UMS
UNIVERSITI MALAYSIA SABAH

ELECTRICAL AND ELECTRONICS ENGINEERING PROGRAM
FACULTY OF ENGINEERING

PROGRAMME OUTCOMES (PO)

Programme Outcomes (POs) that the students must have to achieve at the end of their undergraduate study are follows:

PO1: Engineering Knowledge

Apply knowledge of mathematics, natural science, engineering fundamentals and an engineering specialization respectively to the solution of complex engineering problems.

PO2: Problem Analysis

Identify, formulate, research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PO3: Design/Development of Solutions

Design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PO4: Investigation

Conduct investigations of complex problems using research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.

PO5: Modern Tool Usage

Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering problems, with an understanding of the limitations.

PO6: The Engineer and Society

Apply reasoning informed by contextual knowledge to assess societal, health, safety, and legal issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex engineering problems.

PO7: Environment and Sustainability

Understand and evaluate the sustainability the sustainability and impact of professional engineering work in the solution of complex engineering problems in societal and environmental contexts.

PO8: Ethics

Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PO9: Individual and Team Work

Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.

PO10: Communication

Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project Management and Finance

Demonstrate knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environment.

PO12: Lifelong Learning

Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.