School of Engineering Course Selection Information Pack

Visiting students are expected to choose courses from one of the following 3 colour coordinated parameters;

1. Courses from a single degree programme for **Level 3**
2. Courses from a single **BEng** degree programme for **Level 4**
3. A combination of courses from a single **MEng** degree programme in **Level 4&5**

To do otherwise will give timetabling problems for classes, laboratories, and exams.
It is your responsibility together with your home institution to carry out a course mapping exercise using these parameters to ensure that your learning outcomes are being achieved.
Final Year Project courses will not be available for 24/25 (ENG4110P)
To help pick courses please see below for the details;

BIOMEDICAL ENGINEERING

MEng/BEng Year 3

Course Code	Course	Credits	Semester
BIOL2043	Human Biological Sciences 2	30	2
ENG3090	Biomedical Engineering Skills 3	10	1 & 2
ENG3011	Biological Fluid Mechanics 3	10	1
ENG3015	Control EE3	10	2
ENG3034	Instrumentation and Data Systems 3	10	2
ENG3036	Simulation of Engineering Systems 3	10	1
ENG3038	Microscopy and Optics 3	10	1
ENG3084	Biomechanics 3	10	1
PHYS4013	Medical Imaging	10	2
STATS3002	Statistics for Biomedical Engineering 3	10	1

BEng Year 4

Course Code	Course	Credits	Semester
BIOL4124	Tissue and Cell Engineering 4	20	1
ENG4004	Materials Engineering 4	10	2
ENG4025	Finite Element Analysis 4	10	1
ENG4036	Biosensors and Diagnostics 4	10	2
ENG4113	Rehabilitation Engineering 4	10	2
ENG4189	Bioethics for Biomedical Engineering 4	10	2
ENG4191	Signal Processing of Biosignatures 4	10	1
ENG5321	Entrepreneurship in BME	20	2
ENG4042	Control 4	20	1
ENG4195	Control System Analysis and Design 4	10	1
ENG4193	Ultrasound Technology and Applications 4 ***Please note you may only select one of ENG4195 and ENG4042	10	1
ENG4053	Digital Signal Processing 4	20	1
ENG4098	Microelectronics in Consumer Products 4	10	1
ENG4122	Structural Analysis 4	10	2

MEng Year 4

Course Code	Course	Credits	Semester
ENG4036	Biosensors and Diagnostics 4	10	2
ENG4113	Rehabilitation Engineering 4	10	2
ENG4189	Bioethics for Biomedical Engineering 4	10	2
ENG4191	Signal Processing of Biosignatures 4	10	1
BIOL4124	Tissue and Cell Engineering 4	20	1
ENG4004	Materials Engineering 4	10	2
ENG4025	Finite Element Analysis 4	10	1
ENG4042	Control 4	20	1
ENG4053	Digital Signal Processing 4	20	1
ENG4098	Microelectronics in Consumer Products 4	10	1
ENG4122	Structural Analysis 4	10	2
ENG4193	Ultrasound Technology & Applications 4	10	1
ENG4195	Control System Analysis and Design 4 ***Please note you may only select one of ENG4195 and ENG4042	10	1

MEng Year 5

Course Code	Course	Credits	Semester
ENG5321	Entrepreneurship in Biomedical Engineering	20	2
ENG5281	Energy in Biological Systems M	10	2
ENG5282	Scaffold and Tissues M	10	2
ENG5316	Advanced Ultrasonics	10	2
ENG5220	Real Time Embedded Programming pre-requisite: ENG4053 Digital Signal Processing 4	20	2
ENG5227	Computational Modelling of Nonlinear Problems 5 pre-requisite: ENG4025 Finite Element Analysis 4	10	2
ENG5274	Advanced Structural Analysis and Dynamics 5 pre-requisite: ENG4122 Structural Analysis 4	10	2
ENG5300	Materials Engineering M5	10	2
ENG5009	Advanced Control 5 pre-requisite: ENG4042 Control 4	10	2

