

School of Mathematics, Statistics and Actuarial Science

Head of School: Prof Peter Hydon
School Web Site: www.kent.ac.uk/smsas

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

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 \(PDIP\)](#)
- [Applied Actuarial Science \(MSc\)](#)
- [Applied Actuarial Science with an Industrial Placement](#)
- [Applied Actuarial Science \(International Masters\)](#)
- [International Masters Applied Actuarial Science with an Industrial Placement](#)
- [Mathematics and Its Applications](#)
- [Mathematics and Its Applications with an Industrial Placement](#)
- [Mathematics and Its Applications \(International Masters\)](#)
- [Mathematics and Its Applications \(International Masters with an Industrial Placement\)](#)
- [Statistical Data Science \(Formerly Statistics\)](#)
- [Statistical Data Science with an Industrial Placement \(Formerly Statistics with an Industrial Placement\)](#)
- [International Masters in Statistical Data Science \(Formerly International Masters in Statistics\)](#)
- [International Masters in Statistical Data Science with an Industrial Placement \(Formerly International Masters in Statistics with an Industrial Placement\)](#)
- [Statistics with Finance](#)
- [Statistics with Finance \(International Masters\)](#)
- [Statistics with Finance with an Industrial Placement](#)
- [International Masters Statistics with Finance with an Industrial Placement](#)

STAGE 1 - 120 credits - credit imbalance permitted (up to 75 credits per term)

You must take 120 credits from the following optional modules:

At least 90 credits must be taken at Level 7.

NOTE: Changes to this programme are subject to approval

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST5010	Statistics for Insurance	15	Spring	5	MA501
MAST6390	Time Series Modelling and Simulation	15	Spring	6	MA639
MACT7009	Financial Mathematics	15	Autumn	7	MA7509
MACT7290	Probability and Statistics for Actuarial Science	30	Autumn	7	MA729
MACT7350	Actuarial Mathematics	30	Autumn & Spring	7	MA735
MACT8190	Business Economics	15	Spring	7	MA819
MACT8250	Survival Analysis	15	Autumn	7	MA825
MACT8260	Finance & Financial Reporting	15	Autumn & Spring	7	MA826
MACT8350	Financial Economics and Asset Liability Modelling	15	Autumn	7	MA835
MAST8360	Stochastic Processes	15	Autumn	7	MA836
MACT8370	Mathematics of Financial Derivatives	15	Spring	7	MA837
MACT8400	Financial Modelling	15	Spring	7	MA840

STAGE 1 - 180 credits – credit imbalance permitted (up to 112.5 credits per term)

NOTE: Changes to this programme are subject to approval

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

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MACT9210	Actuarial Risk Management 1	30	Autumn	7	MA921
MACT9220	Actuarial Risk Management 2	30	Autumn & Spring	7	MA922
MACT9530	Communications	15	Autumn & Spring	7	MA953

You must take 105 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MACT9090	Enterprise Risk Management	30	Autumn & Spring	7	MA909
MACT9120	Life Insurance	30	Autumn & Spring	7	MA912
MACT9140	Pensions and Other Benefits Not Running 19/20	30	Autumn & Spring	7	MA914
MACT9150	Finance and Investment	30	Autumn & Spring	7	MA915
MACT9160	Derivative Securities	30	Autumn & Spring	7	MA916
MACT9170	General Insurance Reserving and Capital Modelling	30	Autumn & Spring	7	MA917
MACT9180	General Insurance Pricing	30	Autumn & Spring	7	MA918
MACT9230	Introduction to Actuarial Research	15	Autumn & Spring	7	MA923
MACT9240	Short Project (Actuarial Science)	15	Spring & Summer	7	MA924
MACT9500	Prophet	15	Autumn	7	MA950
MACT9510	Prophet 2	15	Spring	7	MA951
MACT9520	Financial Modelling	15	Autumn & Spring	7	MA952
MAST9420	Data Science with R	15	Autumn	7	MA942

