MENGSC (PHARMACEUTICAL AND BIOPHARMACEUTICAL ENGINEERING)

Programme Requirements

Code	Title	Credits
Students take **90** credits as follows – **60** credits of taught modules and **30** credits of research modules		
Taught Modules		
Year 1		
Students take **30** credits as follows - all listed core modules (**15** credits) and **15** credits of elective modules:		
Core Modules		
PE6010	Pharmaceutical Engineering	5
PE6011	Biopharmaceutical Engineering	5
PE6013	Powder and Particle Technology and Unit Operations	5
Elective Modules		
Students take modules to the value of **15** credits from the following:		15
CM6010	Introductory Pharmaceutical Chemistry (5)	
PE6004	Biopharmaceutical Supporting Systems (5)	
PE6018	Pharmaceutical Process Validation and Quality (5)	
PE6019	Process Analytical Technology (5)	
Year 2		
Students take **30** credits as follows		
Core Modules		
PE6012	Pharmaceutical Process Equipment, Materials and Mechanical Design	5
PE6016	Process Optimisation and Scale-up in the Pharmaceutical Industry	5
PE6022	Aseptic Manufacturing Design	5
PE6024	Process Safety Engineering	5
PE6026	Project Engineering - From Concept to Completion	5
PE6027	Advanced Biopharmaceutical Engineering	5
Research Module		
Students can take the research module from Year 2.		
PE6021	Dissertation in Pharmaceutical and Biopharmaceutical Engineering	30
Total Credits		**90**

Examinations

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*.