## MENGSC MECHANICAL ENGINEERING (MANUFACTURING, PROCESS AND AUTOMATION SYSTEMS)

## **Programme Requirements**

**Total Credits** 

Students take **90** credits as follows – all listed core modules in Part I (**20** credits), elective modules in Part I to the value of **40** credits, and **30** credits of Research in Part II:

**Credits** Code Title Part I Students take 60 credits in Part I as follows - all listed core modules (20 credits) and elective modules to the value of 40 credits: Core Modules ME6019 Preliminary Research Project 10 MG6021 **Operations Management** 5 MG6315 **Project Management** 5 Elective Modules Students take modules to the value of 40 credits from the following, with at least 25 credits from Group A, the balance of credits from Group B, and with no more than 30 credits of elective modules selected in any single Semester. Select at least 25 credits from the following: ME6002 CAD/CAM (5) Non-Destructive Testing (5) ME6006 ME6007 Mechanical Systems (5) Robotics (5) ME6008 Advanced Robotics (5) 1 ME6012 Finite Element Analysis (5) CE6024 Programming in Python (5) <sup>2</sup> CS6506 Programming in Python with Applications (5) <sup>2</sup> CS6507 Data Analytics for Engineering (5) NE6015 EE4012 Biomedical Systems (5) EE6061 Industrial Automation and Control (5) Group B Select remaining credits from the following: PE6009 Pharmaceutical Engineering (5) PE6002 Optimisation and Continuous Process Improvement (5) PE6007 Mechanical Design of Process Equipment (5) CE3010 Energy in Buildings (5) CE4016 Energy Systems in Buildings (5) EE6046 Introduction to Micro Electromechanical Systems (MEMS) (5) Research Students take 30 credits of Research in Part II: Part II ME6020 Dissertation in Mechanical Engineering 30 Students wishing to take ME6012 must also take ME6008.

Students wishing to take CS6507 must also take CS6506.

## **Examinations**

90

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*.