

School of Engineering, Mathematics & Physics

School Website: [School of Engineering, Maths and Physics](#)

Please refer to the online Module Catalogue for full details of all modules:
www.kent.ac.uk/courses/modules

Stages 2 and 3

- Subject requirements are for students entering the specified stage in the 2026-27 academic year only.
- Where modules are running across two terms, assume an even split of credits in each term e.g 40 credits Spring and Summer = 20 credits in Spring and 20 credits in Summer.
- For Joint Honours courses, you must have at least 100 credits of modules in each subject across Stages 2 and 3

Please select a link below to view the Stage 2 and 3 requirements for your course:

- [Actuarial Science](#)
- [Actuarial Science with a Foundation Year](#)
- [Actuarial Science with a Year in Industry](#)
- [Actuarial Science \(Sunway Direct Entry\)](#)
- [Actuarial Science with a Year in Industry \(Sunway Direct Entry\)](#)
- [Digital Design](#)
- [Digital Design with a Year in Industry](#)
- [Digital Design with a Year Abroad](#)
- [Electronic and Computer Engineering \(BEng/MEng\)](#)
- [Electronic and Computer Engineering including a Foundation Year \(BEng/MEng\)](#)
- [Electronic and Computer Engineering with a Year in Industry \(BEng/MEng\)](#)
- [Electronic and Computer Systems \(Top Up-Up Degree\)](#)
- [Data Science](#)
- [Data Science with a Year in Industry](#)
- [Mathematics](#)
- [Mathematics with a Foundation Year](#)
- [Mathematics with a Year in Industry](#)
- [Mathematics with Accounting & Finance](#)
- [Mathematics with Accounting & Finance with a Year in Industry](#)
- [Mathematics with Secondary Education QTS](#)
- [Mechanical Engineering \(BEng\)](#)
- [Mechanical Engineering including a Foundation Year \(BEng\)](#)
- [Mechanical Engineering with a Year in Industry \(BEng\)](#)
- [Electrical and Electronic Engineering \(BEng/MEng\)](#)

- Electrical and Electronic Engineering including a Foundation Year (BEng)
- Biomedical Engineering (BEng)
- Biomedical Engineering with a Foundation (BEng)
- Biomedical Engineering with a Year in Industry (BEng)
- Physics (BSc/MPhys)
- Physics with a Foundation Year BSc/MPhys
- Physics with a Professional Placement (BSc)
- Physics with a Year Abroad (MPhys)
- Physics with Astrophysics (BSc/MPhys)
- Physics with Astrophysics with a Foundation Year (BSc)
- Physics with Astrophysics with a Professional Placement (BSc)
- Physics with Astrophysics with a Year Abroad (MPhys)
- Astronomy, Space Science and Astrophysics (BSc/MPhys)
- Astronomy, Space Science and Astrophysics with a Foundation Year BSc/MPhys
- Astronomy, Space Science and Astrophysics with a Professional Placement (BSc)
- Astronomy, Space Science and Astrophysics with a Year Abroad (MPhys)

The information contained herein is correct at the time of publication. Please note however, that if a module recruits fewer than 8 students it is possible that it will not run. In this event, you will be contacted and asked to select an alternative module.

ACTUARIAL SCIENCE	UASC0001X1BS-F
ACTUARIAL SCIENCE WITH A FOUNDATION YEAR	UASC0001F1BS-F
ACTUARIAL SCIENCE WITH A YEAR IN INDUSTRY	UASC0001P1BS-F
ACTUARIAL SCIENCE (Sunway Direct Entry)	UASC0001S1BS-F
ACTUARIAL SCIENCE WITH A YEAR IN INDUSTRY (Sunway Direct Entry)	UASC0001P2BS-F
ACTUARIAL SCIENCE WITH A FOUNDATION YEAR AND A YEAR IN INDUSTRY (BSc)	UASC0001F2BS-F

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
MACT5100	Corporate Finance and Financial Reporting	5	20	Summer	
MACT5340	Actuarial Mathematics 1	5	20	Spring	
MACT5800	Stage 2 Actuarial Practice	5	20	Autumn	
MAST5100	Mathematical Statistics	5	20	Autumn	
MAST5104	Predictive and Explanatory Modelling	5	20	Spring	
MAST5105	Optimisation for Data Analysis	5	20	Summer	
Compulsory Total			120		

