

# **Anna University**

# **Department of Instrumentation Engineering Madras Institute of Technology Campus**



Chromepet, Chennai-600044.

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### **CALL FOR APPLICATIONS – SISEA 2025**

(Summer Internship for UG/PG Students in Emerging areas of Automation)

### ABOUT THE DEPARTMENT

The Department of Instrumentation Engineering MIT Campus Anna University was established in the year of 1949 and pioneer in offering UG and PG program in Instrumentation Engineering. The core strength of the Instrumentation Engineering Department MIT Campus, Anna University is Process Control & Instrumentation.

#### **HIGHLIGHTS**

- Highly qualified faculty members with multi-disciplinary research expertise and significant professional accomplishments, dedicated Faculty and staff members and highly motivated students.
- Well-equipped laboratories with State-of-the-art facilities to impart high quality education and to pursue research.
- Both UG and PG programmes are approved by ACITE and accredited by NAAC ('A' grade (2014-2019)) and UG programme accredited by NBA for 2 consecutive times for 6 years (2016-2022)& (2022-2028).
- DST FIST & PURSE / UGC SAP & UPE Sponsored /TEQIP/ RUSA 2.0. Funded Dept.
- Collaborative research with Universities and R&D organizations in India and abroad.

# Facilities available in the Department of Instrumentation Engineering 13Major Research cum Curriculum based UG/PG Laboratories

- Advanced Drives and Machines Laboratory— DST PURSE sponsored (Houses sophisticated integrated PC based AC/DC drives from Rock well Automation worth 1 crore)
- Flow Laboratory— UGC SAP DRS-I sponsored—(Customized Flow characterization and control valve testing facility worth 1 crore)
- University for Potential Excellence (UPE) Laboratory UGC-UPE sponsored– (Programmable System on Chip (PSoC), MSOs &DSOs, High Precision LCR Meter & function generator, Spectrophotometer, Fluorometer etc worth 1 crore)
- Centre of Excellence in Factory Automation Mitsubishi sponsored (Mitsubishi PLCs, 6 DOF Robot with software, SCADA HMI software worth 1 crore)
- Control System Laboratory—DST- PURSE sponsored (4 major mechanical PC based pilot systems namely Inverted pendulum, TRMS, Magnetic levitation, AC/DC servo system from Feedback Instruments, USA worth 50 lakhs)
- Process Control Laboratory— DST FIST, UGC,DRDO,TEQIP sponsored (Tailor made Process Training plants for level, temperature, pressure,flow with industrial Transmitters, Valves and Controllers/ Distillation column/Bioreactor/CSTR etc.)
- Industrial Automation Laboratory DST FIST & UGC SAP sponsored (Industrial version of DCSs: Emerson Delta V, Yokogawa CS3000, Invensys, Siemens IoT Enabled DCS Simantic PCS 7, SCADA HMI, PLCs: GE –Fanuc, Modicon, Siemens, Omron, Schneider, Mitsubishi, etcwith pilot processes)
- Embedded System Laboratory— TEQIP AU Lab Modernization funded (ARM CORTEX/PIC/RASPERRY PI /Embedded IoT/Wireless Module/ IDE Platform/Licensed version of Proteus software/etc)
- Industrial Instrumentation Laboratory DST-PURSE, UGC-SAP, LabModernizationfunded (Vital Sign Monitor, Loop Calibrator, Light/Sound Meter, Conductivity and pH Analyser, UV Visible Spectrophotometer, Portable Furnace, Dead Weight Tester, Multiproduct Calibrator, HART communicator with pressure and Temperature Transmitters, Field Instrumentation skid (Endress + Hauser), etc
- Calibration Laboratory- DST-PURSE, UGC-SAP sponsored (Process Calibrator/High & Low Temperature Calibrator/IR Tester/Thermal Imager/Viscometer and Thermosel/Smart Pressure Calibrator etc)
- Transducer & Measurements Laboratory–DST PURSE UGC SAP (Collection of sensors, DAQ cards NI- 6001, 6008, MyDAQ, Compact RIO, ELVIS kit, Analog System Kit, PC based Measurement setup for Strain, Displacement, Vibration, Temperature etc)
- Electronics Laboratory UPE -Lab Modernization(High End MSOs & DSOs Keysight, ALL-IN-ONE Testbench MOKULAB, Spectrum Analyzers Rigol, RPS-APLAB, Keithley etc)
- Electric Vehicle Research Facility RUSA 2.0. Funded—(Battery Management System, Programmable Electronic Load, Hardware-in-Loop simulator, Embedded Hardware, Data Loggers, EV Test Bench setup, Adaptive Charging unit etc)

