

THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI-15

I-STEM Regional Infrastructure Skill Enhancement Operator Training Program (I-RISE OTP)

Day/ Date	Time	Venue	Activity / Session	Faculty Experts / Resource Person
Department of Mechanical Engineering				
Day 1 21.09.2026	09:30–11:30 AM	ECE Seminar Hall	Inaugural Session & I-STEM Portal Training	Dr. Harilal Baskar, COO/National Coordinator, I-STEM 2. Mr. Narmdeshwar Pandey Subject Matter Expert (SME) Manager, I-STEM
	11:30 AM–12:30 PM	TSSCAR & Nanotechnology Lab	KD 2 Pro - Thermal Properties Analyzer	Dr. B. Varun Kumar, Associate Professor -Research Faculty, Dept. of Mechanical Engineering
	01:30–02:30 PM		Zetasizer Advance Lab	Dr. A. Valan Arasu, Professor, Dept. of Mechanical Engineering
	02:00 - 03:30 PM		Electro Dynamic Shaker (Vibration Testing)	Dr. C. Vignesh, Assistant Professor, Dept. of Mechanical Engineering
	03:30–04:30 PM		Altitude Test Chamber and Industrial Chiller (CATH Chamber)	Dr. M. Balamurali, Associate Professor Dept. of Mechanical Engineering and Centre Head, TSSCAR
Department of Civil Engineering				
Day 2 22.09.2026	10:00–11:00 AM	Soil and Roads lab, Structures lab, Material Testing lab, Environmental lab and Survey lab	Rebar locator, UPV test,Rebound hammer test,Concrete core drill test,	Dr. S. Arul Mary, Professor & Head, Dept. of Civil Engineering
	11:15 AM–11:45 PM		Structural Engg lab. nano test, loading frame with actuators of capacity 250 KN	Dr. D. Rajkumar, Assistant Professor, Dept. of Civil Engineering
	11:45 AM–12:15 PM		Compression testing machine, UTM, concrete mixer	Dr. R. Sankaranarayanan, Assistant Professor, Dept. of Civil Engineering
	1:15 PM–1:45 PM		Survey lab	Dr. R. Ponnudurai, Associate Professor, Dept. of Civil Engineering
	1:45 PM - 2.15PM		Auto level, Plane table, Total station	Mrs. R. Abinaya Rajakumari, Assistant Professor, Dept. of Civil Engineering
	2.15PM - 3.15PM		Water quality analysis using sensors, wastewater quality, air quality	Dr. R. K. C. Jeykumar, Assistant Professor, Dept. of Civil Engineering
	3:30PM- 4:00 PM		Overview of soil and Roads laboratory	Dr. R. Sanjay Kumar, Associate Professor, Dept. of Civil Engineering

	4:00PM- 4:30 PM		Sieve analysis, Direct shear test, CBR, Standard proctor	Mrs. J. M. Sivapriya, Assistant Professor, Dept. of Civil Engineering
Department of Electrical and Electronics Engineering				
Day 3 23.09.2026	10:00–10:30 AM	Electrical Machines Lab		Dr. V. Saravanan, Professor, Dept. of Electrical and Electronics Engineering Dr. G. Sivasankar, Associate Professor, Dept. of Electrical and Electronics Engineering
	10:30 AM–12:30 PM		Thermal image CAMERA, Battery Tester, and Vibration Meter POWER Quality Analyser	
	01:30–04:00 PM		Demo & Hands-on Training in TSSCAR EV Lab	
Department of Electronics and Communication Engineering				
Day 4 24.09.2026	10:00–10:30 AM	Centre of Excellence in Electronic Product Testing (CEEPT)	I-STEM Portal Training	I-STEM Expert Dr. B. Manimegalai, Professor & Head, Dept. of Electronics and Communication Engineering
	10:30 AM–11:30 AM		Introduction – (Lab safety, calibration, maintenance)	
	11:30–12:30 PM		Hands-on Vector Network Analyzer -Component Testing & Parameter Measurement	
	01:30–3:00 PM		Hands on training on Spectrum Analyzer (Calibration, Procedure & Signal Analysis)	
	03:00–04:00 PM		Demonstration on Component & Antenna Testing in Anechoic Chamber	
Department of Physics				
Day 5 25.09.2026	10:00–10:30 AM	CoEMRES – Materials Synthesize & Characterization Lab	I-STEM Portal Training (Searching, booking, and managing equipment access)	I-STEM Expert Dr. S. Karthickprabhu, Assistant Professor, Dept. of Physics
	11:00 AM–12:00 PM		Orientation – (Coin Cell Preparation, calibration & Electrochemical Workstation)	
	12:00–12:45 PM		Demonstration – (Electrochemical Workstation Instruments handling & Usage Procedures)	
	01:45–03:45 PM		Demonstration – (UV-Visible Spectrophotometer) (Usage procedures, advanced applications, safety)	
	03:45–04:00 PM		Wrap-Up – (Discussion & feedback)	

*****12:30 PM to 1:30 PM – LUNCH**