

SCHOOL OF MATHEMATICS, STATISTICS AND ACTUARIAL SCIENCE

School Website: www.kent.ac.uk/smsas

Please refer to the online Module Catalogue for full details of all modules: Error! Hyperlink reference not valid.

Note: It is ultimately your responsibility to ensure that you are registered for the correct modules for your programme.

Please select a link below to view the Stage 2+ requirements for your programme:

- [Actuarial Science: BSc](#)
- [Actuarial Science with a Foundation Year: BSc](#)
- [Actuarial Science with a Year in Industry: BSc](#)
- [Financial Mathematics: BSc](#)
- [Financial Mathematics with a Year in Industry: BSc](#)
- [Data Science BSc](#)
- [Data Science with a Year in Industry BSc](#)
- [Mathematics: BSc](#)
- [Mathematics with a Foundation Year: BSc](#)
- [Mathematics: MMATH](#)
- [Mathematics with a Year in Industry: BSc](#)
- [Mathematics with a Year in Industry: MMATH](#)
- [Mathematics and Accounting & Finance: BA](#)
- [Mathematics and Accounting & Finance: BSc](#)
- [Mathematics and Accounting & Finance with a Year in Industry: BA](#)
- [Mathematics and Accounting & Finance with a Year in Industry: BSc](#)
- [Mathematics and Statistics: BSc](#)
- [Mathematics and Statistics with a Year in Industry: BSc](#)
- [Mathematics with Secondary Education: BSc](#)

*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. **The University cannot guarantee whether all options will be available, or how they will be delivered, if Government Covid restrictions continue.***

ACTUARIAL SCIENCE

ACTSCI:BSC

UASC0001X1BS-F

ACTUARIAL SCIENCE WITH A FOUNDATION YEAR

ACTSCI-F-4:BSC

UASC0001F1BS-F

ACTUARIAL SCIENCE WITH A YEAR IN INDUSTRY

ACTSCI-S:BSC

UASC0001P1BS-F

Single Honours

STAGE 2 - 120 credits

You must take the following compulsory modules (90 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MACT5160	Actuarial Mathematics 1	15	Autumn	5	<i>MA516</i>
MACT5270	Corporate Finance for Actuaries	15	Spring	5	<i>MA527</i>
MACT5280	Financial Reports and Their Analysis	15	Autumn or Spring	5	<i>MA528</i>
MAST5001	Applied Statistical Modelling	15	Spring	5	<i>MA5501</i>
MAST5007	Mathematical Statistics	15	Autumn	5	<i>MA5507</i>
MAST5010	Statistics for Insurance	15	Spring	5	<i>MA501</i>

PLUS 30 credits from the following optional modules:

Optional Modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5005	Linear Partial Differential Equations	15	Autumn	5	<i>MA5505</i>
MAST5011	Optimisation with Financial Applications	15	Autumn	5	<i>MA5511</i>
MAST5956	Big Data and Machine Learning	15	Spring	5	<i>MA5956</i>

Students on a Year in Industry will also take the following non-contributory compulsory module:

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
WMATH010	Year in Industry Stage 2 Group B	0	Autumn & Spring	5	<i>WMATH01</i>

ACTUARIAL SCIENCE WITH A YEAR IN INDUSTRY

ACTSCI-S:BSC

UASC0001P1BS-F

Single Honours

STAGE S - 120 credits

You must take the following compulsory modules (120 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5801*	Industrial Placement Experience	90	Autumn, Spring & Summer	5	<i>MA5801</i>
MAST5802*	Industrial Placement (Report and Presentation)	30	Autumn, Spring & Summer	5	<i>MA5802</i>

*This module cannot be compensated, trailed or condoned.

ACTUARIAL SCIENCE

ACTSCI:BSC

UASC0001X1BS-F

ACTUARIAL SCIENCE WITH A FOUNDATION YEAR

ACTSCI-F-4:BSC

UASC0001F1BS-F

ACTUARIAL SCIENCE WITH A YEAR IN INDUSTRY

ACTSCI-S:BSC

UASC0001P1BS-F

Single Honours

STAGE 3 - 120 credits

You must take the following compulsory modules (120 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MACT5250	Survival Analysis	15	Autumn	6	MA525
MACT5330	Actuarial Mathematics 2 (<i>version 2</i>)	15	Spring	6	MA533
MACT5350	Financial Economics and Assets and Liability Modelling (<i>version 2</i>)	15	Autumn	6	MA535
MACT5370	Mathematics of Financial Derivatives	15	Spring	6	MA537
MACT5390	Financial Modelling	15	Spring	6	MA539
MACT6013	Actuarial Practice 3	15	Autumn	6	MA6513
MAST6360	Stochastic Processes	15	Autumn	6	MA636
MAST6390	Time Series Modelling and Simulation	15	Spring	6	MA639