## **Summer Internship to be offered by the Department**

S.	Faculty Detail	2025				
No	·	Topics of internship	No. of Batches	Duration (in Weeks)		
1.	Dr N.Pappa, Prof. Email: npappa@rediffmail.com	1.Experimental studies on EV test bench setup.	1	4		
		2.Experimental studies on Adaptive charging unit for EV.	1	4		
		3.Hardware-in-loop (HIL) realization of soft sensor.	1	4		
2.	Dr Sabitha Ramakrishnan, Prof.	1.Wireless communication.	1	2/4		
	Email: sabitha.ramakrishnan@gmail.com	2. Biomedical Signal processing.	1	2/4		
3.	Dr S.Sutha, Prof. Email: sutha_mani@hotmail.com	1.Computer vision- based health care applications.	1	4		
		2.Embedded – AI for OTEC Plant.	1	4		
		3.Battery thermal management system for Liion battery.	1	4		
4.	Dr C.Shanthi, Asst Prof Email: cgshanthi@gmail.com	Image- based applications.	1	2		
5.	Dr M.Mythily, Asst. Prof <b>Email:</b> mythily_eie@yahoo.co.in	1. Predictive maintenance for ML.	1	2/4		
		2.Digital-twin model for system/process.	1	2/4		
		3.Sensor failure prediction using ML.	1	2/4		
6.	Dr D.Kalpana, Asst. Prof Email:kalpanaspec@gmail.com	AI-based health care applications.	2	2/4		
7.	Dr V.Gomathi, Asst. Prof Email: gomathianand31@gmail.com	Fault diagnosis for pilot scale industrial processes.	2	4		
8.	Mr.K.Selvakumar, Teaching Fellow Email:selvakumark12782@gmail.com	PLC-based automation for industrial process.	1	4		
9.	Dr S.Arockia Suganya, Teaching Fellow Email:arockia.sukanya@gmail.com	Segmentation of dental disorders using Machine Learning and Deep Learning.	1	4		
10.	Dr S.Nambi Narayanan, Teaching Fellow Email:vinoth2852@gmail.com	Biosignal processing and control.	1	4		
11.	MrS.S.Preamanand, Teaching Fellow Email:sivaanand129@gmail.com	Temperature control for Industrial process.	1	4		
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# General information for candidates applying for Summer Internship Programme.

Students currently pursuing (2<sup>nd</sup>/3<sup>rd</sup>Year B.E./ B.Tech)/(1<sup>st</sup>/2<sup>nd</sup> Year M.E/M.Tech) in the listed eligible disciplines or equivalent in any AICTE/ UGC approved academic institutions willing to carry out Summer Internship at the Department of Instrumentation Engineering, MIT Campus, Anna University, Chennai inthe areas of Electronics, Instrumentation, Control and Automation(on specific topics listed under the faculty member who will be offering the internship as per the Table)using the facility available at the Department may apply for the Internship Programme.

### **Eligiblity:**

Programme	Discipline					
B.E/B.Tech	EIE/ICE/ EEE/ECE/CSE/AUTO./AIDS/ROBOTICS/Equivalent					
M.E/M.Tech	<b>Instrumentation</b> Engg./Control	&Instrumentation Engg.				
	/Medical Electronics/Applied	<b>Electronics/</b> Power				
	Electronics/Biomedical	<b>Engineering/Communication</b>				
	Systems/CSE/ Embedded System / Equivalent					

### Fees:

- i. Rs.1180/-(Inclusive of 18% GST) for 2 weeks.
- ii. Rs.2360/-(Inclusive of 18% GST) for 4 weeks.