CIVIL ENGINEERING

MEng/BEng Year 3

Course Code	Course	Credits	Semester
ENG3046	Structural Design 3	10	1
ENG3047	Structural Mechanics 3	20	1 & 2
ENG3073	Geotechnical Engineering 3	20	1 & 2
ENG3037	Mechanics of Solids 3	10	1
ENG3076	Civil Design Projects 3	10	2
ENG3080	Environmental Process Engineering 3	10	2
ENG3082	Construction Management 3	10	2
ENG3085	Engineering Hydraulics 3	10	1
ENG3086	Transportation Engineering 3	10	1

BEng Year 4

Course Code	Course	Credits	Semester
ENG4050	Civil Design Project 4	20	1 & 2
ENG4025	Finite Element Analysis 4	10	1
ENG4070	Geotechnical Engineering 4	10	1
ENG4079	Industrial Aerodynamics 4	10	2
ENG4122	Structural Analysis 4	10	2
ENG4124	Advanced Steel & Concrete Design 4	10	1
ENG4152	Environmental Biotechnology 4	10	2
ENG4173	Renewable & Sustainable Energy 4	10	1
ENG4053	Digital Signal Processing 4	20	1
ENG4183	Transportation Engineering 4	10	1
ENG4192	Hydraulics & Hydrology 4	10	2
ENG5293	Water and Environmental Design	10	2
GEOG4057	Managing River Catchments	10	1 (Alt Years)

MEng Year 4

Course Code	Course	Credits	Semester
ENG4025	Finite Element Analysis 4	10	1
ENG4070	Geotechnical Engineering 4	10	1
ENG4122	Structural Analysis 4	10	2
ENG4124	Advanced Steel and Concrete Design 4	10	1
ENG4192	Hydraulics & Hydrology 4	10	2
ENG4079	Industrial Aerodynamics 4	10	2
ENG4152	Environmental Biotechnology 4	10	2
ENG4173	Renewable and Sustainable Energy 4	10	1
ENG4183	Transportation Systems Engineering 4	10	1
ENG5293	Water Environment and Design	10	2
GEOG4057	Managing River Catchments	10	1 (Alt Years)

MEng Year 5

Course Code	Course	Credits	Semester
ENG5273	Conceptual Design Project M or 5?	20	2
ENG5048	Industrial Aerodynamics M	10	2
ENG5224	Advanced Concrete Performance M	10	2
ENG5227	Structures under Extreme Loads M	10	2
ENG5274	Advanced Structural Analysis and Dynamics 5	10	2
ENG5275	Reclamation of Contaminated Land	10	2
ENG5284	Advanced Soil Mechanics 5	10	2
ENG5293	Water & Environmental Design	10	2
ENG5332	Waste Heat and Power - to- X	10	2

ELECTRONIC AND ELECTRICAL ENGINEERING

MEng/BEng Year 3

Course Code	Course	Credits	Semester
ENG3014	Communication Systems 3	10	1
ENG3015	Control 3	10	2
ENG3023	Electromagnetic Compatibility 3	10	2
ENG3024	Electronic Circuit Design 3	10	2
ENG3025	Electronic Devices 3	10	1
ENG3026	Electronic System Design 3	10	1
ENG3027	Engineering Career Skills 3	10	1 & 2
ENG3091	Advanced Programming & Software Engineering 3	10	2
ENG3036	Simulation of Engineering Systems 3	10	1
ENG3041	Power Engineering 3	10	2
ENG3043	Real Time Computer Systems 3	10	1
ENG3049	Team Design Project EE3	10	1 & 2