ACTUARIAL SCIENCE WITH A YEAR IN INDUSTRY	UASC0001P1BS-F
ACTUARIAL SCIENCE WITH A YEAR IN INDUSTRY (Sunway Direct Entry)	UASC0001P2BS-F

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
MAST6850	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
MAST6860	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

ACTUARIAL SCIENCE
ACTUARIAL SCIENCE WITH A FOUNDATION YEAR
ACTUARIAL SCIENCE WITH A YEAR IN INDUSTRY
ACTUARIAL SCIENCE (Sunway Direct Entry)
ACTUARIAL SCIENCE WITH A YEAR IN INDUSTRY (Sunway Direct Entry)

UASC0001X1BS-F
UASC0001F1BS-F
UASC0001P1BS-F
UASC0001S1BS-F
UASC0001P2BS-F

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
MACT6340	Actuarial Mathematics 2	6	20	Spring	
MACT6400	Financial Economics and Derivatives	6	20	Autumn	
MACT6610	Actuarial Risk Modelling	6	20	Spring	
MACT6620	Statistical Modelling for Actuaries	6	20	Summer	
MACT6800	Stage 3 Actuarial Practice	6	20	Summer	
MAST6100	Machine Learning and Deep Learning	6	20	Autumn	
Compulsory Total			120		

DIGITAL DESIGN
DIGITAL DESIGN WITH A YEAR IN INDUSTRY
DIGITAL DESIGN WITH A YEAR ABROAD

UDID0001X1BS-F
UDID0001P1BS-F
UDID0001A1BS-F

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
DIGM5000	3D Production	5	20	Autumn	
DIGM5010	Interactive Environments	5	20	Autumn	
DIGM5015	Immersive Experiences	5	20	Spring	
DIGM5020	Design Practice	5	40	Spring & Summer	
Compulsory Total			100		

PLUS 20 credits from the following optional modules:

Stage 2 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
BUSB5033	Enterprise and Entrepreneurship	5	20	Summer	
DESG5014	Design Agency	5	20	Summer	
DESG5015	Designing with Data	5	20	Summer	

DIGITAL DESIGN WITH A YEAR IN INDUSTRY

UDID0001P1BS-F

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6901	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
EENG6902	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

DIGITAL DESIGN WITH A YEAR ABROAD

UDID0001A1BS-F

You must take the following compulsory modules:

Stage A – For Students on a Year Abroad					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
ABRD5000	Year Abroad	5	120	Autumn, Spring, Summer	
Compulsory Total			120		

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
DIGM6000	Advanced 3D	6	20	Autumn	
DIGM6010	Mixed Realities	6	20	Spring	
DIGM6020	Advanced Design Practice	6	40	Spring & Summer	Cannot be compensated or condoned
Compulsory Total			80		

PLUS 20 credits from the following optional modules:

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP6019	Video Games Development	6	20	Autumn	
FILM6003	Film & TV Adaptation	6	20	Autumn	

PLUS 20 credits from the following optional modules:

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
FILM6005	Film Marketing & Distribution	6	20	Summer	
MSTU5011	Media and Social Change	5	20	Summer	
MSTU5012	Video Gaming: Play and Players	5	20	Summer	
MSTU6011	Stars and Celebrity Culture	6	20	Summer	

ELECTRONIC AND COMPUTER ENGINEERING (Beng)	UEEX0001X1BE-F
ELECTRONIC AND COMPUTER ENGINEERING (MEng)	UEEX0001X1ME-F
ELECTRONIC AND COMPUTER ENGINEERING INCLUDING A FOUNDATION YEAR (BEng)	UEEX0001F1BE-F
ELECTRONIC AND COMPUTER ENGINEERING INCLUDING A FOUNDATION YEAR (MEng)	UEEX0001F1ME-F
ELECTRONIC AND COMPUTER ENGINEERING WITH A YEAR IN INDUSTRY (BEng)	UEEX0001P1BE-F
ELECTRONIC AND COMPUTER ENGINEERING WITH A YEAR IN INDUSTRY (MEng)	UEEX0001P1ME-F
ELECTRONIC AND COMPUTER ENGINEERING INCLUDING A FOUNDATION YEAR AND A YEAR IN INDUSTRY (Beng)	UEEX0001F5BE-F

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG5103	Microcomputer Technology	5	20	Autumn	
EENG5106	Electronics and Digital IC Design	5	20	Spring	
EENG5107	Embedded Systems and IoT	5	20	Spring	
EENG5111	Engineering Team Project	5	20	Summer	
EENG5113	Signal Processing and Control Systems	5	20	Summer	
EENG5115	Mechatronics and Measurement	5	20	Autumn	
Compulsory Total			120		

