Competence Standards

Electrical and Electronic Engineering (PGT Programmes)

The Competence Standards apply to the following degree programmes:
- H6W8 - MSc Analogue and Digital Integrated Circuit Design
- H6U8 - MSc Communications and Signal Processing
- J9U4 - MSc Control and Optimisation
- H6U7 - MSc Future Power Networks
- I460 - MSc Applied Machine Learning

You will be expected to meet the basic academic competence standards before applying to these courses as given in the table below.

Area	Competence Standard
Independent study and learning skills	Ability to perceive, comprehend, synthesise, retain and apply information presented orally and in writing from a range of contexts, including large-group, small-group and individual learning, as well as eLearning, online learning, seminars and practical work.
	Ability to undertake guided but independent learning outside time-tabled contact hours.
	Ability to follow general laboratory, workshop and/or fieldwork instructions and safety guidance and precautions.
	Acceptance of the general principles and practices of the academic codes of conduct.
	Psychological ability to cope as an individual with full-time study in a city environment.
General skills	Physical and manual dexterity to precisely perform practical procedures.
	Ability to observe laboratory practices, use equipment for measurements and a computer to record and manipulate data.
	Ability to communicate ideas and concepts in an academic context within a cohort group with staff and students.
	Ability to make notes, record data and sketch visual representations in hard copy by hand or using appropriate computer software.
Practical skills	The ability to undertake travel and field trips as organised by the host institution.
	Ability to work as part of a group/team in a range of roles, for the purposes of research, collective problem solving, development of ideas, production of objects and/or communication of results/findings. Ability to recognise and respect the contributions of other team members to promote successful teamwork.
	Ability to respond to written material politely, critically, effectively and efficiently.

	Ability to use computer systems to access learning resources, receive communications, undertake assessments and submit assignments.
	Ability to use appropriate equipment competently and safely (following appropriate training) to conduct a range of electrical and electronic measurements safely.

It should be noted that the Faculty of Engineering believes in providing the widest practicable access to all degree programmes and appreciates that it is not possible to anticipate all circumstances. If it is possible to mitigate the impact of a disability by making a *reasonable adjustment* to procedures, e.g. by the use of an amanuensis or by the application of a specific technology, then every effort will be made to implement this with due consideration to ensuring fairness to all students and ensuring that all health and safety concerns are met. Therefore, the inability to meet one of the competency standards due to disability does not necessarily preclude entry to a given degree programme but rather constitutes the starting point for a *dialogue* between the potential applicant, the College's disability officer and the Department (contact the admissions team).

You are advised to also consult the Engineering Council's UK Standard for Professional Engineering Competence (UK-SPEC) that identifies key required competences for the various levels of the Council's registrants. Our courses are accredited by the "The IET" and thus consulting their documents will also be beneficial. These documents provide insight into the expectations of the Engineering Council and IET for practising professionals, post graduation.

The additional competences that you will acquire upon graduation from the different streams in the Electrical and Electronic Engineering Department are defined by the Learning Outcomes given in the Programme Specifications.