BEng Year 4

Course Code	Course	Credits	Semester
COMPSCI5093	Secured Software Engineering (M)	10	2
COMPSCI4071	Advanced Software Engineering Practices (H)	10	1 & 2
ENG4001	Acoustics and Audio Technology 4	20	2
ENG4036	Biosensors and Diagnostics 4*	10	2
ENG4042	Control 4	20	1
ENG4052	Digital Communication 4	20	1&2
ENG4053	Digital Signal Processing 4	20	1
ENG4099	Quantum Electronic Devices 4	20	2
ENG4100	Microwaves and Optical Transmission Systems 4	20	2
ENG4104	Power Systems 4	20	2
ENG4138	VLSI Design 4	20	1
ENG4173	Renewable and Sustainable Energy 4	10	1
ENG4181	Biophysics of Cells and Systems 4*	10	1
ENG4184	Navigation Systems 4	10	1
ENG4185	Radar and Electro-Optic Systems 4	10	2
ENG4193	Ultrasound Technology and Applications 4	10	1
ENG4187	Power Electronics and Drives 4	10	1

Notes:

* ENG4181 Biophysics of Cells & Systems 4 is a pre-requisite for ENG4036 Biosensors & Diagnostics 4

MEng Year 4

Course Code	Course	Credits	Semester
COMPSCI5093	Secured Software Engineering (M)	10	2
COMPSCI4071	Advanced Software Engineering Practices (H)	10	1 & 2
ENG4001	Acoustics and Audio Technology 4	20	1
ENG4036	Biosensors and Diagnostics 4*	10	2
ENG4042	Control 4	20	1
ENG4052	Digital Communication 4	20	1
ENG4053	Digital Signal Processing 4	20	1
ENG4099	Quantum Electronic Devices 4□	20	2
ENG4100	Microwaves and Optical Transmission Systems 4	20	2
ENG4104	Power Systems 4	20	2
ENG4138	VLSI Design 4	20	1
ENG4172	Team Project EE4	20	1&2
ENG4173	Renewable and Sustainable Energy 4[#]	10	1
ENG4181	Biophysics of Cells & Systems 4*	10	1
ENG4184	Navigation Systems 4	10	1
ENG4185	Radar and Electro-Optic Systems 4	10	2
ENG4187	Power Electronics and Drives 4	10	1
ENG4193	Ultrasound Technology and Applications 4	10	1

MEng Year 5

Course Code	Course	Credits	Semester
ENG5026	Design Special Topic 5	20	2
ENG5009	Advanced Control 5	10	2
ENG5048	Introduction to Wind Engineering	10	2
ENG5055	Micro and Nano Technology	20	2
ENG5056	Microwave and mm Wave Circuit Design	20	2
ENG5066	Optical Communications	20	2
ENG5220	Real Time Embedded Programming	20	2
ENG5250	Energy Conversion Systems M[#]	10	2
ENG5261	Quantum Electronic Devices M□	20	2
ENG5326	Robotics M□	20	2
ENG5316	Advanced Ultrasonics	10	2

Notes:

[#] ENG5250 Energy Conversion Systems M cannot be taken in Year 5 if ENG4173 Renewable & Sustainable Energy 4 has been taken in Year 4

* ENG4181 Biophysics of Cells & System 4 is a pre-requisite for ENG4036 Biosensors & Diagnostics 4

□ ENG5261 Quantum Electronic Devices M cannot be taken in Year 5 if ENG4099 Quantum Electronic Devices 4 has been taken in Year 4

MECHANICAL ENGINEERING

MEng/BEng Year 3

Course Code	Course	Credits	Semester
ENG3015	Control 3	10	2
ENG3030	Fluid Mechanics 3	10	2
ENG3032	Heat Transfer 3	10	2
ENG3034	Instrumentation and Data Systems 3	10	2
ENG3035	Design and Manufacture 3	10	2
ENG3036	Simulation of Engineering Systems 3	10	1
ENG3037	Mechanics of Solids 3	10	1
ENG3039	Dynamics 3	10	1
ENG3041	Power Engineering 3	10	2
ENG3053	Thermodynamics of Energy Systems 3	10	1
ENG3017	Mechanical Design 3	20	1 & 2
ENG3091	Advanced Programming & Software Engineering 3	10	2
ENG3092	Mechanical Engineering Skills 3	10	1

