## MSC (MATHEMATICAL MODELLING AND MACHINE LEARNING)

Programme	e Requirements	
Code	Title Cre	dits
Students take	90 credits as follows:	
Part I 1		
Students take	60 credits as follows:	
Core Modules		
AM6004	Numerical Methods and Applications	5
AM6005	Nonlinear Dynamics	5
AM6007	Scientific Computing with Numerical Examples	10
AM6015	Computational Techniques with Networks	5
AM6016	Dynamic Machine Learning with Applications	5
AM6017	Complex and Neural Networks	5
AM6020	Open Source Infrastructure for Modelling with Data	5
CS6421	Deep Learning	5
EE6024	Engineering Machine Learning Solutions	5
ST6040	Machine Learning and Statistical Analytics I	5
ST6042	Machine Learning and Statistical Analytics II	5
Part II		
Dissertation		
Students take	30 credits as follows:	
Core Modules		
AM6021	Dissertation in Mathematical Modelling and Machine Learning	30

Students who have taken any of these modules in a previous degree must select alternative modules (subject to availability and timetabling) in consultation with the Programme Coordinator.

90

## **Examinations**

**Total Credits** 

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.