

ECE 232: Introduction to Project Practices

IN

OUT

Skills Needed

- Basic knowledge of engineering technologies

Pre-requisites

- ECE202, may be taken concurrently or ECE395B, may be taken concurrently, or ECE495B, may be taken concurrently

Weekly Lectures:

- Determining project specifications and needs
- Project lifecycle
- Team formation and team charter
- Project timeline
- Creating and maintaining budget
- Design, test, validation and characterization
- FMEA and risk analysis
- Ethics and internationalization
- Intellectual property
- Standards
- Industrialization phase of bringing product to market
- Technical writing skills
- Presentation skills

Weekly Pre-work:

- Required weekly individual reading to prepare for class

Weekly In-class work:

- Lecture attendance is required
- Students work on weekly deliverable during class time, aided by guest visitors and lecturers

Weekly Assignments:

- All post-lecture assignments are team deliverables

Project-Related Skills; Team Management and Teamwork

- Define project requirements and deliverables
- Market research and creation of advertisement videos
- Create individual assignments and project timeline; re-working the timeline during life of the project
- Manage time and resources
- Managing budget
- Creating test plan and meeting the requirements
- Understanding IP and how it affects product design
- Product compliance with standards

Written and Oral Skills

- Preparing weekly team and individual deliverables
- Short, 5-min oral presentations
- Written reports
- Exposure to different audience types

Self and Peer Evaluation

- Evaluate work of others (peer evaluation)
- Evaluate own work (self-evaluation)