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## POSTGRADUATE DIPLOMA IN MECHANICAL ENGINEERING (MANUFACTURING, PROCESS AND AUTOMATION SYSTEMS)

## **Programme Requirements**

Code Title Credits

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.

|   |                 | 3  |
|---|-----------------|--|
|   | Select at least | 25 credits from the following:                         |
|   | ME6002          | CAD/CAM  |
|   | ME6006          | Non-Destructive Testing                                |
|   | ME6007          | Mechanical Systems                                     |
|   | ME6008          | Robotics <sup>1</sup>                                  |
|   | ME6012          | Advanced Robotics <sup>1</sup>                         |
|   | CE6024          | Finite Element Analysis                                |
|   | CS6506          | Programming in Python <sup>2</sup>                     |
|   | CS6507          | Programming in Python with Applications <sup>2</sup>   |
|   | NE6015          | Data Analytics for Engineering                         |
|   | EE4012          | Biomedical Systems                                     |
|   | EE6061          | Industrial Automation and Control                      |
| ( | Group B         |  |
|   | Select remain   | ing credits from the following:                        |
|   | PE6009          | Pharmaceutical Engineering                             |
|   | PE6002          | Optimisation and Continuous Process<br>Improvement     |
|   | PE6007          | Mechanical Design of Process Equipment                 |
|   | CE3010          | Energy in Buildings                                    |
|   | CE4016          | Energy Systems in Buildings                            |
|   | EE6046          | Introduction to Micro Electromechanical Systems (MEMS) |
|   |                 |  |

## **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*.

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Students wishing to take ME6012 must also take ME6008.
Students wishing to take CS6507 must also take CS6506.