ELECTRONIC AND COMPUTER ENGINEERING WITH A YEAR IN INDUSTRY (BEng)	UEEX0001P1BE-F
ELECTRONIC AND COMPUTER ENGINEERING WITH A YEAR IN INDUSTRY (MEng)	UEEX0001P1ME-F
ELECTRONIC AND COMPUTER ENGINEERING INCLUDING A FOUNDATION YEAR AND A YEAR IN INDUSTRY (BEng)	UEEX0001F5BE-

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6901	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
EENG6902	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

ELECTRONIC AND COMPUTER ENGINEERING (BEng)
ELECTRONIC AND COMPUTER ENGINEERING (MEng)
ELECTRONIC AND COMPUTER ENGINEERING INCLUDING A FOUNDATION YEAR (BEng)
ELECTRONIC AND COMPUTER ENGINEERING WITH A YEAR IN INDUSTRY (BEng)
ELECTRONIC AND COMPUTER ENGINEERING WITH A YEAR IN INDUSTRY (MEng)

UEEX0001X1BE-F
UEEX0001X1ME-F

UEEX0001F1BE-F

UEEX0001P1BE-F

UEEX0001P1ME-F

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6001	Digital Systems Design	6	20	Autumn	
EENG6005	Robotics and AI	6	20	Autumn	
EENG6010	Project	6	40	Spring & Summer	Cannot be compensated or condoned.
EENG6009	Communication and Networking	6	20	Summer	
Compulsory Total			100		

PLUS 20 credits from the following optional modules:

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP5006	Fundamentals of Cyber Security	5	20	Spring	
EENG5107	Embedded Systems and IoT	5	20	Spring	
EENG5108	Image Analysis and Application	5	20	Spring	

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 3 Compulsory modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6001	Digital Systems Design	6	20	Autumn	
EENG6010	Project	6	40	Spring & Summer	Cannot be compensated or condoned.
EENG6009	Communication and Networking	6	20	Summer	
Compulsory Total			80		

PLUS 20 credits from the following optional modules (Students may choose no more than 20 credits at level 5):

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP6017	Signal, Image and Data Analysis	6	20	Autumn	
EENG6005	Robotics and AI	6	20	Autumn	

PLUS 20 credits from the following optional modules (Students may choose no more than 20 credits at level 5):

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP5006	Fundamentals of Cyber Security	5	20	Spring	
COMP6028	Natural Language Processing	6	20	Spring	
EENG5107	Embedded Systems and IoT	5	20	Spring	

**DATA SCIENCE
 DATA SCIENCE WITH A YEAR IN INDUSTRY
 DATA SCIENCE WITH A FOUNDATION YEAR**

**UDSC0001X1BS-F
 UDSC0001P1BS-F
 UDSC0001F1BS-F**

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP5000	Algorithms	5	20	Autumn	
COMP5001	Database Systems	5	20	Autumn	
COMP5003	Fundamentals of Artificial Intelligence	5	20	Spring	
MAST5104	Predictive and Explanatory Modelling	5	20	Spring	
MAST5105	Optimisation for Data Analysis	5	20	Summer	
MAST5106	Preparing for Professional Practice	5	20	Summer	
Compulsory Total			120		

DATA SCIENCE WITH A YEAR IN INDUSTRY

UDSC0001P1BS-F

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP6022	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
COMP6023	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

DATA SCIENCE
DATA SCIENCE WITH A YEAR IN INDUSTRY
DATA SCIENCE WITH A FOUNDATION YEAR
DATA SCIENCE WITH A FOUNDATION YEAR AND A YEAR IN
INDUSTRY

UDSC0001X1BS-F
UDSC0001P1BS-F
UDSC0001F1BS-F

UDSC0001F2BS-F

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP6002	Natural Computation	6	20	Autumn	
COMP6040	Data Science Project	6	40	Spring and Summer	Cannot be compensated or condoned.
MAST6100	Machine Learning and Deep Learning	6	20	Autumn	
MAST6105	Bayesian Machine Learning	6	20	Summer	
Compulsory Total			100		

PLUS 20 credits from the following optional modules:

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP6028	Natural language Processing	6	20	Spring	
COMP7004	Data Mining and Knowledge Discovery	7	20	Spring	