BEng Year 4

Course Code	Course	Credits	Semester
MGT5068	Professional Practice 5	20	2
ENG4004	Materials Engineering 4	10	2
ENG4042	Control 4	20	1
ENG4079	Industrial Aerodynamics 4	10	2
ENG4088	Lasers and Electro-Optic Systems 4	20	1
ENG4094	Mechanics of Solids 4	20	1
ENG4098	Microelectronics in Consumer Products 4	10	1
ENG4137	Vibration 4	20	2
ENG4173	Renewable Energy 4	10	1
ENG4179	Thermal Engineering 4	10	1
ENG4193	Ultrasound Technology and Applications	10	1
LAW1011	Elements of Law for Engineers	10	2

MEng Year 4

Course Code	Course	Credits	Semester
ENG4004	Materials Engineering 4	10	2
ENG4037	Computational Fluid Dynamics 4	10	2
ENG4042	Control 4	20	1
ENG4079	Industrial Aerodynamics 4	10	2
ENG4088	Lasers and Electro-Optic Systems 4	20	1
ENG4094	Mechanics of Solids 4	20	1
ENG4098	Microelectronics in Consumer Products 4	10	1
ENG4104	Power Systems 4	20	2
ENG4137	Vibration 4	20	2
ENG4173	Renewable Energy 4	10	1
ENG4175	Autonomous Vehicle Guidance Systems 4	10	2
ENG4179	Thermal Engineering 4	10	1
ENG4187	Power Electronics and Drives 4	20	1
ENG4193	Ultrasound Technology and Applications 4	20	1
LAW1011	Elements of Law for Engineers	10	2

MEng Year 5

Course Code	Course	Credits	Semester
MGT5068	Professional Practice 5	20	2
ENG5009	Robust Control 5	10	2
ENG5017	Autonomous Vehicle Guidance Systems	10	2
ENG5048	Introduction to Wind Engineering	10	2
ENG5081	Spacecraft Systems 5	10	2
ENG5227	Structures under Extreme Loads M	10	2
ENG5299	Dynamics 5	10	2
ENG5300	Materials Engineering 5	10	2
ENG5302	Ultrasound Technology and applications	10	2
ENG5303	Advanced Thermal Engineering 5	10	2
ENG5307	Computational Fluid Dynamics 5	10	2
ENG5316	Advanced Ultrasonics	10	2

MECHANICAL WITH AERO

MEng/BEng Year 3

Course Code	Course	Credits	Semester
ENG3015	Control 3	10	2
ENG3032	Heat Transfer 3	10	2
ENG3034	Instrument and Data Systems	10	2
ENG3035	Design and Manufacture 3	10	2
ENG3036	Simulation of Engineering Systems 3	10	1
ENG3037	Mechanics of Solids 3	10	1
ENG3039	Dynamics 3	10	1
ENG3042	Propulsion and Turbomachinery 3	10	1
ENG3059	Aircraft Performance 3	10	1
ENG3060	Flight Mechanics 3	10	2

BEng Year 4

Course Code	Course	Credits	Semester
MGT5068	Professional Practice 5	20	2
ENG4004	Materials Engineering 4	10	2
ENG4025	Finite Element Analysis 4	10	1
ENG4037	Computational Fluid Dynamics 4	10	2
ENG4042	Control 4	20	1
ENG4074	High Speed Aerodynamics 4	10	2
ENG4079	Industrial Aerodynamics 4	10	2
ENG4088	Lasers and Electro-Optic Systems 4	20	1
ENG4094	Mechanics of Solids 4	20	1
ENG4102	Physics of Fluids 4	10	1
ENG4121	Space Flight Dynamics 4	10	1
ENG4137	Vibration 4	20	2
ENG4173	Renewable Energy 4	10	1
ENG4175	Autonomous Vehicle Guidance Systems 4	10	2
ENG4179	Thermal Engineering 4	10	1
ENG4193	Ultrasound Technology and Applications	10	1
ENG4194	Aerospace Propulsion 4	10	2
ENG4196	Rotorcraft Aeromechanics 4	10	2
LAW1011	Elements of Law for Engineers	10	2

