Outcome Based Education (OBE) system

Getting to know the mapping of Programme Outcomes (POs), Programme Educational Objectives (PEOs), Mission and Vision of FOE for the degree

B.Eng. (Hons) Electronics majoring in Telecommunications

Vision

To be a leading engineering faculty with global recognition for creation and dissemination of knowledge

To cultivate talents who embrace Inquiry, Inspiration and Innovation via excellent engineering programmes, impactful research and strong industry support

Mission

PEO1: Graduates assume a technical or managerial leadership role in telecommunications or in any field benefitting from their engineering knowledge

PEO2: Graduates embrace lifelong learning through advanced study, training, or professional membership

PEO3: Graduates are committed to professional ethics, sustainability, and appreciation of social values in their chosen fields

POs

- PO1: Acquire and apply knowledge of mathematics, science and engineering fundamentals to solve complex engineering problems
  - Related to PEO 1
  - Graduates have good fundamental knowledge and therefore can easily adapt to advances in engineering
  - This will ensure graduates of high calibre who are equipped with scientific principles can support the development of engineering practices

- PO2: Acquire technical competencies in a specialised engineering discipline to solve complex engineering problems
  - Related to PEO 1
  - Graduates have comprehensive knowledge in their specialised engineering field to solve complex problems

- PO3: Identify and analyse complex engineering problems to reach substantiated conclusions using fundamental principles of mathematics, science and engineering
  - Related to PEO 1
  - Graduates identify, analyse and recommend solutions to complex problems

- PO4: Design solutions for complex engineering problems that meet specified needs with appropriate considerations for public health and safety, society and the environment
  - Related to PEOs 1 and 3
  - Graduates design solutions that comply with social and environmental obligations

- PO5: Conduct research-based investigations into complex engineering problems to reach valid conclusions
  - Related to PEO 1
  - Graduates resolve complex problems by conducting research independently

- PO6: Create, select and apply appropriate techniques, resources, and modern engineering and IT tools to complex engineering activities
  - Related to PEOs 1 and 2

- PO7: Apply appropriate reasoning to assess societal, health, safety, legal and cultural issues that are relevant to professional engineering practice
  - Related to PEO 1
  - Graduates understand their roles as engineers for the betterment of the society, which include societal, health, safety and cultural responsibilities

- PO8: Understand the impact to sustainability, society and the environment in the design and development of professional engineering solutions
  - Related to PEO 3
  - Graduates apply sustainable and cost-effective solutions in their professional engineering practices

- PO9: Apply and commit to professional ethics and responsibilities in engineering practice
  - Related to PEO 3
  - Graduates are ethical and disciplined in their engineering practices

- PO10: Communicate effectively on complex engineering activities in both oral and written forms
  - Related to PEO 1
  - Graduates are articulate when communicating while open to feedback and criticism

- PO11: Function effectively as an individual, and as a member or leader of a team in multidisciplinary environments
  - Related to PEO 1
  - Graduates are competent leaders and team members

- PO12: Recognise the need for, and acquire the ability to engage in lifelong learning amidst change
  - Related to PEO 2
  - Graduates are inquisitive and enthusiastic for knowledge and experiences

- PO13: Demonstrate engineering and management principles, as a member and leader of a team, in managing projects in multidisciplinary environments
  - Related to PEO 1

Description of how PEs are linked to the PEOs: