### Programme Regulations: 2021/22

## Programme Title: Degree of Master of Science in Automation and Control

### Code: 5057F

### Notes:

- (i) These programme regulations should be read in conjunction with the University's Taught Programme Regulations.
- (ii) A core module is a module which a student must pass.
- (iii) A compulsory module is a module which a student is required to study.
- (iv) All modules are delivered in Linear mode unless stated otherwise as Block, eLearning or distance learning.
- (v) If a candidate is a graduate of Newcastle University the candidate is not permitted to take a module which has already been taken as part of another programme. In such a case the Degree Programme Director shall substitute appropriate modules.
- (vi) All optional modules are offered subject to the constraints of the timetable and to any restrictions on the number of students who may be taught on a particular module. Not all modules may be offered in all years and they are listed subject to availability.

## 1. Programme structure

- (a) The programme is available for study in full-time mode only.
- (b) The period of study for full-time mode shall be 1 year starting in September.
- (c) The programme comprises modules to a credit value of 180.
- (d) All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2	Sem 3		
EEE8153	Linear Controller Design & State Space with Matlab	20	20			7	Block
	Applications						
EEE8150	Industrial Automation, PLCs and Robotics	20	20			7	Block
EEE8151	Distributed Control Systems	20		20		7	Block
EEE8152	Digital Control Systems	20		20		7	Block
EEE8097	Individual Project	60		10	50	7	

(e) All candidates shall select one of the streams listed in (i) to (ii) below:

# (i) Control Systems Stream

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2	Sem 3		
EEE8154	Control of Electric Drives	20	20			7	Block
EEE8158	Robust and Adaptive Control Systems	20		20		7	Block

## (ii) Mechatronics Stream

Code	Descriptive title	Total	Credits	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2	Sem 3		
MEC8058	Instrumentation and Drive Systems	20	20			7	Block
MEC8057	Mechatronics and Mobile Robotics	20		20		7	Block

All candidates shall take the following compulsory modules:

# 2. Assessment methods

Details of the assessment pattern for each module are explained in the module outline.

For the purpose of professional accreditation, the University's Education Committee has approved a variation in Postgraduate (Taught) Examination Convention G.92 to the effect that a candidate who passes all core modules and fails up to 20 credits of non-core modules is recommended, as of right, for the award of an appropriate Master's degree or Postgraduate Diploma, **provided that no mark is below 40** and the weighted average mark for all modules and all non-modular aggregated assessment is at least 50.