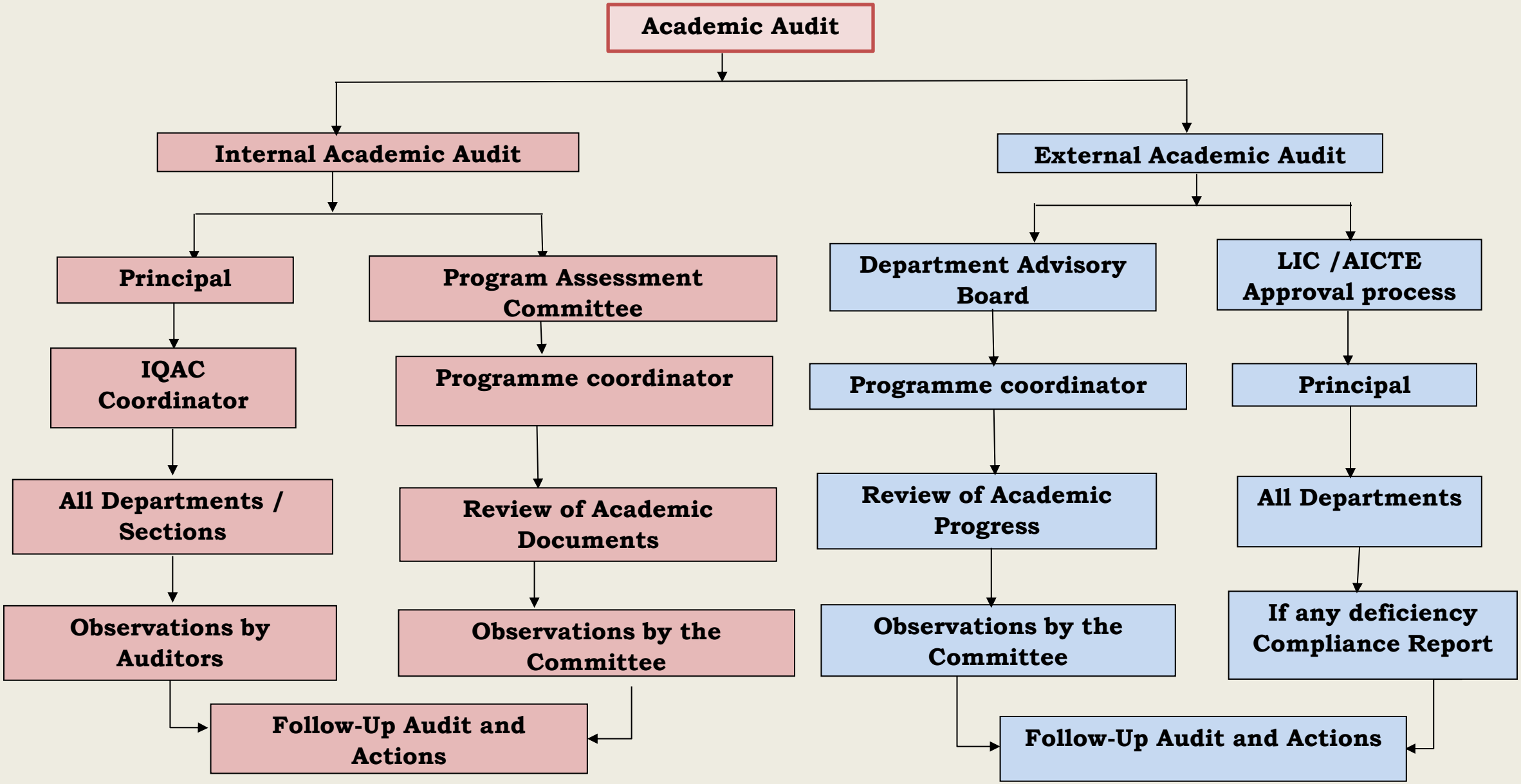
PO-PSO ATTAINMENT

POs Attainment Levels and Actions for improvement

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
2018-19	2.44	2.14	1.98	1.93	2.16	1.89	2.12	2.05	1.96	1.96	2.04	1.73	2.17	2.25
2019-20	2.36	2.04	1.89	1.79	2.16	1.91	2.08	2.02	1.86	1.88	2.00	1.69	2.01	2.12
2020-21	2.35	2.08	1.92	1.82	2.20	1.93	2.15	2.06	1.91	1.90	1.95	1.68	2.09	2.11



CRITERIA 7: CONTINUOUS IMPROVEMENT



CRITERIA 7: CONTINUOUS IMPROVEMENT

Improvement in Placement and Higher Studies

Item	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)	CAYm4 (2021-22)
Total No. of Final Year Students (N)	23	41	92	98
No. of Students placed in companies or Government Sector (x)	16	31	63	56
No. of students admitted to higher studies with valid qualifying score (GATE or equivalent state or National level Tests, GRE, GMAT etc.) (y)	01	04	05	02
No. of students turned entrepreneur in engineering/technology (z)	00	01	02	00
x + y + z =	17	36	70	58
Placement Index : (x + y + z) / N	0.739	0.878	0.76	0.592
Average placement = (P1 + P2 +P3) / 3	0.792			