MATHEMATICS
MATHEMATICS WITH A FOUNDATION YEAR
MATHEMATICS WITH A YEAR IN INDUSTRY

UMTH0001X1BS-F
UMTH0001F1BS-F
UMTH0001P1BS-F

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
MAST5100	Mathematical Statistics	5	20	Autumn	
MAST5101	Multivariable and Vector Calculus	5	20	Autumn	
MAST5102	Number Theory and Cryptography	5	20	Spring	
MAST5103	Numerical Methods and Differential Equations	5	20	Spring	
MAST5105	Optimisation for Data Analysis	5	20	Summer	
MAST5106	Preparing for Professional Practice	5	20	Summer	
Compulsory Total			120		

MATHEMATICS WITH A YEAR IN INDUSTRY
MATHEMATICS WITH A FOUNDATION YEAR AND A YEAR IN
INDUSTRY

UMTH0001P1BS-F
UMTH0001F3BS-F

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
MAST6850	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
MAST6860	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
MAST6101	Groups, Fields, and Applications	6	20	Autumn	
MAST6102	Complex Analysis	6	20	Spring	
MAST6103	Experience and Research in Mathematics	6	40	Spring & Summer	
MAST6104	Partial Differential Equations and Applications	6	20	Summer	
Compulsory Total			100		

PLUS 20 credits from the following optional modules:

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
MACT6400	Financial Economics and Derivatives	6	20	Autumn	
MAST6100	Machine Learning and Deep Learning	6	20	Autumn	

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
BUSB4006	Management Accounting	4	20	Spring	
BUSB5021	Financial Markets and Institutions	5	20	Autumn	
BUSB5012	Management Accounting for Decision Makers	5	20	Summer	
MAST5100	Mathematical Statistics	5	20	Autumn	
MAST5103	Numerical Methods and Differential Equations	5	20	Spring	
MAST5105	Optimisation for Data Analysis	5	20	Summer	
Compulsory Total			120		

MATHEMATICS WITH ACCOUNTING AND FINANCE WITH A YEAR IN INDUSTRY

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
MAST6850	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
MAST6860	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

STAGE 3

You must take 120 credits in total - 40 in each term

You must take 60 credit from the following Mathematics Optional Modules:

Stage 3 Mathematics Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
MAST6100	Machine Learning and Deep Learning	6	20	Autumn	
MAST6101	Groups, Fields and Applications	6	20	Autumn	
MAST6102	Complex Analysis	6	20	Spring	
MAST6103	Experience and Research in Mathematics	6	40	Spring & Summer	
MAST6104	Partial Differential Equations and Applications	6	20	Summer	

PLUS 60 credits from the following Accounting and Finance optional modules:

Stage 3 Accounting and Finance Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
BUSB6008	Fintech	6	20	Spring	
BUSB6021	Advanced Financial Accounting	6	20	Autumn	
BUSB6022	Investment and Portfolio Management	6	20	Autumn	
BUSB6023	Sustainable Finance and Reporting	6	20	Spring	
BUSB6024	Taxation	6	20	Spring	
BUSB6025	Advanced Management Accounting	6	20	Summer	
BUSB6026	Research Project in Accounting and Finance	6	40	Spring and Summer	
BUSB6027	Assurance and Auditing	6	20	Summer	

STAGE 3

You must take 120 credits in total

You must take the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
MAED1011	Subject Pedagogy 1 (Mathematics)	6	20	Autumn	CCU
MAED1012	Subject Pedagogy 2 (Mathematics)	6	20	Autumn	CCU
MAED1021	Professional Placement	6	20	Spring	CCU
MAED1031	Preparing for Qualified Teacher Status	6	10	Spring	CCU
MAED1041	Research and Enquiry in Education (Mathematics)	6	20	Spring	CCU
MAST6010	Individual Project in Mathematics	6	30	Autumn & Spring	
Compulsory Total			120		

MECHANICAL ENGINEERING (BEng)
MECHANICAL ENGINEERING INCLUDING A FOUNDATION YEAR (BEng)
MECHANICAL ENGINEERING WITH A YEAR IN INDUSTRY (BEng)
MECHANICAL ENGINEERING INCLUDING A FOUNDATION YEAR AND A YEAR IN INDUSTRY (BEng)

