

The programme outcomes currently in use according to the ETAC 2020 standard have been mapped and are equivalent to the ETAC 2024 standard. The PO mapping from Standard 2020 to Standard 2024 as follow;

NO	PROGRAM LEARNING OUTCOMES (PO) - STANDARD ETAC 2020		NO	PROGRAM LEARNING OUTCOMES (PO) - STANDARD ETAC 2024	
PO 1	Knowledge	Apply knowledge of applied mathematics, applied science, engineering fundamentals and an *engineering specialisation to wide practical procedures and practices	PO 1	Knowledge	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;
PO 2	Problem analysis	Identify and analyse *well-defined engineering problems reaching substantiated conclusions using codified methods of analysis specific to their field of activities	PO 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);
PO 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	PO 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, as well as cultural, societal, and environmental considerations as required (DK5);
PO 4	Investigation	Conduct investigations of *well-defined problems; locate and search relevant codes and catalogues, conduct standard tests and measurements	PO 4	Investigation	Conduct investigations of well-defined problems; locate and search relevant codes and catalogues, conduct standard tests and measurements (DK8)
PO 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	PO 5	Tool Usage	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);
PO 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	PO 6	The Engineer Technician and the World	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);
PO 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			
PO 8	Ethics	Understand and commit to professional ethics and responsibilities and norms of technician practice	PO 7	Ethics	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)
PO 9	Individual and Team Work	Function effectively as an individual, and as a member in diverse technical teams	PO 8	Individual and Collaborative Team Work	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)
PO 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;	PO 9	Communications	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;
PO 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;	PO 10	Project Management and Finance	Demonstrate awareness of engineering management principles as a member or leader in a technical team and to manage projects in multidisciplinary environments;
PO 12	Life Long Learning	Recognise the need for, and have the ability to engage in independent updating in the context of specialised technical knowledge;	PO 11	Life Long Learning	Recognize the need for, and have the ability for i) independent and life-long learning and ii) critical thinking in the face of specialised technical knowledge; (DK8)

Knowledge profile (DK), well-defined engineering problems (DP), and well-defined engineering activities (NA) were mapped to graduates attributes based on STANDARD ETAC 2024 as given in the tables below;

PO 1 Knowledge	DK 1 – DK 4	DP
PO 2 Problem analysis	DK 1 – DK 4	DP
PO 3 Design / development of solutions	DK5	DP
PO 4 Investigation	DK 8	DP
PO 5 Tool Usage	DK 2 & DK6	DP
PO 6 The Engineer Technician and the World	DK 1 , DK 5 & DK7	DP
PO 7 Ethics	DK 9	DP
PO 8 Individual and Collaborative Team Work	DK 9	-
PO 9 Communications	-	NA
PO 10 Project Management and Finance	-	-
PO 11 Life Long Learning	DK 8	-