



Adhiyamaan College of Engineering

(An Autonomous Institution, Accredited by NAAC with 'A' Grade-UGC,
Affiliated to Anna University, Chennai)



Department of Electronics and Communication Engineering

(Accredited by NBA)

CENTRE OF EXCELLENCE (CoE) IN EMBEDDED SYSTEMS & IoT TECHNOLOGIES

Roadmap of the Centre of Excellence

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1. Consultancy

2. Research & Development (R&D)

3. Patents & Intellectual Property

4. Training & Skill Development

5. Project Collaboration with Wireless & IoT Industry

1. Consultancy

The Centre of Excellence in Embedded Systems & IoT Technologies will:

- Develop customized embedded and IoT-based solutions for industries
- Undertake consultancy projects in real-time monitoring, automation, and smart systems
- Provide product prototyping, testing, and validation support
- Offer system integration and technical advisory services
- Generate revenue through industry-sponsored projects

Expected Outcome: Strengthened industry collaboration, practical exposure for students, and sustainable consultancy revenue

2. Research & Development (R&D)

The CoE will promote innovation-driven research by:

- Encouraging applied research in Embedded Systems and IoT Technologies
- Developing AI-integrated embedded and smart IoT applications
- Supporting interdisciplinary and funded research projects
- Publishing research articles in reputed journals and conferences
- Designing innovative prototypes for real-world applications

Expected Outcome: Research publications, funded projects, innovative prototypes, and technology transfer

3. Patents & Intellectual Property

The Centre will cultivate an innovation and IP culture by:

- Identifying patentable ideas from student and faculty projects
- Filing patents through **Intellectual Property India**
- Conducting awareness programs on IPR and technology commercialization
- Supporting patent drafting, copyright filing, and product registration
- Encouraging conversion of projects into intellectual property assets

Expected Outcome: Increased patent filings, granted intellectual properties, and commercialization opportunities

4. Training & Skill Development

The CoE will focus on skill enhancement by:

- Conducting certification programs in Embedded Systems & IoT
- Organizing hands-on workshops, bootcamps, and value-added courses
- Offering industry-aligned training modules
- Facilitating internships and live project training
- Conducting hackathons and technical competitions

Expected Outcome: Industry-ready graduates with strong technical and practical competencies

5. Project Collaboration with Wireless & IoT Industry

The Centre will strengthen industry-academia partnership through:

- Collaboration with wireless communication and IoT industries
- Execution of live industry-sponsored projects
- Facilitating industrial visits and internship opportunities
- Joint development of smart and connected products
- Supporting startup and incubation initiatives in embedded and IoT domains

Expected Outcome: Sustainable industry partnerships, employability enhancement, and innovation-driven ecosystem