MEng Year 4

Course Code	Course	Credits	Semester
ENG4004	Materials Engineering 4	10	2
ENG4025	Finite Element Analysis 4	10	1
ENG4037	Computational Fluid Dynamics 4	10	2
ENG4042	Control 4	20	1
ENG4074	High Speed Aerodynamics 4	10	2
ENG4079	Industrial Aerodynamics 4	10	2
ENG4088	Lasers and Electro-Optic Systems 4	20	1
ENG4094	Mechanics of Solids 4	20	1
ENG4102	Physics of Fluids 4	10	1
ENG4121	Space Flight Dynamics 4	10	1
ENG4137	Vibration 4	20	2
ENG4173	Renewable and Sustainable Energy 4	10	1
ENG4175	Autonomous Vehicle Guidance Systems 4	10	2
ENG4179	Advanced Thermal Engineering 4	10	1
ENG4193	Ultrasound Technology and Applications 4	10	1
ENG4194	Aerospace Propulsion 4	10	2
ENG4196	Rotorcraft Aeromechanics 4	10	2
LAW1011	Elements of Law for Engineers	10	2

MEng Year 5

Course Code	Course	Credits	Semester
MGT5068	Professional Practice 5	20	2
ENG5009	Advanced Control 5	10	2
ENG5017	Autonomous Vehicle Guidance Systems M	10	2
ENG5048	Industrial Aerodynamics M	10	2
ENG5081	Spacecraft Systems 2	10	2
ENG5227	Structures under Extreme Loads M	10	2
ENG5263	Aeroelastics & Aeroacoustics 5	10	2
ENG5265	Rotorcraft Aeromechanics 5	10	2
ENG5278	Advanced Aerodynamics 5	10	2
ENG5299	Dynamics 5	10	2
ENG5300	Materials Engineering 5	10	2
ENG5302	Ultrasound Technology and Applications	10	1
ENG5303	Advanced Thermal Engineering 5	10	2
ENG5307	Computational & Experimental Fluid Dynamics 5	10	2
ENG5313	Aerospace Propulsion M	10	2
ENG5316	Advanced Ultrasonics	10	2

MECHANICAL DESIGN ENGINEERING

MEng/BEng Year 3

Course Code	Course	Credits	Semester
ENG3015	Control 3	10	2
ENG3017	Mechanical Design 3	20	1 & 2
ENG3030	Fluid Mechanics 3	10	2
ENG3032	Heat Transfer 3	10	2
ENG3034	Instrumentation and Data Systems 3	10	2
ENG3035	Design and Manufacture 3	10	2
ENG3036	Simulation of Engineering Systems 3	10	1
ENG3037	Mechanics of Solids 3	10	1
ENG3039	Dynamics 3	10	1
ENG3091	Advanced Programming & Software Eng 3	10	2
ENG3092	Mechanical Engineering Skills 3	10	1

BEng Year 4

Course Code	Course	Credits	Semester
MGT5068	Professional Practice 5	20	2
ENG4025	Finite Element Analysis 4	10	1
ENG4004	Materials Engineering 4	10	2
ENG4042	Control 4	20	1
ENG4088	Lasers and Electro-Optic Systems 4	20	1
ENG4094	Mechanics of Solids 4	20	1
ENG4098	Microelectronics in Consumer Products 4	10	1
ENG4137	Vibration 4	20	2
ENG4173	Renewable Energy 4	10	1
ENG4179	Advanced Thermal Engineering 4	10	1
LAW1011	Elements of Law for Engineers	10	2

