Glasgow Caledonian University

School of Engineering and Computing

MSc./PgD. Applied Instrumentation and Control

Programme Specification
November 2016

GLASGOW CALEDONIAN UNIVERSITY
PS1

Programme Specification Pro-forma

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<tr><td colspan="3">1. GENERAL INFORMATION</td></tr>
<tr><td>Programme Title:</td><td>Applied Instrumentation and Control</td></tr>
<tr><td>1. Final Award:</td><td>MSc Applied Instrumentation and Control</td></tr>
<tr><td>2. Exit Awards:</td><td>PgD Applied Instrumentation and Control
PgC (Untitled)</td></tr>
<tr><td>3. Awarding Body:</td><td>Glasgow Caledonian University</td></tr>
<tr><td><i>4.</i> Approval Date:</td><td>April 2015</td></tr>
<tr><td>5. School:</td><td>Engineering and Built Environment</td></tr>
<tr><td>6. Host Department:</td><td>Engineering</td></tr>
<tr><td>7. UCAS Code:</td><td></td></tr>
<tr><td>8. PSB Involvement:</td><td>Institute of Measurement and Control</td></tr>
<tr><td>9. Place of Delivery:</td><td>Glasgow Caledonian University</td></tr>
<tr><td>10. Subject Benchmark Statement:</td><td>QAA Qualification Descriptors for Masters Degrees</td></tr>
<tr><td>11. Modes of Delivery</td><td>Full time and distance learning</td></tr>
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2. EDUCATIONAL AIMS OF THE PROGRAMME

Aims

The aims of the programme are to enable the student to acquire:

- an understanding of the principles and implementation of instrumentation, and control systems;

- an understanding of the importance of efficient and reliable measurement and control systems to a range of industries;

- the skills and knowledge to conduct contracts and projects efficiently, ethically and safely;

- an ability to design and commission new instrumentation and control systems and troubleshoot existing systems;

- managerial, communication and information technology skills;

- have the ability to cope with future technological change;

- equip the student with a sufficiently wide perspective of the subject area so that a number of different approaches to a problem can be identified; to evaluate each of these solutions and to select which would be most appropriate.

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.

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

The proposed programme consists of 8 taught modules and an industrially relevant project. Each module is credited with 15 credits and the final project is credited with 60 credits. In accordance with the University guidelines, the following exit awards are available:

Postgraduate Certificate	60 credits
Postgraduate Diploma	120 credits
Master of Science	180 credits

Hence a student completing the 8 modules and accumulating 120 credits would be eligible for the award of a Postgraduate Diploma in Applied Instrumentation and Control. On successful completion of the 8 modules, and the project, the student would be awarded the MSc in Applied Instrumentation and Control. A student accumulating 60 taught credits would be eligible for the award of Postgraduate Certificate (un-named).

The Programme Structure is as follows:

SHE Level M

Module Code*	Module Title	Credit	Potential Awards
MMH323674	Professional Practice	15	
MMH120618	Measurement Theory and Devices	15	
MMH120619	Data Acquisition and Analysis	15	
MMH120620	Control Systems	15	
MMH623522	Measurement Systems	15	
MMH623621	Distributed Instrumentation	15	
MMH623521	Industrial Case Studies	15	
MMH623620	Industrial Process Systems	15	PgD in Applied Instrumentation and Control (120 credits)
MMH621937	Project	60	MSc in Applied Instrumentation and Control (180 credits)

*Module codes subject to confirmation

8. ASSESSMENT REGULATIONS

The Glasgow Caledonian University Assessment Regulations for Taught Postgraduate Programmes (June 2014) apply to this programme

Programme specific aspects:

Section 17:
PgC (unnamed) may be awarded for successful completion of **any** four taught modules.
PgD Applied Instrumentation and Control (Oil & Gas) may be awarded for successful completion of **the** eight taught modules.

Summary of classification of marks:

As outlined in the regulations (section 18) Merit:will be awarded where the overall credit-weighted average of the modules used in the calculation, as specified in 18.2.3, lies within within the range 65% to 69%, and the student has passed all modules included in the calculation at the first attempt.

As outlined in the regulations (section 18), Distinction in the PgD will be awarded to candidates with an overall average of 70% with no mark less 55%. This will be based on performance across all modules taken
In addition, to be awarded the MSc with distinction, the dissertation mark requires to be a minimum of 70%.

Assessment Boards (Terms of Reference and Standard Operations of Assessment Boards (June 2014): Section 5.1)

This postgraduate programme has PgD and MSc exit points at the end of Trimester 1, 2 and in September. The Assessment Board will meet formally at all three points and consider all marks for all students.

Role of External Examiner:

External Examiner are appointed to the Assessment Board after being approved by the University Academic Practice Committee (through the submission of an EXT1 form).

The responsibilities and rights of an External Examiner can be found in the Regulations for the Appointment and Responsibilities of External Examiners (June 2014) Section 2..

The duties of an External Examiner will include the following:

- to moderate the work of the Internal Assessors in respect of the assessments under his/her jurisdiction

- to attend Assessment Boards at which the results of a final stage assessment will be determined

- to satisfy himself/herself that the work and decisions of the Assessment Board(s) are consistent with the policies and regulations of the University and best practice in higher education

- to ensure that students are assessed within the regulations approved by the University for the programme and to inform the University on any matter which, in his/her view, militates against the maintenance of proper academic standards

- to report annually to the Academic Practice Committee on the standards attained by students on the programme and on any other matters which may seem appropriate for report