School of Engineering and Built Environment

MSc Advanced Internetwork Engineering

Programme Specification

Session 2015-16

Programme Specification Pro-forma - Postgraduate

1. GENERAL INFORMATION

1.	**Programme Title:**	Advanced Internetwork Engineering
2.	**Final Award:**	MSc
3.	**Exit Awards:**	PgC/PgD
4.	**Awarding Body**:	Glasgow Caledonian University
5.	**Approval Date:**	14th May 2014
6.	**Faculty/School:**	School of Engineering and Built Environment
7.	**Host Department:**	Computer, Communications, Interactive Systems
8.	**UCAS Code:**	
9.	**PSB Involvement:**	N/A
10.	**Place of Delivery:**	GCU Campus
11.	**Subject Benchmark Statement**:	Computing
12.	**Dates of PS Preparation/Revision**:	May 2014

2. EDUCATIONAL AIMS OF THE PROGRAMME

The aim of this programme is to provide students with the theoretical and practical skills necessary to pursue careers as high level network professionals. It is concerned with the design, implementation and troubleshooting of complex computer network infrastructures and includes an examination of the technologies, methods, and design approaches used in the development of such infrastructures.

The programme aims are to:

- Develop an understanding of the established theories, principles and concepts and emerging issues in computer network engineering.
- Develop an ability to deploy established design principles within complex networking projects and to critically appraise their use.
- Develop a critical awareness of current issues in the development of computer network engineering which is informed by advanced practice in the field and relevant research.
- Analyze increasingly complex inter-related network requirements and implement appropriate solutions within tight time constraints.
- Develop the employability of students including the ability to communicate effectively both orally and in writing, using a range of media.
- Develop the ability to work independently.

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

All Modules are SHEM Level.

The academic year is split into three trimesters, each of 15-16 weeks (12 teaching plus exam revision weeks).

MSc/PgD/PgC Advanced Internetwork Engineering (Full/Time)

Exit Award – Post Graduate Diploma (or Post Graduate Certificate with 60 credits).

Trimester 1		
ISIS Code	**Module Title**	**Credits**
MMI122895	Layer 2 Technologies	15M
MMI123707	Layer 3 Technologies I	15M
MMI123708	Layer 3 Technologies II	15M
MMI122899	Integrating Network Technologies (trimesters 2 and 1)	15M
MMI123178	Research and Project Methods (trimesters 2 and 1)	15M

Trimester 2		
ISIS Code	**Module Title**	**Credits**
MMI123709	Security and VPN Technologies	15M
MMI122898	Infrastructure Services	15M
MMI123710	Multicast and WAN Technologies	15M
MMI122899	Integrating Network Technologies (continued)	15M
MMI123178	Research and Project Methods (continued)	15M

Exit Award – Masters

Trimester 2		
ISIS Code	**Module Title**	**Credits**
MMI123177	MSc Project	60M

Each taught trimester has 3 taught modules (which are delivered sequentially) and half of 2 modules which run long-thin across both trimesters (Integrating Network Technologies and Research and Project Methods).

The Integrating Network Technologies module progressively incorporates content from the other technical modules in order to develop the student's ability to solve increasingly complex problems.

8. ASSESSMENT REGULATIONS

The University Assessment Regulations, October 2013 apply to this programme. These can be found at the following location:
http://www.gcu.ac.uk/media/gcalwebv2/theuniversity/gaq/gaqfiles/University%20Assessment%20Regulations%202013_14.pdf

Assessment rules:-

- Overview of assessment details are provided in the Student Handbook for the programme and a copy of full assessment regulations are available from the University web site. Minimum pass mark is 50% for all taught modules. The Project has a pass mark of 50%
- The award of the Postgraduate Certificate in Advanced Internetwork Engineering shall be made to students who are ineligible for a higher level of award and have achieved a minimum of 60 credits with a minimum of 40 at SHEM level. (excluding the project module)
- The award of the Postgraduate Diploma in Advanced Internetwork Engineering shall be made to students who achieve at least 120 credits with a minimum of 90 being at the SHEM level. (excluding the project module)
- The award of the Postgraduate Diploma with Distinction in Advanced Internetwork Engineering shall normally be granted to a candidate who is eligible for the Postgraduate Diploma and has achieved an overall average of 70% or more and no mark below 55% in any module. (excluding the project module)
- The award of Master of Science in Advanced Internetwork Engineering shall be made to students who have achieved at least 180 credits with a minimum of 150 at SHEM level.
- The award of the Master of Science with Distinction in Advanced Internetwork Engineering shall normally be granted to a candidate who is eligible for the award of Master of Science and achieved an overall average of 70% or more with no mark below 55% in any module, and have gained at least 70% in the project module.

Role of External Assessor:

The duties of an External Assessor 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 on the standards attained by students on the programme and on any other matters which may seem appropriate for report.