MEng Year 4

Course Code	Course	Credits	Semester
ENG4004	Materials Engineering 4	10	2
ENG4025	Finite Element Analysis 4	10	1
ENG4037	Computational Fluid Dynamics 4	10	2
ENG4042	Control 4	20	1
ENG4074	High Speed Aerodynamics 4	10	2
ENG4079	Industrial Aerodynamics 4	10	2
ENG4088	Lasers and Electro-Optic Systems 4	20	1
ENG4094	Mechanics of Solids 4	20	1
ENG4098	Microelectronics in Consumer Products 4	10	1
ENG4102	Physics of Fluids 4	10	1
ENG4121	Space Flight Dynamics 4	10	1
ENG4137	Vibration 4	20	2
ENG4173	Renewable and Sustainable Energy 4	10	1
ENG4175	Autonomous Vehicle Guidance Systems 4	10	2
ENG4179	Advanced Thermal Engineering 4	10	1
ENG4194	Aerospace Propulsion 4	10	2
ENG4196	Rotorcraft Aeromechanics 4	10	2
LAW1011	Elements of Law for Engineers	10	2

MEng Year 5

Course Code	Course	Credits	Semester
MGT5068	Professional Practice 5	20	2
ENG5009	Advanced Control 5	10	2
ENG5017	Autonomous Vehicle Guidance Systems M	10	2
ENG5048	Industrial Aerodynamics M	10	2
ENG5081	Spacecraft Systems 2	10	2
ENG5227	Structures under Extreme Loads M	10	2
ENG5263	Aeroelastics & Aeroacoustics 5	10	2
ENG5265	Rotorcraft Aeromechanics 5	10	2
ENG5278	Advanced Aerodynamics 5	10	2
ENG5299	Dynamics 5	10	2
ENG5300	Materials Engineering 5	10	2
ENG5302	Ultrasound Technology and Applications	10	2
ENG5303	Advanced Thermal Engineering 5	10	2
ENG5307	Computational Fluid Dynamics 5	10	2
ENG5316	Advanced Ultrasonics	10	2

MECHATRONICS

MEng/BEng Year 3

Course Code	Course	Credits	Semester
ENG3015	Control 3	10	2
ENG3023	Electromagnetic Compatibility 3	10	2
ENG3026	Electronic System Design 3	10	1
ENG3034	Instrumentation and Data Systems 3	10	2
ENG3035	Design and Manufacture 3	10	2
ENG3036	Simulation of Engineering Systems 3	10	1
ENG3037	Mechanics of Solids 3	10	1
ENG3039	Dynamics 3	10	1
ENG3041	Power Engineering 3	10	2
ENG3043	Real Time Computer Systems 3	10	1
ENG3071	Mechatronic Team Project 3	10	2
ENG3091	Advanced Programming &Software Eng 3	10	2

BEng Year 4

Course Code	Course	Credits	Semester
ENG4042	Control 4	20	1
ENG4053	Digital Signal Processing 4	20	1
ENG4175	Autonomous Vehicle Guidance Systems 4	10	2
MGT5068	Professional Practice 5	20	2

MEng Year 4

Course Code	Course	Credits	Semester
ENG4042	Control 4	20	1
ENG4053	Digital Signal Processing 4	20	1
ENG4153	Mechatronic Team Project 4	20	1 & 2
ENG4004	Materials Engineering 4	10	2
ENG4025	Finite Element Analysis 4	10	1
ENG4187	Power Electronics and Drives 4	20	1
ENG4088	Lasers and Electro-Optic Systems 4	20	1
ENG4094	Mechanics of Solids 4	20	1
ENG4104	Power Systems 4	20	2
ENG4137	Vibration 4	20	2
ENG4175	Autonomous Vehicle Guidance Systems 4	10	2
ENG4193	Ultrasounds Technology and Applications 4	10	1
LAW1011	Elements of Law for Engineers	10	2

MEng Year 5

Course Code	Course	Credits	Semester
ENG5009	Advanced Control 5	10	2
ENG5017	Autonomous Vehicle Guidance Systems M	10	2
ENG5031	Fault Detection, Isolation and Reconfiguration	10	2
ENG5299	Dynamics 5	10	2
MGT5068	Professional Practice 5	20	2

