



School of Engineering and Built Environment

MSc Electrical and Electronic Engineering

Programme Specification

2020/21

GLASGOW CALEDONIAN UNIVERSITY

PS1

Programme Specification

1 GENERAL INFORMATION

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| 1. Programme Title: | Electrical and Electronic Engineering |
| 2. Final Award: | MSc Electrical and Electronic Engineering |
| 3. Exit Awards: | PgD Electrical and Electronic Engineering, PgC |
| 4. Awarding Body: | Glasgow Caledonian University |
| 5. Approval Date: | 17th May 2013 |
| 6. School: | School of Engineering and Built Environment |
| 7. Host Division/Dept: | Department of Engineering |
| 8. UCAS Code: | N/A |
| 9. PSB Involvement: | Institution of Engineering and Technology (IET) |
| 10. Place of Delivery: | Glasgow Caledonian University |
| 11. Subject Benchmark Statement: | QAA Qualification Descriptors for Masters Degrees and UK Standard for Professional Engineering Competence |
| 12. Dates of PSP preparation/revision: | 17th May 2013, 31st July 2014, 11 October 2016, 6 October 2017, 20 July 2018, 25th June 2019, 29th May 2020 |

2 EDUCATIONAL AIMS OF THE PROGRAMME

2.1 Programme Philosophy

The programme aims to enable graduates to qualify for entry into the profession of electrical and electronic engineering with a bias towards energy engineering and renewable technologies. In addition to the knowledge and understanding of electrical and electronic engineering there will be an integrated understanding of power systems, instrumentation systems, telecommunications systems and technologies, and business, reinforced with personal and inter-personal skills. The programme aims to prepare students for the next stage in their careers, whether entering employment or to enable those undertaking the programme to contribute towards research within the discipline. It also aims to provide continuing professional development opportunities related to the electrical and electronic professions or employment settings.

The general educational aims of the programme are that students should:

- Be provided with the knowledge and skills to equip them for a career in industry, taking up a wide range of employment opportunities within a wide range of specialisations from powers electronics to measurement systems and telecommunications;
- Develop skills and knowledge, to understand and analyse technical solutions in different areas of energy production and use;
- Develop critical, analytical problem-based learning skills and the transferable skills to prepare them for employment in industry;
- Develop skills in information seeking and retrieval, and in critical assessment of received data;
- Gain the skills to adapt and respond positively to new developments and change;
- Enhance the development of their communication and other skills required for employment;
- Receive a learning experience that promotes and encourages a culture of lifelong learning, further study and continuing professional development.

The additional aim of the MSc Project component of the programme is to expand the student's expertise by providing the opportunity to undertake a significant piece of independent work in an area in electronic systems, measurement or telecommunications.

4.PROGRAMME STRUCTURES AND REQUIREMENTS, LEVELS, MODULES, CREDITS AND AWARDS

Full Time

The full-time route is suitable for graduates from a range of undergraduate programmes. These graduates will include suitably qualified mature students undertaking a career change/development and overseas students. Full-time students normally complete the programme in one calendar year. September and January start dates are possible.

Table 4.1 Full-Time Programme Curriculum (September start)

| PgD (Level M) | Full-Time Programme | | | |
|--|---------------------------------------|--------------|----------------|------------------|
| Module Code | Module Title | Level | Credits | Trimester |
| MMH624493 | Power System Operation and Protection | M | 15 | A |
| MMH626242 | Advanced Telecommunications | M | 15 | A |
| MMH120618 | Measurement Theory and Devices | M | 15 | A |
| MMH323674 | Professional Practice | M | 15 | A |
| MMH623522 | Measurement Systems | M | 15 | B |
| MMH223840 | Energy Audit and Asset Management | M | 15 | B |
| MMJ921238 | Renewable Energy Technologies | M | 15 | B |
| MMH623670 | Condition Monitoring | M | 15 | B |
| Exit PgD in Electrical and Electronic Engineering | | | | |

| Module Code | Module Title | Level | Credits | Trimester |
|--|---------------------|--------------|----------------|------------------|
| MMH621937 | Project | M | 60 | C |
| Exit MSc in Electrical and Electronic Engineering | | | | |

Part Time

The structure of the part time programme is flexible to allow for the needs of a wide range of students and common teaching with the full time students. It is recommended that part time students should choose to undertake only two modules per Trimester. All modules have material delivered in class and additional material available to students on GCULearn.

Part time students will normally be able to complete the taught modules in two calendar years and then proceed to the MSc Project during the third calendar year. Other timescales can be considered.

8. ASSESSMENT REGULATIONS

The Glasgow Caledonian University Taught Postgraduate Assessment Regulations can be accessed from [here](#).