ME (ELECTRICAL AND ELECTRONIC) ENGINEERING

Programme Learning Outcomes

Programme Learning Outcomes for ME (Electrical and Electronic) (NFQ Level 9, Major Award)

On successful completion of this programme, students should be able to:

- Systematically apply advanced knowledge from mathematics, science and engineering to solve complex and/or unbounded problems in electrical and electronic engineering and in the related disciplines of microelectronic and mechanical engineering;
- Apply information technology and software development techniques to visualise, analyse and solve a broad range of problems in electrical and electronic engineering and in the related disciplines of microelectronic and mechanical engineering to an advanced level;
- Demonstrate the ability to adjust, self-evaluate and critically alter practice in response to evolving project requirements;
- Design components and systems to the standard required of a professional engineer demonstrating logical thinking and imaginative skills to provide the most appropriate solution;
- Critically evaluate the engineering, economic, environmental and societal impacts of proposed solutions;
- Critically evaluate published work at the forefront of the field in the context of a particular engineering solution;
- Work effectively as an individual, in teams and in multi-disciplinary settings with the ability to appropriately plan and meet the role responsibilities, including leadership qualities;
- Communicate effectively engineering-related information and the results of one's own work (in both oral and written form) while demonstrating appreciation of the expertise of the target audience;
- Demonstrate knowledge and understanding of the need for high ethical standards in their professional practice of engineering to the standards expected of a Chartered Engineer.