APPLIED ACTUARIAL SCIENCE WITH AN INDUSTRIAL PLACEMENT**ACTSCIAP-S:MSC-T****STAGE 1 (Year 1) – 330 credits****You must take the following compulsory modules (75 credits):**

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MACT9210	Actuarial Risk Management 1	30	Autumn	7	MA921
MACT9220	Actuarial Risk Management 2	30	Autumn & Spring	7	MA922
MACT9530	Communications	15	Autumn & Spring	7	MA953

You must take 105 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MACT9090	Enterprise Risk Management	30	Autumn & Spring	7	MA909
MACT9120	Life Insurance	30	Autumn & Spring	7	MA912
MACT9140	Pensions and Other Benefits Not Running 19/20	30	Autumn & Spring	7	MA914
MACT9150	Finance and Investment	30	Autumn & Spring	7	MA915
MACT9160	Derivative Securities	30	Autumn & Spring	7	MA916
MACT9170	General Insurance Reserving and Capital Modelling	30	Autumn & Spring	7	MA917
MACT9180	General Insurance pricing	30	Autumn & Spring	7	MA918
MACT9230	Introduction to Actuarial Research	15	Autumn & Spring	7	MA923
MACT9240	Short Project (Actuarial Science)	15	Spring & Summer	7	MA924
MACT9500	Prophet	15	Autumn	7	MA950
MACT9510	Prophet 2	15	Spring	7	MA951
MACT9520	Financial Modelling	15	Autumn & Spring	7	MA952
MAST9420	Data Science with R	15	Autumn	7	MA942

(Year 2)**150 credits (12 months) – PLACEMENT MODULES****You must take the following compulsory modules (150 credits):**

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7801	Industrial Placement Report and Presentation	30	Autumn & Spring	7	MA976
MAST7805	Industrial Placement Experience (12 Months)*	120	Year Long	7	MA991

*Module cannot be compensated or condoned

NOTE: Changes to this programme are subject to approval

STAGE 1 - 120 credits - credit imbalance permitted (up to 75 credits per term)

You must take 120 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST5010	Statistics for Insurance	15	Spring	5	MA501
MAST6390	Time Series Modelling and Simulation	15	Spring	6	MA639
MACT7009	Financial Mathematics	15	Autumn	7	MA7509
MACT7290	Probability and Statistics for Actuarial Science	30	Autumn	7	MA729
MACT7350	Actuarial Mathematics	30	Autumn & Spring	7	MA735
MACT8190	Business Economics	15	Spring	7	MA819
MACT8250	Survival Analysis	15	Autumn	7	MA825
MACT8260	Finance & Financial Reporting	15	Autumn & Spring	7	MA826
MACT8350	Financial Economics and Asset and Liability Modelling	15	Autumn	7	MA835
MAST8360	Stochastic Processes	15	Autumn	7	MA836
MACT8370	Mathematics of Financial Derivatives	15	Spring	7	MA837
MACT8400	Financial Modelling	15	Spring	7	MA840

STAGE 2 - 180 credits - credit imbalance permitted (up to 112.5 credits per term)

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

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MACT9210	Actuarial Risk Management 1	30	Autumn	7	MA921
MACT9220	Actuarial Risk Management 2	30	Autumn & Spring	7	MA922
MACT9530	Communications	15	Autumn & Spring	7	MA953

You must take 105 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MACT9090	Enterprise Risk Management	30	Autumn & Spring	7	MA909
MACT9120	Life Insurance	30	Autumn & Spring	7	MA912
MACT9140	Pensions and Other Benefits Not Running 19/20	30	Autumn & Spring	7	MA914
MACT9150	Finance and Investment	30	Autumn & Spring	7	MA915
MACT9160	Derivative Securities	30	Autumn & Spring	7	MA916
MACT9170	General Insurance Reserving and Capital Modelling	30	Autumn & Spring	7	MA917
MACT9180	General Insurance Pricing	30	Autumn & Spring	7	MA918
MACT9230	Introduction to Actuarial Research	15	Autumn & Spring	7	MA923
MACT9240	Short Project (Actuarial Science)	15	Spring & Summer	7	MA924
MACT9500	Prophet	15	Autumn	7	MA950
MACT9510	Prophet 2	15	Spring	7	MA951
MACT9520	Financial Modelling	15	Autumn & Spring	7	MA952
MAST9420	Data Science with R	15	Autumn	7	MA942