FINANCIAL MATHEMATICS

FINMATHS:BSC

UFIM0001X1BS-F

FINANCIAL MATHEMATICS WITH A YEAR IN INDUSTRY

FINMATHS-S:BSC

UFIM0001P1BS-F

Single Honours

STAGE 2 - 120 credits

You must take the following compulsory modules (90 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5001	Applied Statistical Modelling	15	Spring	5	MA5501
MAST5005	Linear Partial Differential Equations	15	Autumn	5	MA5505
MAST5006	Macroeconomics for Financial Mathematics	15	Autumn	5	MA5506
MAST5007	Mathematical Statistics	15	Autumn	5	MA5507
MAST5009	Numerical Methods	15	Spring	5	MA5509
MAST5011	Optimisation with Financial Applications	15	Autumn	5	MA5511

PLUS 30 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5010	Statistics for Insurance	15	Spring	5	MA501
MAST5012	Ordinary Differential Equations	15	Spring	5	MA5512
MAST5170	Corporate Finance for Financial Mathematics	15	Spring	5	MA517

Students on a Year in Industry will also take the following non-contributory compulsory module:

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
WMATH010	Year in Industry Stage 2 Group B	0	Autumn & Spring	5	WMATH01

Single Honours

STAGE S - 120 credits

You must take the following compulsory modules (120 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5801*	Industrial Placement Experience	90	Autumn, Spring & Summer	5	MA5801
MAST5802*	Industrial Placement (Report and Presentation)	30	Autumn, Spring & Summer	5	MA5802

*This module cannot be compensated, trailed or condoned.

FINANCIAL MATHEMATICS

UFIM0001X1BS-F

FINMATHS:BSC

FINANCIAL MATHEMATICS WITH A YEAR IN INDUSTRY

UFIM0001P1BS-F

FINMATHS-S:BSC

Single Honours

STAGE 3 - 120 credits

You must take the following compulsory modules (75 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MACT5350	Financial Economics and Assets and Liability Modelling (<i>version 2</i>)	15	Autumn	6	MA535
MAST6034	Derivative Markets	15	Autumn	6	MA6534
MAST6040	Financial Econometrics	15	Spring	6	MA6540
MAST6053	Statistical Learning for Data Scientists	15	Spring	6	MA6553
MAST6360	Stochastic Processes	15	Autumn	6	MA636

PLUS 45 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MACT5370	Mathematics of Financial Derivatives	15	Spring	6	MA537
MAST5490	Discrete Mathematics	15	Spring	6	MA549
MAST5870	Numerical Solution of Differential Equations	15	Autumn	6	MA587
MAST6011	Bayesian Statistics with Stan and Python	15	Spring	6	MA6511
MAST6012	Statistical Consultancy and Data Presentation	15	Spring	6	MA6512
MAST6018	Games and Strategy	15	Spring	6	MA6518
MAST6044	Nonlinear Systems and Applications	15	Spring	6	MA6544
MAST6703†	Communicating Mathematics	15	Autumn	6	MA6503
MAST6704†	Discovering and Communicating Mathematics	30	Autumn & Spring	6	MA6504

† Only one of these modules may be taken.

DATA SCIENCE
DATASCIENCE:BSC1
DATA SCIENCE WITH A YEAR IN INDUSTRY
DATASCIENCE-S:BSC1

UDSC0001X1BS-F

UDSC0001P1BS-F

STAGE 2 - 120 Credits

You must take the following compulsory modules (120 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
COMP3830	Problem Solving with Algorithms	15	Spring	4	<i>CO383</i>
COMP5280	Introduction to Artificial Intelligence	15	Autumn	5	<i>CO528</i>
COMP5320	Database Systems	15	Spring	5	<i>CO532</i>
COMP5390	Web Development	15	Autumn	5	<i>CO539</i>
MAST5001	Applied Statistical Modelling	15	Spring	5	<i>MA5501</i>
MAST5015	Data Collection and Analytics	15	Autumn	5	<i>MA5515</i>
MAST5016	Optimisation for Data Science	15	Autumn	5	<i>MA5516</i>
MAST5956	Big Data and Machine Learning	15	Spring	5	<i>MA5956</i>