UMEC0001X1BE-F

UMEC0001F1BE-F

UMEC0001P1BE-F

UMEC0001F5BE-F

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG5102	Fluid Mechanics	5	20	Autumn	
EENG5104	Dynamics of Machines	5	20	Spring	
EENG5109	Manufacturing Technologies	5	20	Spring	
EENG5111	Engineering Team Project	5	20	Summer	
EENG5114	Vibration and Control	5	20	Summer	
EENG5115	Mechatronics and Measurement	5	20	Autumn	
Compulsory Total			120		

MECHANICAL ENGINEERING WITH A YEAR IN INDUSTRY (BEng)

UMEC0001P1BE-F

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6901	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
EENG6902	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

MECHANICAL ENGINEERING (BEng)
MECHANICAL ENGINEERING INCLUDING A FOUNDATION YEAR (BEng)
MECHANICAL ENGINEERING WITH A YEAR IN INDUSTRY (BEng)
MECHANICAL ENGINEERING INCLUDING A FOUNDATION YEAR AND A YEAR IN INDUSTRY (BEng)

UMEC0001X1BE-F

UMEC0001F1BE-F

UMEC0001P1BE-F

UMEC0001F5BE-F

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6002	Finite Element Analysis	6	20	Autumn	
EENG6005	Robotics and AI	6	20	Autumn	
EENG6006	Thermodynamics and Heat Transfer	6	20	Spring	
EENG6010	Project	6	40	Spring & Summer	Cannot be compensated or condoned.
Compulsory Total			100		

PLUS 20 credits from the following optional modules:

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6007	Biomaterials	6	20	Summer	
PHYS5016	Spacecraft Design and Operations	5	20	Summer	
EENG6008	Renewable Energy Technology	6	20	Summer	

ELECTRICAL AND ELECTRONIC ENGINEERING (BEng)
ELECTRICAL AND ELECTRONIC ENGINEERING (MEng)
ELECTRICAL AND ELECTRONIC ENGINEERING INCLUDING A FOUNDATION YEAR (BEng)
ELECTRICAL AND ELECTRONIC ENGINEERING WITH A YEAR IN INDUSTRY (BEng)

UXEE0001X1BE-F
UXEE0001X1ME-F
UXEE0001F1BE-F
UXEE0001P1BE-F

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG5103	Microcomputer Technology	5	20	Autumn	
EENG5105	Electrical Machines	5	20	Spring	
EENG5111	Engineering Team Project	5	20	Summer	
EENG5112	Power Electronics	5	20	Spring	
EENG5113	Signal Processing and Control Systems	5	20	Summer	
EENG5115	Mechatronics and Measurement	5	20	Autumn	
Compulsory Total			120		

ELECTRICAL AND ELECTRONIC ENGINEERING WITH A YEAR IN INDUSTRY (BEng)

UXEE0001P1BE-F

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6901	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
EENG6902	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

ELECTRICAL AND ELECTRONIC ENGINEERING (BEng)
ELECTRICAL AND ELECTRONIC ENGINEERING (MEng)
ELECTRICAL AND ELECTRONIC ENGINEERING INCLUDING A
FOUNDATION YEAR (BEng)

UXEE0001X1BE-F
UXEE0001X1ME-F
UXEE0001F1BE-F

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules (100):

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6001	Digital System Design	6	20	Autumn	
EENG6004	Power Transmission and Distribution	6	20	Autumn	
EENG6010	Project	6	40	Spring and Summer	Cannot be resat or compensated
EENG6008	Renewable Energy Technology	6	20	Summer	
Compulsory Total			100		

PLUS 20 credits from the following optional modules:

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP5006	Fundamentals of Cyber Security	5	20	Spring	
EENG5107	Embedded Systems and IoT	5	20	Spring	
EENG5108	Image Analysis and Application	5	20	Spring	

BIOMEDICAL ENGINEERING (BEng)
BIOMEDICAL ENGINEERING WITH A FOUNDATION YEAR (BEng)
BIOMEDICAL ENGINEERING WITH A YEAR IN INDUSTRY (BEng)
BIOMEDICAL ENGINEERING WITH A FOUNDATION YEAR AND A YEAR IN INDUSTRY (BEng)

UBME0001X2BE-F
UBME0001F1BE-F
UBME0001P2BE-F

UBME0001F5BE-F

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG5101	Biomechanics	5	20	Spring	
EENG5108	Image Analysis and Applications	5	20	Spring	
EENG5111	Engineering Team Project	5	20	Summer	
EENG5113	Signal Processing and Control Systems	5	20	Summer	
EENG5115	Mechatronics and Measurement	5	20	Autumn	
EENG5116	Human Anatomy Physiology and Flow Dynamics	5	20	Autumn	
Compulsory Total			120		