Demand Draft Should be drawn in favour of 'Director, CSRC' payable at Chennai.

**Mode:** Hybrid (Compulsory 1 week offline for 2 weeks Internship / Compulsory 2 weeks offline for 4 weeks Internship to carry out real time work and remaining period can be offline or online)

**Period**: 2 weeks/4 weeks duration between **May – July 15<sup>th</sup>,2025** as per the faculty supervisor concern.

### **Application Procedure:**

- 1. Interested students may look at the profiles of faculty members of the Institute at the Anna University/ MIT website and contact them directly to get their supervisor consent.
- 2. Application should be made in the prescribed format as available in MIT, Chennai website with copy of consent mail from the faculty along with fees

payment proof. It mustbe duly signed, scanned, and submitted through Google form with necessary enclosures before the due date.

Google form Link: <a href="https://forms.gle/3xd3xj2eREZRV86t6">https://forms.gle/3xd3xj2eREZRV86t6</a>

- **3.** The faculty members will conduct online interviews for the shortlisted candidates and selection will be intimated through the mail.
- 4. The candidate must confirm their participation once selected and send the hard copy of filled application along with original copy of Demand Draft and all the listed documents mentioned in the application. Kindly mention "Application for the SISEA 2025" on the left-hand top corner of the postal cover and send to the following Postal address:-

The HoD,
Department of Instrumentation Engineering,
MIT Campus,
Anna University,
Chromepet, Chennai – 600044.

### **Important Dates:**

Submission of Application with faculty consent along with DD copy: Last date  $10^{th}$  May 2025

**Selection confirmation: 13th May 2025** 

Starting of Internship: Between May to 15th July 2025(for a period of 2/4 weeks)

Contacts: Please contact your Supervisor from IE/MIT Campus in case you have any queries/doubts etc.

### SISEA – 2025 Application Form:

1)Name of the App	licant					Insert Passpo	ort size photo
2) Internship Topic							<u>-</u> -
3) Duration(Preferr	red)	2 Weeks : 4	Weeks:		Starting I	Date: En	ding Date:
4) Name of the Sup from IE/MIT Camp	ous						
5) Name of the Inst	itution						
6) Department							
7) Degree Pursuing specialization	with						
8) Year of Study							
<ul><li>9) Gender</li><li>10) Address Details</li></ul>							
11) Contact Details		Mobile No.:		Email i			
12) Educational Q	ualificatio	on with marks (Sta	rting fron	n 10 <sup>m</sup> o	nwards an	d up to last sem	completed in UG) %Marks/
Examination Passed	Boa	ard/University/Coll	lege	Year	Sp	ecialization	CGPA /
SSLC							
HSC							
UG (Till							
completed Sem.)							
PG (Till completed Sem.)							
		for the Internship fe	ees:				l
1. Name of the Ban		101 <b></b> 1					
2.Name of the Brar							
3.DD Amount:							
4.DD Number:							
14) List of Attachm	nents:1.Tra	anscripts,2.Resume,	3.Bonafide	e Certifi	cate,4.Iden	tity Card, 5. Proc	of for payment made
				· · · · · · · · · · · · · · · · · · ·			
Place:							
Date:					Sig	gnature of the A	pplicant

<u>Sign and Scan Application:</u> Send It to <u>mitieau@mitindia.edu</u> and submit through Google form before due date with attachments(documents listed in S. No. 14)

### **Bonafide Certificate**

(To be obtained from HOD/Academic Section)

This is to certify thatM	r./Ms				,	a student of this
Institution/University	studying					is
nominated to undergo	internship	at M	IT Campus,	Anna	University,	Chennai-600044
from	to			•		
Signature:						
Name:						
Designation:						
Name of theInstitution:						

Seal with date