Students on a Year in Industry will also take the following non-contributory compulsory module:

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
WMATH010	Year in Industry Stage 2 Group B	0	Autumn & Spring	5	<i>WMATH01</i>

MATHEMATICS MATHS:BSC1	UMTH0001X1BS-F
MATHEMATICS WITH A FOUNDATION YEAR MATHS-F-4:BSC1	UMTH0001F1BS-F
MATHEMATICS WITH A YEAR IN INDUSTRY MATHS-S:BSC1	UMTH0001P1BS-F
MATHEMATICS (4 year programme) MATHS-4:MMATH1	UMTH0001X1MM-F
MATHEMATICS WITH A YEAR IN INDUSTRY (5 year programme) MATHS-S:MMATH1	UMTH0001P1MM-F

Single Honours

STAGE 2 - 120 credits

You must take the following compulsory modules (45 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5003	Groups and Symmetries	15	Autumn	5	MA5503
MAST5005	Linear Partial Differential Equations	15	Autumn	5	MA5505
MAST5013	Real Analysis 2	15	Autumn	5	MA5513

PLUS 75 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5001	Applied Statistical Modelling	15	Spring	5	MA5501
MAST5002	Curves and Surfaces	15	Spring	5	MA5502
MAST5004	Lagrangian and Hamiltonian Dynamics	15	Spring	5	MA5504
MAST5007	Mathematical Statistics	15	Autumn	5	MA5507
MAST5009	Numerical Methods	15	Spring	5	MA5509
MAST5012	Ordinary Differential Equations	15	Spring	5	MA5512
MAST5014	Rings and Fields	15	Spring	5	MA5514
MAST5660	Number Theory	15	Autumn	5	MA566

Students on a Year in Industry will also take the following non-contributory compulsory module:

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
WMATH010	Year in Industry Stage 2 Group B	0	Autumn & Spring	5	WMATH01

MATHEMATICS WITH A YEAR IN INDUSTRY MATHS-S:BSC1	UMTH0001P1BS-F
MATHEMATICS WITH A YEAR IN INDUSTRY (5 year programme) MATHS-S:MMATH1	UMTH0001P1MM-F

Single Honours

STAGE S - 120 credits

You must take the following compulsory modules (120 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5801*	Industrial Placement Experience	90	Autumn, Spring & Summer	5	MA5801
MAST5802*	Industrial Placement (Report and Presentation)	30	Autumn, Spring & Summer	5	MA5802

*This module cannot be compensated, trailed or condoned.

MATHEMATICS MATHS:BSC1	UMTH0001X1BS-F
MATHEMATICS WITH A FOUNDATION YEAR MATHS-F-4:BSC1	UMTH0001F1BS-F
MATHEMATICS WITH A YEAR IN INDUSTRY MATHS-S:BSC1	UMTH0001P1BS-F
MATHEMATICS (4 year programme) MATHS-4:MMATH1	UMTH0001X1MM-F
MATHEMATICS WITH A YEAR IN INDUSTRY (5 year programme) MATHS-S:MMATH1	UMTH0001P1MM-F

Single Honours

STAGE 3 - 120 credits

Across Stages 3 & 4 you may select up to 60 credits in total from the Statistics optional modules:

Those available in Stage 3 are:

Statistics optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST6011	Bayesian Statistics with Stan and Python	15	Spring	6	MA6511
MAST6012	Statistical Consultancy and Data Presentation	15	Spring	6	MA6512
MAST6015	Data Collection and Analytics	15	Autumn	6	MA6515
MAST6053	Statistical Learning for Data Scientists	15	Spring	6	MA6553
MAST6360	Stochastic Processes	15	Autumn	6	MA636
MAST6390	Time Series Modelling and Simulation	15	Spring	6	MA639

The remaining credits should be chosen from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5490	Discrete Mathematics	15	Spring	6	MA549
MAST5670	Topology	15	Spring	6	MA567
MAST5740	Polynomials in Several Variables	15	Autumn	6	MA574
MAST5870	Numerical Solution of Differential Equations	15	Autumn	6	MA587
MAST6002	Linear and Nonlinear Waves	15	Autumn	6	MA691
MAST6004	Quantum Mechanics	15	Spring	6	MA607
MAST6017	Functions of a Complex Variable	15	Autumn	6	MA6517
MAST6018	Games and Strategy	15	Spring	6	MA6518
MAST6044	Nonlinear Systems and Applications	15	Spring	6	MA6544
MAST6091	Mathematics in the World of Finance	15	Autumn	6	MA6591
MAST6703†	Communicating Mathematics	15	Autumn	6	MA6503
MAST6704†*	Discovering and Communicating Mathematics	30	Autumn & Spring	6	MA6504

† Only one of these modules may be taken.

