

DEPARTMENT OF ELECTRICAL ENGINEERING

DEG

**DIPLOMA IN ELECTRICAL
ENGINEERING
(GREEN ENERGY)**

DEP

**DIPLOMA IN ELECTRONIC
ENGINEERING
(COMMUNICATION)**

DEQ

**DIPLOMA IN ELECTRICAL
ENGINEERING
(ENERGY EFFICIENCY)**

DET

**DIPLOMA IN ELECTRICAL
ENGINEERING**

DTK

**DIPLOMA IN ELECTRONIC
ENGINEERING (COMPUTER)**

PROGRAMME EDUCATIONAL OBJECTIVES **PEO**

The engineering programme should produce balanced TVET graduates who are:

PEO 1	Practising technician in electrical engineering-related field	Practising technician in electrical and electronic engineering-related field	Practising technician in electrical engineering-related field	Practising technician in electrical engineering-related field	Practising technician in electrical and electronic engineering-related field
PEO 2	Contributing to society with professional ethics and responsibilities	Contributing to society with professional ethics and responsibilities	Contributing to society with professional ethics and responsibilities	Contributing to society with professional ethics and responsibilities	Contributing to society with professional ethics and responsibilities
PEO 3	Engaging in enterprising activities that apply engineering knowledge and technical skills	Engaging in enterprising activities that apply engineering knowledge and technical skills	Engaging in enterprising activities that apply engineering knowledge and technical skills	Engaging in enterprising activities that apply engineering knowledge and technical skills	Engaging in enterprising activities that apply engineering knowledge and technical skills
PEO 4	Engaging in continuous professional development in response to technological and social challenges	Engaging in continuous professional development in response to technological and social challenges	Engaging in continuous professional development in response to technological and social challenges	Engaging in continuous professional development in response to technological and social challenges	Engaging in continuous professional development in response to technological and social challenges

PROGRAMME LEARNING OUTCOMES **PLO**

Upon completion the programme, students should be able to:

PLO 1	Apply knowledge of applied mathematics, applied science, computing and engineering fundamentals and an engineering specialisation as specified in DK1 to DK4 respectively to wide practical procedures and practices.	
	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 2
PLO 3	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 as well as, cultural, societal, and environmental considerations as required (DK5).	
	Conduct investigations of well-defined problems; locate and search relevant codes and catalogues, conduct standard tests and measurements (DK8).	PLO 4
PLO 5	Apply appropriate techniques, resources, and modern engineering computing and IT tools to well defined engineering problems, with an awareness of the limitations (DK2 and DK6).	
	Consider sustainable development impacts* to: society, the economy, sustainability, health and safety, legal frameworks, and the environment, in solving well-defined engineering problems (DK1, DK5, and DK7).	PLO 6
PLO 7	Understand and commit to professional ethics and responsibilities and norms of technician practice and including compliance with national and international laws. Demonstrate an understanding of the need for diversity and inclusion (DK9)	
	Function effectively as an individual, and as a member in diverse and inclusive teams in multi-disciplinary, face to face, remote and distributed settings (DK9).	PLO 8
PLO 9	Communicate effectively and inclusively 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.	
	Demonstrate awareness of engineering management principles as a member or leader in a technical team and to manage projects in multidisciplinary environments.	PLO 10
PLO 11	Recognize the need for and have the ability for i) independent and lifelong learning and ii) critical thinking in the face of specialised technical knowledge (DK8).	