



## DIPLOMA IN CIVIL ENGINEERING PROGRAMME (DKA)

### PROGRAMME LEARNING OUTCOMES (PLO)

Upon completion of the programme, students should be able to:

PLO	DESCRIPTION
PLO1	apply <b>knowledge</b> of applied mathematics, applied science, engineering fundamentals and an engineering specialisation as specified in DK1 to DK4 respectively to wide practical procedures and practices
PLO2	identify and <b>analyse</b> well-defined engineering <b>problems</b> reaching substantiated conclusions using codified methods of analysis specific to their field of activity (DK1 to DK4)
PLO3	<b>design</b> 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)
PLO4	conduct <b>investigations</b> of well-defined problems; locate and search relevant codes and catalogues, conduct standard tests and measurements
PLO5	apply appropriate techniques, resources, and <b>modern engineering and IT tools</b> to well-defined engineering problems, with an awareness of the limitations (DK6)
PLO6	demonstrate knowledge of the <b>societal</b> , health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering technician practice and solutions to well-defined <b>engineering</b> problems (DK7)
PLO7	understand and evaluate the <b>sustainability</b> and impact of engineering technician work in the solution of well-defined engineering problems in societal and <b>environmental</b> contexts (DK7)
PLO8	understand and commit to professional <b>ethics</b> and responsibilities and norms of technician practice
PLO9	function effectively as an <b>individual</b> , and as a member in diverse technical <b>teams</b>
PLO10	<b>communicate</b> 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
PLO11	demonstrate knowledge and understanding of engineering management principles and apply these to <b>one's own work</b> , as a member or leader in a technical team and to <b>manage projects</b> in multidisciplinary environments
PLO12	recognise the need for, and have the ability to engage in <b>independent updating</b> in the context of specialised technical knowledge