*Available to only the BSC courses (Not to MMATH)

MATHEMATICS (4 year programme)

MATHS-4:MMATH1

MATHEMATICS WITH A YEAR IN INDUSTRY (5 year programme)

MATHS-S:MMATH1

UMTH0001X1MM-F

UMTH0001P1MM-F

Single Honours

STAGE 4 - 120 credits

You must take the following compulsory module (45 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST7020	Dissertation for MMath Mathematics	45	Autumn & Spring	7	MA702

PLUS, across Stages 3 and 4 you may select up to 60 credits in total from the Statistics optional modules: Those available in Stage 4 are:

Please note that you cannot take the Level 7 version of a module that you took at Level 6.

Statistics optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST7011	Bayesian Statistics with Stan and Python	15	Spring	7	MA7511
MAST7012	Statistical Consultancy and Data Presentation	15	Spring	7	MA7512
MAST7053	Statistical Learning for Data Scientists	15	Spring	7	MA7553
MAST9420	Data Science with R	15	Autumn	7	MA942

The remaining credits should be chosen from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST7002+	Linear and Nonlinear Waves	15	Autumn	7	MA791
MAST7004	Quantum Mechanics	15	Spring	7	MA967
MAST7015	Discrete Mathematics	15	Spring	7	MA7515
MAST7027*	Polynomials in Several Variables	15	Autumn	7	MA7527
MAST7032	Topology	15	Spring	7	MA7532
MAST7044	Nonlinear Systems and Applications	15	Spring	7	MA7544
MAST7703‡	Communicating Mathematics	15	Autumn	7	MA7503

‡ This module **must** be taken in Stage 4 if MAST6703 not taken in Stage 3

+This module must NOT be taken if in stage 3 student has done MAST6002

* This module must NOT be taken if in stage 3 student has done MAST5740

MATHEMATICS AND ACCOUNTING & FINANCE

UMTHACF2X1BA-F

MATHS-ACCF:BA

MATHEMATICS AND ACCOUNTING & FINANCE

UMTHACF2X1BS-F

MATHS-ACCF:BSC

MATHEMATICS AND ACCOUNTING & FINANCE WITH A YEAR IN INDUSTRY

UMTHACF2P1BA-F

MATHS-ACCF-S:BA

MATHEMATICS AND ACCOUNTING & FINANCE WITH A YEAR IN INDUSTRY

UMTHACF2P1BS-F

MATHS-ACCF-S:BSC

Single Honours

STAGE 2 - 120 credits

You must take the following compulsory modules (60 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
ACCT3050	Principles of Management Accounting	15	Spring	4	AC305
ACCT5260	International Financial Reporting	15	Autumn	5	AC526
BUSN3014	Financial Markets and Institutions	15	Spring	4	CB3014
MAST5005	Linear Partial Differential Equations	15	Autumn	5	MA5505

PLUS 60 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5001	Applied Statistical Modelling	15	Spring	5	MA5501
MAST5007	Mathematical Statistics	15	Autumn	5	MA5507
MAST5009	Numerical Methods	15	Spring	5	MA5509
MAST5010	Statistics for Insurance	15	Spring	5	MA501
MAST5011	Optimisations with Financial Applications	15	Autumn	5	MA5511
MAST5012	Ordinary Differential Equations	15	Spring	5	MA5512
MAST5660	Number Theory	15	Autumn	5	MA566

Students on a Year in Industry will also take the following non-contributory compulsory module:

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
WMATH010	Year in Industry Stage 2 Group B	0	Autumn & Spring	5	WMATH01

MATHEMATICS AND ACCOUNTING & FINANCE WITH A YEAR IN INDUSTRY

MATHS-ACCF-S:BA

UMTHACF2P1BA-F

MATHEMATICS AND ACCOUNTING & FINANCE WITH A YEAR IN INDUSTRY

MATHS-ACCF-S:BSC

UMTHACF2P1BS-F

Single Honours

STAGE S - 120 credits

You must take the following compulsory modules (120 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5801*	Industrial Placement Experience	90	Autumn, Spring & Summer	5	MA5801
MAST5802*	Industrial Placement (Report and Presentation)	30	Autumn, Spring & Summer	5	MA5802

*This module cannot be compensated, trailed or condoned.

