List of Topics / areas of proposed works for internship programme:

<u>STUDENT INTERNSHIPS:</u>
1. Short Duration (Duration: 3 week / 6-week internship)
   Period: **Dec 2025 to July 2026**

Sl. No.	Name of Mentor/Guide	Section/ Department	Subject Area	Preferable Discipline & Desired Skill-sets	No. of Slots
1	Dr. M Suresh, DD & Team	Research Project	CFD on turbulence reduction at test section	Mechanical Engg, CFD	2
2	Mr. C B Suresh, CRE	Gas Flow	Review of Piston provers for gas flow	Instrumentation, Electrical Sciences	2
3	Mrs Dhanya M P, CRE	Electro-Technical	Thermocouple inhomogeneity study	Instrumentation, Electrical Sciences	2
4	Mr. Gopan C K, CRE	Quality	QMS study & updation	Documentation	1
5	Dr. M Suresh, DD & Team	Project	Automated Actuation / Cyclic Endurance (IoT)	Instrumentation, Electrical Sciences	2
6	Mr. P N Unnikrishnan, SRE	Air Flow	Survey of gravimetric gas flow systems	Mechanical / Instrumentation / Electrical Sciences	1
7	Dr. M Suresh, DD & Team	Research Project	CFD: evaluating an automotive variable area orifice	Mechanical Engg, CFD/ Multiphysics	2
8	Dr. M Suresh, DD & Team	Multi-phase	Analysis of two-phase flow parameters	Any discipline Engg. or BSc/MSc/BSMS in Mathematics/ Statistics / Physics; (Python, AI/ML)	2

2. Academic Projects (Duration: 3 months / 1 semester)
   Period: **Dec 2025 to Dec 2026**

Sl. No.	Name of Mentor/Guide	Section/ Department	Subject Area	Preferable Discipline & Desired Skill-sets	No. of Slots
1	Dr. M Suresh, DD & Team	Research Project	CFD & Prototyping of flapper-nozzle mechanism	Mechanical Engg, CFD, micro-fabrication, 3D printing	2
2	Dr A Tamilchandran	Noise & Vibration	Acoustic measurement & analysis (Qualification of Hemi anechoic chamber/ ISO 3745)	Mechanical Engg / M.Sc Physics (LabVIEW, Multiphysics, Data Acquisition)	1
3	Mr. Jayesh K G, SRE	Liquid Flow	Automation / Data acquisition for mass & time measurement	Electronics / Instrumentation	1
4	Mr. C B Suresh, CRE	Gas Flow	Design of Auto Quick-connect coupling	Mechanical Engg	1
5	Mr. P N Unnikrishnan, SRE	Air Flow	Assessment & Comparison of gravimetric gas flow systems	Mechanical Engg	1
6	Dr. M Suresh, DD & Team	Research Project	CFD & design of quiet test section	Mechanical Engg, CFD	2
7	Dr. M Suresh, DD & Team	Research Project	CFD: pressure loss on surfaces	Mechanical Engg, CFD	2
8	Dr. M Suresh, DD & Team	Research Project	Offset assessment with inclination sensing	Instrumentation, Electrical Sciences	1

NOTE:

Due to strict Non-Disclosure requirements, the full details on activity (topic) is not provided here.

3. Sponsored Project / Research Project Internship (Duration: 1 semester / 2 semester)
   Period: **Dec 2025 to July 2027**

Sl. No.	Name of Mentor/Guide	Section/ Department	Subject Area	Preferable Discipline & Desired Skill-sets	No. of Slots
1	Dr. M Suresh, DD & Team	Research Project	Micro-displacement actuator & sensor for flow control	Electrical & Mechanical (Inter-disciplinary)	2+2
2	Dr A Tamilchandran	Noise & Vibration	Qualification and performance verification of tri axial shaker system	M.Tech (Mechanical / Engineering Design) (LabVIEW, Multiphysics)	1
3	Dr. M Suresh, DD & Team	Research Project	Development of micro-fluidic drug delivery system prototype	Electrical & Mechanical (Inter-disciplinary)	1+1
4	Mr. C B Suresh, CRE	Gas Flow	Air buoyancy effect in gravimetry	Mechanical Engg.	1
5	Mrs Dhanya M P, CRE	Electro-Technical	Data acquisition based Test System- application development (LabVIEW)	Instrumentation / Electrical sciences	1
6	Mr. K Suresh, CRE	Logistics	e-procure module for work flow	Computer Science/IT (web-page, DBMS)	1
7	Dr. M Suresh, DD & Team	Research Project	two-phase flow regime characteristics	Mechanical / Chemical Engg, CFD / Multiphysics	1
8	Dr. M Suresh, DD & Team	Research Project	Underwater Velocity sensor system	Electrical & Mechanical (Inter-disciplinary)	1+1

FACULTY DEVELOPMENT INTERNSHIPS / INDUSTRIAL PROGRAMME:

4. INTERNSHIP for Faculty from Engineering Colleges/Polytechnics (Duration: 2 weeks)
   Period: **Dec 2025 to July 2026**

Sl. No.	Name of Mentor/Guide	Subject Area	Preferable Discipline & Desired Skill-sets	No. of Slots
1	Dr. M Suresh, DD & Team	Quiet Water tunnel system	Mechanical Engg (Fluid Mechanics, CFD)	1
2	Dr. M Suresh, DD & Team	Insertion probe calibration system	Mechanical Engg (Fluid Mechanics, CFD)	1
3	Dr. M Suresh, DD & Team	Process data analytics in mixture flows	Data science (AI/ML)	1
4	Dr. M Suresh, DD & Team	Tow Facility mobile system design	Electrical Engg	1
5	Mr C B Suresh, CRE	Air buoyancy effect in gravimetry systems	Mechanical Engg	1

NOTE:

Due to strict Non-Disclosure requirements, the full details on activity (topic) is not provided here.