BIOMEDICAL ENGINEERING WITH A YEAR IN INDUSTRY (BEng)
BIOMEDICAL ENGINEERING WITH A FOUNDATION YEAR AND A YEAR IN INDUSTRY (BEng)

UBME0001P2BE-F

UBME0001F5BE-F

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6901	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
EENG6902	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

BIOMEDICAL ENGINEERING (BEng)
BIOMEDICAL ENGINEERING WITH A FOUNDATION YEAR (BEng)
BIOMEDICAL ENGINEERING WITH A YEAR IN INDUSTRY (BEng)

UBME0001X2BE-F
UBME0001F1BE-F
UBME0001P2BE-F

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
EENG6003	Medical Dynamics	6	20	Autumn	
EENG6005	Robotics and AI	6	20	Autumn	
EENG6007	Biomaterials	6	20	Summer	
EENG6010	Project	6	40	Spring & Summer	Cannot be compensated or condoned.
Compulsory Total			100		

PLUS 20 credits from the following optional modules:

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP5006	Fundamentals of Cyber Security	5	20	Spring	
EENG5107	Embedded System and IoT	5	20	Spring	
EENG5109	Manufacturing Technologies	5	20	Spring	
PHYS7015	Biomedical Optics	7	20	Spring	

PHYSICS (BSc)
PHYSICS (MPhys)
PHYSICS WITH A FOUNDATION YEAR (BSc)
PHYSICS WITH A FOUNDATION YEAR (MPhys)
PHYSICS WITH A PROFESSIONAL PLACEMENT (BSc)
PHYSICS WITH A YEAR ABROAD (MPhys)
PHYSICS WITH A FOUNDATION YEAR AND A PROFESSIONAL PLACEMENT (BSc)
PHYSICS WITH A YEAR IN INDUSTRY (BSc)

UPHY0001X1BS-F
UPHY0001X1MI-F
UPHY0001F1BS-F
UPHY0001F1MI-F
UPHY0001P2BS-F
UPHY0001A2MI-F

UPHY0001F2BS-F
UPHY0001P3BS-F

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS5010	Mathematical Techniques for Physical Sciences	5	20	Autumn	Cannot be trailed
PHYS5011	Physics Group Laboratory Project	5	20	Autumn	Cannot be compensated, condoned or trailed
PHYS5012	Quantum and Atomic Physics	5	20	Spring	Cannot be trailed
PHYS5013	Electromagnetism and Relativity	5	20	Spring	Cannot be trailed
PHYS5014	Machine Learning for Natural Sciences	5	20	Summer	Cannot be trailed
Compulsory Total			100		

PLUS 20 credits from the following optional modules:

Stage 2 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS5015	Observational Astronomy and Exoplanets	5	20	Summer	
PHYS5016	Spacecraft Design and Operations	5	20	Summer	

PHYSICS WITH A PROFESSIONAL PLACEMENT (BSc)
 PHYSICS WITH A FOUNDATION YEAR AND A PROFESSIONAL
 PLACEMENT (BSc)
 PHYSICS WITH A YEAR IN INDUSTRY (BSc)

UPHY0001P2BS-F

UPHY0001F2BS-F

UPHY0001P3BS-F

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS6500	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
PHYS6501	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

PHYSICS WITH A YEAR ABROAD (MPhys)

UPHY0001A2MI-F

You must take the following compulsory modules:

Stage A– For Students on a Year in Abroad					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS6900	Year Abroad	6	120	Autumn, Spring, Summer	
Compulsory Total			120		

PHYSICS (BSc)
PHYSICS (MPhys)
PHYSICS WITH A FOUNDATION YEAR (BSc)
PHYSICS WITH A FOUNDATION YEAR (MPhys)
PHYSICS WITH A PROFESSIONAL PLACEMENT (BSc)
PHYSICS WITH A YEAR ABROAD (MPhys)
PHYSICS WITH A FOUNDATION YEAR AND A PROFESSIONAL PLACEMENT (BSc)
PHYSICS WITH A YEAR IN INDUSTRY (BSc)