MATHEMATICS AND ACCOUNTING & FINANCE

MATHS-ACCF:BA

UMTHACF2X1BA-F

MATHEMATICS AND ACCOUNTING & FINANCE

MATHS-ACCF:BSC

UMTHACF2X1BS-F

MATHEMATICS AND ACCOUNTING & FINANCE WITH A YEAR IN INDUSTRY

MATHS-ACCF-S:BA

UMTHACF2P1BA-F

MATHEMATICS AND ACCOUNTING & FINANCE WITH A YEAR IN INDUSTRY

MATHS-ACCF-S:BSC

UMTHACF2P1BS-F

Single Honours

STAGE 3 - 120 credits

You must take 60 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
ACCT5040	Auditing	30	Autumn & Spring	6	<i>AC504</i>
ACCT5220	Advanced Financial Accounting	30	Autumn & Spring	6	<i>AC522</i>
BUSN5023	Personal Taxation	15	Spring	5	<i>CB5023</i>
BUSN5130	Taxation	30	Autumn & Spring	6	<i>CB513</i>
BUSN6001	Fixed Income Markets and Instruments	15	Autumn	6	<i>CB6001</i>
BUSN6002	Finance with Excel	15	Spring	6	<i>CB6002</i>
BUSN6110	Futures and Options Markets	15	Autumn	6	<i>CB611</i>
BUSN7690 *	Risk Management	15	Spring	6	<i>CB769</i>

* This module is taught at Medway

The remaining 60 credits should be taken from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5490	Discrete Mathematics	15	Spring	6	<i>MA549</i>
MAST5870	Numerical Solution of Differential Equations	15	Autumn	6	<i>MA587</i>
MAST6002	Linear and Nonlinear Waves	15	Autumn	6	<i>MA691</i>
MAST6011	Bayesian Statistics with Stan and Python	15	Spring	6	<i>MA6511</i>
MAST6015	Data Collection and Analytics	15	Autumn	6	<i>MA6515</i>
MAST6018	Games and Strategy	15	Spring	6	<i>MA6518</i>
MAST6044	Nonlinear Systems and Applications	15	Spring	6	<i>MA6544</i>
MAST6053	Statistical Learning for Data Scientists	15	Spring	6	<i>MA6553</i>
MAST6360	Stochastic Processes	15	Autumn	6	<i>MA636</i>
MAST6390	Time Series Modelling and Simulation	15	Spring	6	<i>MA639</i>
MAST6703	Communicating Mathematics	15	Autumn	6	<i>MA6503</i>

MATHEMATICS AND STATISTICS

MATHS-STATS:BSC

UMAS0001X1BS-F

MATHEMATICS AND STATISTICS WITH A YEAR IN INDUSTRY

MATHS-STATS-S:BSC

UMAS0001P1BS-F

Single Honours

STAGE 2 - 120 credits**You must take the following compulsory modules (75 credits):**

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5001	Applied Statistical Modelling	15	Spring	5	<i>MA5501</i>
MAST5003	Groups and Symmetries	15	Autumn	5	<i>MA5503</i>
MAST5005	Linear Partial Differential Equations	15	Autumn	5	<i>MA5505</i>
MAST5007	Mathematical Statistics	15	Autumn	5	<i>MA5507</i>
MAST5013	Real Analysis 2	15	Autumn	5	<i>MA5513</i>

PLUS 45 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5002	Curves and Surfaces	15	Spring	5	<i>MA5502</i>
MAST5004	Lagrangian and Hamiltonian Dynamics	15	Spring	5	<i>MA5504</i>
MAST5010	Statistics for Insurance	15	Spring	5	<i>MA501</i>
MAST5012	Ordinary Differential Equations	15	Spring	5	<i>MA5512</i>
MAST5014	Rings and Fields	15	Spring	5	<i>MA5514</i>

Students on a Year in Industry will also take the following non-contributory compulsory module:

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
WMATH010	Year in Industry Stage 2 Group B	0	Autumn & Spring	5	<i>WMATH01</i>

MATHEMATICS AND STATISTICS WITH A YEAR IN INDUSTRY

MATHS-STATS-S:BSC

UMAS0001P1BS-F

Single Honours

STAGE S - 120 credits**You must take the following compulsory modules (120 credits):**

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5801*	Industrial Placement Experience	90	Autumn, Spring & Summer	5	<i>MA5801</i>
MAST5802*	Industrial Placement (Report and Presentation)	30	Autumn, Spring & Summer	5	<i>MA5802</i>

*This module cannot be compensated, trailed or condoned.