AERONAUTICAL ENGINEERING

MEng/BEng Year 3

Course Code	Course	Credits	Semester
ENG3006	Aircraft Design 3	10	2
ENG3015	Control 3	10	2
ENG3034	Instrumentation and Data Systems 3	10	2
ENG3036	Simulation of Engineering Systems 3	10	1
ENG3039	Dynamics 3	10	1
ENG3042	Propulsion and Turbomachinery 3	10	1
ENG3059	Aircraft Performance 3	10	1
ENG3060	Flight Mechanics 3	10	2
ENG3062	Aircraft Structural Analysis and Design 3	10	2
ENG3081	Aircraft Structures and Materials 3	10	1

BEng Year 4

Course Code	Course	Credits	Semester
ENG4013	Aerospace Design Project 4	10	2
LAW1011	Elements of Law for Engineers	10	2
ENG4023	Aircraft Vibration and Aeroelasticity 4	10	2
ENG4025	Finite Element Analysis 4	10	1
ENG4037	Computational Fluid Dynamics 4	10	2
ENG4042	Control 4	20	1
ENG4074	High Speed Aerodynamics 4	10	2
ENG4079	Industrial Aerodynamics 4	10	2
ENG4088	Lasers and Electro-Optic Systems M4	20	1
ENG4102	Physics of Fluids 4	10	1
ENG4121	Space Flight Dynamics 4	10	1
ENG4173	Renewable Energy 4	10	1
ENG4175	Autonomous Vehicle Guidance Systems 4	10	2
ENG4179	Advanced Thermal Engineering 4	20	1
ENG4184	Navigation Systems 4	10	1
ENG4185	Radar and Electro-optic Systems 4	10	2
ENG4194	Aerospace Propulsion 4	10	2
ENG4196	Rotorcraft Aeromechanics 4	10	2

MEng Year 4

Course Code	Course	Credits	Semester
ENG4023	Aircraft Vibration and Aeroelasticity 4	10	2
ENG4025	Finite Element Analysis 4	10	1
ENG4037	Computational Fluid Dynamics 4	10	2
ENG4042	Control 4	20	1
ENG4074	High Speed Aerodynamics 4	10	2
ENG4079	Industrial Aerodynamics 4	10	2
ENG4088	Lasers and Electro-Optic Systems M4	20	1
ENG4094	Mechanics of Solids 4	20	1
ENG4102	Physics of Fluids 4	10	1
ENG4137	Vibration 4	20	2
ENG4173	Renewable Energy 4	10	1
ENG4175	Autonomous Vehicle Guidance Systems 4	10	2
ENG4179	Advanced Thermal Engineering 4	20	1
ENG4184	Navigation Systems 4	10	1
ENG4185	Radar and Electro-Optic Systems 4	10	2
ENG4194	Aerospace Propulsion 4	10	2
ENG4196	Rotorcraft Aeromechanics 4	10	2

MEng Year 5

Course Code	Course	Credits	Semester
LAW1011	Elements of Law for Engineers	10	2
ENG5009	Advanced Control 5	10	2
ENG5017	Autonomous Vehicle Guidance Systems M	10	2
ENG5031	Fault Detection, Isolation and Recovery	10	2
ENG5048	Industrial Aerodynamics M	10	2
ENG5052	Materials Engineering	10	2
ENG5072	Radar and Electro-Optic Systems M	10	2
ENG5081	Spacecraft Systems 5	10	2
ENG5263	Aeroelasticity and Aeroacoustics 5	10	2
ENG5265	Rotorcraft Aeromechanics M	10	2
ENG5278	Advanced Aerodynamics 5	10	2
ENG5303	Advanced Thermal Engineering 5	10	2
ENG5307*	Computational and Experimental Fluid Dynamics 5	10	2
ENG5313	Aerospace Propulsion M	10	2