UPHY0001X1BS-F
UPHY0001X1MI-F
UPHY0001F1BS-F
UPHY0001F1MI-F
UPHY0001P2BS-F
UPHY0001A2MI-F

UPHY0001F2BS-F
UPHY0001P3BS-F

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS6010	Modern Optics and Photonics	6	20	Autumn	Cannot be trailed
PHYS6011	Thermal and Statistical Physics	6	20	Autumn	Cannot be trailed
PHYS6012	Condensed Matter Physics	6	20	Spring	Cannot be trailed
PHYS6013	Advanced Physics Laboratory and Investigation		20	Spring	Cannot be compensated, condoned or trailed
PHYS6016	Problem Solving in Physics	6	20	Summer	Cannot be trailed
Compulsory Total			100		

PLUS 20 credits from the following optional modules:

Stage 3 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
COMP7006	Introduction to Quantum Computing & Quantum Cryptography	7	20	Summer	
PHYS6019	Medical Physics	6	20	Summer	

STAGE 4

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 4 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS7010	MPhys Research Project	7	60	Autumn, Spring & Summer	Cannot be compensated or condoned.
PHYS7011	Advanced Quantum Mechanics	7	20	Autumn	
Compulsory Total			80		

PLUS 20 credits from the following optional modules:

Stage 4 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS7014	Quantum Materials	7	20	Spring	
PHYS7015	Biomedical Optics	7	20	Spring	

PLUS the following 20 credit optional module:

Stage 4 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS7016	Analytical Mechanics	7	20	Summer	

PHYSICS WITH ASTROPHYSICS (BSc)
PHYSICS WITH ASTROPHYSICS (MPhys)
PHYSICS WITH ASTROPHYSICS WITH A FOUNDATION YEAR (BSc)
PHYSICS WITH ASTROPHYSICS WITH A PROFESSIONAL PLACEMENT (BSc)
PHYSICS WITH ASTROPHYSICS WITH A YEAR ABROAD (MPhys)

UPAP0001X1BS-F
UPAP0001X1MI-F
UPAP0001F1BS-F
UPAP0001P2BS-F
UPAP0001A2MI-F

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS5010	Mathematical Techniques for Physical Sciences	5	20	Autumn	Cannot be trailed
PHYS5011	Physics Group Laboratory Project	5	20	Autumn	Cannot be compensated, condoned or trailed
PHYS5012	Quantum and Atomic Physics	5	20	Spring	Cannot be trailed
PHYS5013	Electromagnetism and Relativity	5	20	Spring	Cannot be trailed
PHYS5015	Observational Astronomy and Exoplanets	5	20	Summer	Cannot be trailed
PHYS5014	Machine Learning for Natural Sciences	5	20	Summer	
Compulsory Total			120		

PHYSICS WITH ASTROPHYSICS WITH A PROFESSIONAL PLACEMENT (BSc)
PHYSICS WITH ASTROPHYSICS WITH A YEAR IN INDUSTRY (BSc)
PHYSICS WITH ASTROPHYSICS WITH A FOUNDATION YEAR AND A YEAR IN INDUSTRY

UPAP0001P2BS-F
UPAP0001P3BS-F
UPAP0001F2BS-F

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS6500	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
PHYS6501	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

You must take the following compulsory modules:

Stage A– For Students on a Year in Abroad					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS6900	Year Abroad	6	120	Autumn, Spring, Summer	
Compulsory Total			120		

**PHYSICS WITH ASTROPHYSICS (BSc)
PHYSICS WITH ASTROPHYSICS (MPhys)
PHYSICS WITH ASTROPHYSICS WITH A FOUNDATION YEAR
(BSc)
PHYSICS WITH ASTROPHYSICS WITH A PROFESSIONAL
PLACEMENT (BSc)**

UPAP0001X1BS-F

UPAP0001X1MI-F

UPAP0001F1BS-F

UPAP0001P2BS-F

STAGE 3

You must take 120 credits in total - 40 in each term

You must the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS6010	Modern Optics and Photonics	6	20	Autumn	Cannot be trailed
PHYS6011	Thermal and Statistical Physics	6	20	Autumn	Cannot be trailed
PHYS6012	Condensed Matter Physics	6	20	Spring	Cannot be compensated, condoned or trailed
PHYS6014	Astrophysics Data Analysis and Investigation	6	20	Spring	
PHYS6016	Problem Solving in Physics	6	20	Summer	Cannot be trailed
PHYS6017	Stars, Galaxies and the Universe	6	20	Summer	Cannot be trailed
Compulsory Total			120		

STAGE 4

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 4 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS7010	MPhys Research Project	7	60	Autumn, Spring, Summer	Cannot be compensated or condoned.
PHYS7012	Star Formation and Galactic Structure	7	20	Autumn	
Compulsory Total			80		