MATHEMATICS AND STATISTICS

MATHS-STATS:BSC

UMAS0001X1BS-F

MATHEMATICS AND STATISTICS WITH A YEAR IN INDUSTRY

MATHS-STATS-S:BSC

UMAS0001P1BS-F

Single Honours

STAGE 3 - 120 credits

You must take the following compulsory modules (30 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST6012	Statistical Consultancy and Data Presentation	15	Spring	6	<i>MA6512</i>
MAST6015	Data Collection and Analytics	15	Autumn	6	<i>MA6515</i>

PLUS at least 30 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST6011	Bayesian Statistics with Stan and Python	15	Spring	6	<i>MA6511</i>
MAST6053	Statistical Learning for Data Scientists	15	Spring	6	<i>MA6553</i>
MAST6360	Stochastic Processes	15	Autumn	6	<i>MA636</i>
MAST6390	Time Series Modelling and Simulation	15	Spring	6	<i>MA639</i>

The remaining credits should be taken from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5490	Discrete Mathematics	15	Spring	6	<i>MA549</i>
MAST5670	Topology	15	Spring	6	<i>MA567</i>
MAST5740	Polynomials in Several Variables	15	Autumn	6	<i>MA574</i>
MAST6002	Linear and Nonlinear Waves	15	Autumn	6	<i>MA691</i>
MAST6017	Functions of a Complex Variable	15	Autumn	6	<i>MA6517</i>
MAST6018	Games and Strategy	15	Spring	6	<i>MA6518</i>
MAST6044	Nonlinear Systems and Applications	15	Spring	6	<i>MA6544</i>
MAST6091	Mathematics in the World of Finance	15	Autumn	6	<i>MA6591</i>
MAST6703†	Communicating Mathematics	15	Autumn	6	<i>MA6503</i>
MAST6704†	Discovering and Communicating Mathematics	30	Autumn & Spring	6	<i>MA6504</i>

† Only one of these modules may be taken.

Single Honours

STAGE 2 - 120 credits

You must take the following compulsory modules (60 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAED1000	School Practice	30	Autumn & Spring	5	<i>MAE100</i>
MAST5001	Applied Statistical Modelling	15	Spring	5	<i>MA5501</i>
MAST5003	Groups and Symmetries	15	Autumn	5	<i>MA5503</i>

PLUS 60 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAST5004	Lagrangian and Hamiltonian Dynamics	15	Spring	5	<i>MA5504</i>
MAST5005	Linear Partial Differential Equations	15	Autumn	5	<i>MA5505</i>
MAST5007	Mathematical Statistics	15	Autumn	5	<i>MA5507</i>
MAST5009	Numerical Methods	15	Spring	5	<i>MA5509</i>
MAST5012	Ordinary Differential Equations	15	Spring	5	<i>MA5512</i>
MAST5014	Rings and Fields	15	Spring	5	<i>MA5514</i>
MAST5660	Number Theory	15	Autumn	5	<i>MA566</i>

Single Honours

STAGE 3 - 120 credits

You must take the following compulsory modules (120 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	OFFICE USE ONLY
MAED1010	Curriculum Studies: Mathematics MMETT3CUR Curriculum Studies Maths	40	Year Long	6	<i>MAE101</i>
MAED1020	Professional Placement 1 MMETT3PL1 Professional Placement 1	10	Autumn & Spring	6	<i>MAE102</i>
MAED1030	Professional Placement 2 MMETT3PL2 Professional Placement 2	20	Autumn	6	<i>MAE103</i>
MAED1040	Professional Studies MMETT3STU Professional Studies	20	Year Long	6	<i>MAE104</i>
MAST6010	Individual Project in Mathematics	30	Autumn & Spring	6	<i>MA601</i>