*ENG5307 – student numbers on this course may be capped

AEROSPACE SYSTEMS

MEng/BEng Year 3

Course Code	Course	Credits	Semester
ENG3091	Advanced Programming & Software Engineering 3	10	2
ENG3005	Aerospace Team Design Project 3	10	2
ENG3014	Communication Systems 3	10	1
ENG3015	Control 3	10	2
ENG3023	Electromagnetic Compatibility 3	10	2
ENG3034	Instrumentation and Data Systems 3	10	2
ENG3036	Simulation of Engineering Systems 3	10	1
ENG3039	Dynamics 3	10	1
ENG3042	Propulsion and Turbomachinery 3	10	1
ENG3043	Real Time Computer Systems 3	10	1
ENG3059	Aircraft Performance 3	10	1
ENG3060	Flight Mechanics 3	10	2

BEng Year 4

Course Code	Course	Credits	Semester
ENG4042	Control 4	20	1
ENG4121	Space Flight Dynamics 4	10	1
ENG4175	Autonomous Vehicle Guidance Systems 4	10	2
ENG4184	Navigation Systems 4	10	1
ENG4185	Radar and Electro-Optic Systems 4	10	2
ENG4194	Aerospace Propulsion 4	10	2
ENG4196	Rotorcraft Aeromechanics 4	10	2
ENG4088	Lasers and Electro-optic Systems 4	20	1
ENG4173	Renewable & Sustainable Energy 4	10	1
ENG4079	Industrial Aerodynamics 4	10	2

MEng Year 4

Course Code	Course	Credits	Semester
ENG4042	Control 4	20	1
ENG4121	Space Flight Dynamics 4	10	1
ENG4175	Autonomous Vehicle Guidance Systems 4	10	2
ENG4184	Navigation Systems 4	10	1
ENG4185	Radar and Electro-Optic Systems 4	10	2
ENG4194	Aerospace Propulsion	10	2
ENG4196	Rotorcraft Aeromechanics 4	10	2
ENG4088	Lasers & Electro-Optic Systems 4	20	1
ENG4173	Renewable Energy 4	10	1
ENG4079	Industrial Aerodynamics 4	10	2

MEng Year 5

Course Code	Course	Credits	Semester
ENG5009	Advanced Control 5	10	2
LAW1011	Elements of Law for Engineers	10	2
ENG5017	Autonomous Vehicle Guidance Systems M	10	2
ENG5031	Fault Detection, Isolation and Recovery	10	2
ENG5072	Radar and Electro-Optic Sys M	10	2
ENG5081	Spacecraft Systems 5	10	2
ENG5220	Real Time Embedded Programming	20	2
ENG5265	Rotorcraft Aeromechanics M	10	2
ENG5313	Aerospace Propulsion M	10	2
ENG5048*	Industrial Aerodynamics M	10	2

*If ENG4079 is selected in Year 4, ENG5048 cannot be selected in Year 5.

Please turn over

FAQs Frequently Asked Questions

1 **Question**: You only offer 40/50 credits in one semester for my discipline can I choose from another.
Answer: No, you will need to move discipline completely or find a course in another school.

2 **Question**: Can I choose courses from Level 1 or 2.
Answer: No, we do not allow any incoming students to be enrolled onto this. There are no exceptions.

3 **Question**: Can I choose courses across multiple levels.
Answer: No, you have to work within the parameters of a single degree programme for Level 3, a single degree programme for Level 4 BEng and finally a combination of courses from a single degree programme in Level 4&5 MEng.

4 Changes on arrival are not normally accommodated and subject to class capacity.

5 There are no resits available on Level 4 & 5 courses. Level 3 courses will have a resit.

6 It's your responsibility, together with your home institution to do a course mapping exercise to ensure the subjects you are choosing are suitable. If you have a gap that doesn't fit (point 1) unfortunately Glasgow University School of Engineering **will not be able** to accommodate this request.