PLUS 20 credits from the following optional modules:

Stage 4 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS7013	Space Exploration: The 21 st Century Space Industry	7	20	Spring	
PHYS7014	Quantum Materials	7	20	Spring	
PHYS7015	Biomedical Optics	7	20	Spring	

PLUS the following 20 credit optional module:

Stage 4 Optional Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS7016	Analytical Mechanics	7	20	Summer	

ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS (BSc)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS (MPhys)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A FOUNDATION YEAR (BSc)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A FOUNDATION YEAR (MPhys)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A PROFESSIONAL PLACEMENT (BSc)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A YEAR IN INDUSTRY (BSc)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A YEAR ABROAD (MPhys)

UASA0001X1BS-F
UASA0001X1MI-F

UASA0001F1BS-F

UASA0001F1MI-F

UASA0001P2BS-F

UASA0001P3BS-F

UASA0001A2MI-F

STAGE 2

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 2 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS5010	Mathematical Techniques for Physical Sciences	5	20	Autumn	Cannot be trailed
PHYS5011	Physics Group Laboratory Project	5	20	Autumn	Cannot be compensated, condoned or trailed
PHYS5012	Quantum and Atomic Physics	5	20	Spring	Cannot be trailed
PHYS5013	Electromagnetism and Relativity	5	20	Spring	Cannot be trailed
PHYS5015	Observational Astronomy and Exoplanets	5	20	Summer	Cannot be trailed
PHYS5016	Spacecraft Design and Operations	5	20	Summer	
Compulsory Total			120		

ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A PROFESSIONAL PLACEMENT (BSc)

UASA0001P2BS-F

ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A YEAR IN INDUSTRY (BSc)

UASA0001P3BS-F

ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A FOUNDATION YEAR AND A YEAR IN INDUSTRY (BSc)

UASA0001F2BS-F

You must take the following compulsory modules:

Stage S – For Students on a Year in Industry					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS6500	Industrial Placement Experience	6	100	Autumn, Spring, Summer	
PHYS6501	Industrial Placement Report	6	20	Autumn, Spring, Summer	
Compulsory Total			120		

ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A YEAR ABROAD (MPhys)

UASA0001A2MI-F

You must take the following compulsory modules:

Stage A– For Students on a Year in Abroad					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS6900	Year Abroad	6	120	Autumn, Spring, Summer	
Compulsory Total			120		

ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS (BSc)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS (MPhys)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A FOUNDATION YEAR (BSc)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A FOUNDATION YEAR (MPhys)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A PROFESSIONAL PLACEMENT (BSc)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A YEAR ABROAD (MPhys)

UASA0001X1BS-F
UASA0001X1MI-F

UASA0001F1BS-F

UASA0001F1MI-F

UASA0001P2BS-F

UASA0001A2MI-F

STAGE 3

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 3 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS6010	Modern Optics and Photonics	6	20	Autumn	Cannot be trailed
PHYS6011	Thermal and Statistical Physics	6	20	Autumn	Cannot be trailed
PHYS6012	Condensed Matter Physics	6	20	Spring	Cannot be trailed
PHYS6015	Data Analysis and Investigation in Astronomy and Planetary Sciences	6	20	Spring	Cannot be compensated, condoned or trailed
PHYS6017	Stars, Galaxies and the Universe	6	20	Summer	Cannot be trailed
PHYS6018	The Solar System	6	20	Summer	Cannot be trailed
Compulsory Total			120		

ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS (MPhys)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A FOUNDATION YEAR (MPhys)
ASTRONOMY, SPACE SCIENCE AND ASTROPHYSICS WITH A YEAR ABROAD (MPhys)

UASA0001X1MI-F

UASA0001F1MI-F

UASA0001A2MI-F

STAGE 4

You must take 120 credits in total - 40 in each term

You must take the following compulsory modules:

Stage 4 Compulsory Modules					
KV CODE	MODULE TITLE	LEVEL	CREDITS	TERM	NOTES
PHYS7010	MPhys Research Project	7	60	Autumn, Spring & Summer	Cannot be compensated or condoned.
PHYS7012	Star Formation and Galactic Structure	7	20	Autumn	
PHYS7013	Space Exploration: The 21 st Century Space Industry	7	20	Spring	
PHYS7018	Astrobiology and Astrochemistry	7	20	Summer	
Compulsory Total			120		