Highest CTC	
2024-25	7.5LPA
2023-24	3.78LPA
2022-23	7.02LPA
2021-22	8LPA

CRITERIA 7: CONTINUOUS IMPROVEMENT

Quality of Student Admission

Item		CAY (2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
National Level Entrance Examination, COMED-K	No. of Students admitted	-	-	-
	Opening Score/Rank	-	-	-
	Closing Score/Rank	-	-	-
State/University/ Level Entrance Examination/ Others (Name of the Entrance Examination) KCET	No. of Students admitted	04	08	03
	Opening Score/Rank	67610	50953	148213
	Closing Score/Rank	177830	168153	170109
Name of the Entrance Examination for Lateral Entry or Lateral entry details KCET (DIPLOMA)	No. of Students admitted	4	6	5
	Opening Score/Rank	4130	4612	5187
	Closing Score/Rank	10073	14555	14348
Average CBSE/Any other Board Result of admitted students(Physics, Chemistry & Mathematics)		81.66	77.88	59.22

SJC INSTITUTE OF TECHNOLOGY, CHICKBALLAPUR
DEPARTMENT OF MECHANICAL ENGINEERING

SWOC

Strengths
S

- Qualified, Committed, Experienced faculty
- Good Infrastructure
- Successful Alumni
- Research Activities
- Disciplined and Decentralized Work Culture

Weakness
W

- Patents and Book writing
- Limited diversity/depth of course offerings/ research areas
- Curriculum Design by University
- Student Exchange Program
- Student Publications
- Campus Placements to Core Industries
- Students Publications

Opportunity
O

- Brilliant career opportunities for graduates.
- Splendid Opportunities for Interdisciplinary Research
- Excellent Opportunities for Funded Projects through VTU/VGST/ AICTE/DST
- Skill Based Learning
- Publication in High Impact / rated Journals

Challenges
C

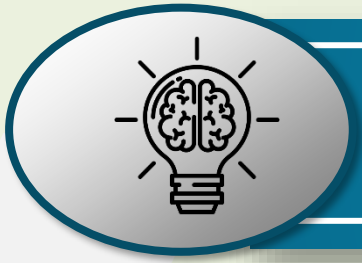
- Striking a balance between Academic, Research and Consultancy work
- Achieving 100% Placements and admission
- Publishing Papers at Reputed/Indexed Journal
- Obtaining Patents

SJC INSTITUTE OF TECHNOLOGY, CHICKBALLAPUR
DEPARTMENT OF MECHANICAL ENGINEERING

Future Plans

Improve placement opportunities in core companies and to have tie-up with industries for better employability of students

- Enhance the Mechanical Engineering intake from 30 to 60
- Addition of New program in the area Artificial Intelligence and Robotics



Motivate students to learn any one current technology and implement their innovative concepts in their projects

Strengthening of linkages with VTU, DST, VGST and AICTE for contributing towards the productive socio-economic growth of our nation

SJC INSTITUTE OF TECHNOLOGY, CHICKBALLAPUR
DEPARTMENT OF MECHANICAL ENGINEERING

Distinguished Alumni

Mr. Srikanth Bhargava
Director level officer
in Def Service
Bengaluru, Karnataka, India

Dr. Ganga Reddy C
General Manager
HCL Technologies, Bengaluru

Flt. Lt (R) Archana Bhatt, KAS
Tahashiladar,
Bengaluru

Mr. Vinod Gowda K R
Sr. Manager, Bombardier
Aerospace, Bengaluru

Mr. Aditya Anil Babu
Co-founder of Reddy
Naturals LLC, Chicago
(USA)

Mr. Sudeshkar Keshava
MD, Sri AlliaNce MechatroNics Pvt Ltd...
Mysore, Karnataka,
India

Mr. Sathyavrath S N
Senior Verification Engineer
Mercedes-Benz research and
Development India (MBRDI)

Mrs. Supriya Premkumar
Software Engineer,
Kubernetes,
San Francisco, USA

SJC INSTITUTE OF TECHNOLOGY, CHICKBALLAPUR
DEPARTMENT OF MECHANICAL ENGINEERING

Honourable Guests

Dr. J N Balaraju
Senior Principal Scientist,
CSIR-NAL
Bengaluru

Dr. T Ram Prabhu
Joint Director,
DRDO, Bangalore

Dr. Suresh R
Professor
MSRUAS, Bangalore

Dr. Dinesh Rangappa
Professor, VTU, Muddenahalli

Dr. C S Prakash
Dean R & D
SNPSU, Bangalore

Dr. Venkateswarlu Karodi
Senior Principal Scientist,
CSIR-NAL
Bengaluru

Dr. Raghothama Rao
Chairman NDRF,
DRDO, ADE
Bengaluru

Dr. Amarnath M
Assistant Professor
IITDM, Jabalpur


Thank you

Calculation of POs and PSOs