

List of Graduate Attributes _Programme Outcomes

WA1: Engineering knowledge	Apply knowledge of mathematics, natural science, computing and engineering fundamentals, and an engineering specialization as specified in WK1 to WK4 respectively to develop solutions to complex engineering problems.
WA2: Problem Analysis	Identify, formulate, research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences with holistic considerations for sustainable development*(WK1 to WK4)
WA3: Design and development of solutions	Design creative solutions for complex engineering problems and design systems, components or processes to meet identified needs with appropriate consideration for public health and safety, whole-life cost, net-zero carbon as well as resource, cultural, societal, and environmental considerations as required (WK5)
WA4: Investigation	Conduct investigations of complex engineering problems using research methods including research-based knowledge, design of experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions (WK8).
WA5: Modern Tool Usage	Create, select and apply and recognize limitations of appropriate techniques, resources and modern engineering and IT tools, including prediction and modelling, to complex engineering problems (WK2 and WK6)
WA6: The Engineer and Society for Environment & Sustainability	When solving complex engineering problems, analyze and evaluate sustainable developments impacts* to: society, the economy, sustainability, health and safety, legal frameworks, and the environment (WK1, WK5 and WK7)
WA7: Ethics	Apply ethical principles and commit to professional ethics and norms of engineering practice and adhere to relevant national and international laws. Demonstrate an understanding of the need for diversity and inclusion (WK9).
WA8: Individual and Teamwork	Function effectively as an individual, and as a member or leader in diverse and inclusive teams and in multi-disciplinary, face-to-face, remote and distributed settings (WK9).
WA9: Communication	Communicate effectively and inclusively 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, taking into account cultural, language, and learning differences.

WA10: Project Management and Finance	Apply 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, and to manage projects in multi-disciplinary environments.
WA11: Lifelong learning	Recognize the need for, and have the preparation and ability for (i) Independent and life-long learning (ii) Adaptability to new and emerging technologies and (iii) Critical thinking in the broadest context of technological change (WK8).