

ECMT – Internship Opportunity

Deep-Tech | Clean Energy | Battery Materials & AI

Position: Research & Engineering Intern (Materials science & Engineering/
Chemical Engineering/Chemistry/Physics/ AI-ML)

Location: Ambur / Hybrid (with optional on-site collaboration)

Duration: 3–6 Months (extendable)

Start Date: Rolling

About ECMT

ECMT is a deep-tech startup focused on advancing next-generation battery materials and energy storage solutions for electric vehicles (EVs) and grid-scale applications. Operating at the intersection of materials science, chemical engineering, and AI/ML, ECMT is building scalable, cost-efficient, and sustainable solutions to support the global clean energy transition.

Role Overview

We are seeking driven and technically strong interns from Materials Engineering, Chemical Engineering, and AI/ML domains to work on high-impact challenges in battery material development, process optimization, and data-driven innovation. This internship offers hands-on exposure to R&D, scale-up thinking, and digitalization in clean energy technologies.

Key Responsibilities

Materials / Chemical Engineering:

- Support synthesis of advanced cathode materials (e.g., LFP, LMFP)
- Assist in process development

- Design and execute experiments using DOE methodologies
- Analyze material characteristics (structure, morphology, electrochemical behavior)

AI / Machine Learning:

- Develop predictive models for materials and process optimization
- Apply ML techniques to reduce experimental cycles and improve performance
- Work with experimental and process datasets for insights and modeling
- Contribute to digital tools for battery R&D and manufacturing intelligence

Cross-functional:

- Collaborate across materials, process, and data domains
- Document findings and contribute to technical knowledge base
- Engage in solving real-world industrial and scale-up challenges

Qualifications

- Pursuing or recently completed B.Tech / M.Tech / PhD in relevant fields
- Strong fundamentals in materials science, electrochemistry, chemical processes, or data science
- Analytical mindset with problem-solving capability
- Familiarity with Python, MATLAB, JMP, or Minitab is an advantage

What You Will Gain

- Hands-on experience in battery materials R&D and scale-up strategy
- Exposure to a deep-tech startup environment with real impact
- Mentorship from industry experts in EV and energy storage
- Experience integrating materials science with AI/ML approaches