KEMENTERIAN PENDIDIKAN TINGGI
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI

POLITEKNIK MALAYSIA
IBRAHIM SULTAN

DEPARTMENT OF ELECTRICAL ENGINEERING

POLITEKNIK IBRAHIM SULTAN

DIPLOMA IN

- ELECTRICAL AND ELECTRONIC ENGINEERING - DEE
- ELECTRONIC ENGINEERING (COMMUNICATION) - DEP
- ELECTRONIC ENGINEERING (CONTROL) - DJK

PROGRAMME EDUCATIONAL OBJECTIVES

PEO 1 practicing technician in electrical engineering related field	**PEO 2** contributing to society with professional ethic and responsibilities	**PEO 3** engaging in enterprising activities that apply engineering knowledge and technical skills	**PEO4** engaging in activities to enhance knowledge for successful career advancement

PROGRAMME LEARNING OUTCOMES (PLO)

PLO 1 - Knowledge

Apply knowledge of applied mathematics, applied science, engineering fundamentals and an engineering specialisation as specified in DK1 to DK4 respectively to wide practical procedures and practices

PLO 2 - Problem Analysis

Identify and analyse well-defined engineering problems reaching substantiated conclusions using codified methods of analysis specific to their field of activity (DK1 to DK4)

PLO 3 - Design/Development of Solutions

Design solutions for well-defined technical problems and assist with the design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations (DK5)

PLO 4 - Investigation

Conduct investigations of well-defined problems; locate and search relevant codes and catalogues, conduct standard tests and measurements

PLO 5 - Modern Tool Usage

Apply appropriate techniques, resources, and modern engineering and IT tools to well-defined engineering problems, with an awareness of the limitations

PLO 6 - The Engineer and Society

Demonstrate knowledge of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering technician practice and solutions to well-defined engineering problems (DK7)

PLO 7 - Environment and Sustainability

Understand and evaluate the sustainability and impact of engineering technician work in the solution of well-defined engineering problems in societal and environmental contexts (DK7)

PLO 8 - Ethics

Understand and commit to professional ethics and responsibilities and norms of technician practice; (DK7)

PLO 9 - Individual and Teamwork

Function effectively as an individual, and as a member in diverse technical teams;

PLO 10 - Communications

Communicate effectively on well-defined engineering activities with the engineering community and with society at large, by being able to comprehend the work of others, document their own work, and give and receive clear instructions

PLO 11 - Project Management and Finance

Demonstrate knowledge and understanding of engineering management principles and apply these to one's own work, as a member or leader in a technical team and to manage projects in multidisciplinary environments

PLO 12 - Life Long Learning

Recognise the need for, and have the ability to engage in independent updating in the context of specialised technical knowledge

DK 1: A descriptive, formula-based understanding of the **natural sciences** applicable in a sub-discipline
DK 2: Procedural **mathematics**, numerical analysis, statistics applicable in a subdiscipline
DK 3: A coherent procedural formulation of **engineering fundamentals** required in an accepted sub-discipline
DK 4: Engineering **specialist knowledge** that provides the body of knowledge for an accepted sub-discipline
DK 5: Knowledge that supports **engineering design** based on the techniques and procedures of a practice area
DK 6: Codified **practical engineering knowledge** in recognised practice area
DK 7: **Knowledge** of issues and approaches in engineering technician practice: ethics, financial, cultural, environmental and sustainability impacts