FACULTY OF ENGINEERING

DEPARTMENT OF DESIGN MANUFACTURE AND ENGINEERING MANAGEMENT

ADVANCED MANUFACTURING: FORGING AND FORMING

Doctor of Engineering (EngD) in Advanced Manufacturing Forging and Forming
Master of Science in Advanced Manufacturing: Forging and Forming

For regulations relating to admissions, duration of study, examinations, progress, final assessment, award and research elements of this degree, please refer to the General Academic Regulations - Postgraduate Research Degree Regulations.

For regulations relating to taught (compulsory/optional) modules, please refer to the General Academic Regulations - Postgraduate Taught Degree Programme Level.

Admission
1. See General Academic Regulations - Postgraduate Research Degree Regulations.

Mode of Study
2. The programme is available by full-time study only.

Curriculum
3. All students shall undertake an approved curriculum as follows:

4. **First Year**

Compulsory Modules

Module Code	Module Title	Level	Credits
BE919	Research Methodology	5	10
DM957	Management of Technology and Innovation	5	10
DM932	Postgraduate Individual Project	5	60
DM956	Digital Manufacturing and Smart Products	5	10
DM942	Manufacturing Automation	5	10
DM943	Sustainable Product Design and Manufacturing	5	10
DM946	Micro- and Nano-Manufacturing	5	10
DM948	Advanced Material and Production Technology	5	10

Optional Modules

No fewer than 50 credits chosen from:

Module Code	Module Title	Level	Credits
DM923	Product Modelling and Visualisation	5	10
DM927	Strategic Supply Chain Management	5	10
DM933	Engineering Risk Management	5	10
OR			
DM805	Engineering Risk Management (Online)	5	10
DM945	Systems Thinking and Modelling	5	10
OR			
DM808	Introduction to Systems Thinking, Modelling and Optimisation (online)	5	10
DM947	Advanced Forming Technology and Systems	5	10
DM954	Intelligent Sensing and Reasoning through Machine Learning	5	10
DM986	Mechatronic Systems Design Techniques	5	10
DM993	Systems Architectures and Design	5	10
DM994	Systems Engineering Concepts	5	10
EF931	Project Management	5	10
OR			
DM811	Project Management (Online)	5	10

Exceptionally, such other Level 5 modules totalling no more than 20 credits, as approved by the Programme Director.

Not all optional modules will be available in each academic year. Please check your programme handbook for confirmation of which optional modules will run.

Second, Third and Fourth Years

5. All students shall undertake a Doctoral Research Project. Research projects are allocated to students from an approved list at the start of the programme and the normal supervisory and progression requirements for doctoral awards apply (see the General Academic Regulations - Postgraduate Research Degree Regulations).

Examination, Progress and Final Assessment

6. Candidates are required to perform to the satisfaction of the Board of Examiners in the taught component of the programme. In addition, students must satisfy the general regulations associated with the award of a doctoral research degree as specified in the General Academic Regulations - Postgraduate Research Degree Regulations.

7. Candidates will normally be expected to attain 180 credits before being permitted to commence work on a doctoral research project.

8. Candidates who fail to satisfy the Board of Examiners in any taught module shall be permitted one further attempt to pass the relevant module(s) normally in the same academic year.

Award

9. **Degree of EngD**: In order to qualify for the award of the degree of EngD in Advanced Manufacturing; Forging and Forming, a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 180 credits from the programme curriculum, of which 60 must have been awarded in respect of the Postgraduate Individual Project DM932 and submitted a piece of satisfactory original research in the form of a portfolio as specified in the General Academic Regulations - Postgraduate Research Degree Regulations, performed satisfactorily in an oral examination.

10. **Degree of MSc:** In order to qualify for the award of the degree of MSc in Advanced Manufacturing: Forging and Forming a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 180 credits from the programme curriculum, of which 60 must have been awarded in respect of the Postgraduate Individual Project DM932.