AIM

The aim of the BS degree program at the Department of Electrical and Electronics Engineering is to graduate engineers who can have successful careers in industrial and academic environments, working on design, development, production, and research, have systematic approach in problem solving, can effectively work in teams, have social, environmental, economical, and ethical awareness and responsibility, and have leadership skills.

KNOWLEDGE

Theoretical/Factual

1. Has the background in math, science, and related engineering fields; and has the ability to use them together to solve problems.

SKILLS

Cognitive/Practical

2. Identifies, defines, formulates, and solves engineering problems; chooses and uses the proper methods, techniques, and tools for this purpose.

3. Analyzes a system, its components, or a process; designs to address the needs under realistic restrictions; and uses modern design tools for this purpose.

4. Chooses and uses modern techniques and tools for engineering applications.

5. Designs and conducts experiment; collects data; analyzes and interprets the results.

COMPETENCY

Ability to work independently and take responsibility

6. Works effectively individually and in teams.

7. Has the awareness in project management, workplace practices, worker health, environmental and workplace safety, professional and ethical responsibility, and legal issues about engineering practices.

Learning Competence

8. Reaches information, and surveys literature for this purpose; has critical approach; uses databases and other information sources.

9. Aware of the necessity of life-long learning; follows technological advances and renews him/herself.

Communication and Social Competence

10. Communicates, oral and written, effectively using modern tools; knows at least one foreign language at the B1 level of European Language Portfolio.

Field-based Competence

11. Aware of universal and social effects of engineering solutions and practices; develops new technologies for solving universal problems and social advance.