INTERNATIONAL MASTERS APPLIED ACTUARIAL SCIENCE WITH AN INDUSTRIAL PLACEMENT
ACTSCIAP-S-I:MSC-T

STAGE 1 (Year 1) – 300 credits

NOTE: Changes to this programme are subject to approval

You must take 120 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST5010	Statistics for Insurance	15	Spring	5	MA501
MAST6390	Time Series Modelling and Simulation	15	Spring	6	MA639
MACT7009	Financial Mathematics	15	Autumn	7	MA7509
MACT7290	Probability and Statistics for Actuarial Science	30	Autumn	7	MA729
MACT7350	Actuarial Mathematics	30	Autumn & Spring	7	MA735
MACT8190	Business Economics	15	Spring	7	MA819
MACT8250	Survival Analysis	15	Autumn	7	MA825
MACT8260	Finance & Financial Reporting	15	Autumn & Spring	7	MA826
MACT8350	Financial Economics and Asset and Liability Modelling	15	Autumn	7	MA835
MAST8360	Stochastic Processes	15	Autumn	7	MA836
MACT8370	Mathematics of Financial Derivatives	15	Spring	7	MA837
MACT8400	Financial Modelling	15	Spring	7	MA840

(Year 2)

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

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MACT9210	Actuarial Risk Management 1	30	Autumn	7	MA921
MACT9220	Actuarial Risk Management 2	30	Autumn & Spring	7	MA922
MACT9530	Communications	15	Autumn & Spring	7	MA953

You must take 105 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MACT9090	Enterprise Risk Management	30	Autumn & Spring	7	MA909
MACT9120	Life Insurance	30	Autumn & Spring	7	MA912
MACT9140	Pensions and Other Benefits Not Running 19/20	30	Autumn & Spring	7	MA914
MACT9150	Finance and Investment	30	Autumn & Spring	7	MA915
MACT9160	Derivative Securities	30	Autumn & Spring	7	MA916
MACT9170	General Insurance Reserving and Capital Modelling	30	Autumn & Spring	7	MA917
MACT9180	General Insurance Pricing	30	Autumn & Spring	7	MA918
MACT9230	Introduction to Actuarial Research	15	Autumn & Spring	7	MA923
MACT9240	Short Project (Actuarial Science)	15	Spring & Summer	7	MA924
MACT9500	Prophet	15	Autumn	7	MA950

MACT9510	Prophet 2	15	Spring	7	MA951
MACT9520	Financial Modelling	15	Autumn & Spring	7	MA952
MAST9420	Data Science with R	15	Autumn	7	MA942

150 credits (12 months) – PLACEMENT MODULES

You must take the following compulsory modules (150 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7801	Industrial Placement Report and Presentation	30	Autumn & Spring	7	MA976
MAST7805	Industrial Placement Experience (12 Months)*	120	Year Long	7	MA991

*Module cannot be compensated or condoned

STAGE 1 - 120 credits - credit imbalance permitted (up to 75 credits per term)

You must take the following compulsory module (15 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7703	Communicating Mathematics	15	Autumn	7	MA7503

You must take 105 credits from the following optional modules:

Students may take no more than 30 credits of level 6 modules.

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST5610	Introduction to Lie Groups and Algebras	15	Autumn	6	MA561
MAST5740	Polynomials in Several Variables	15	Autumn	6	MA574
MAST5870	Numerical Solution of Differential Equations	15	Autumn	6	MA587
MAST6018	Games and Strategy	15	Spring	6	MA6518
MAST7002	Linear and Nonlinear Waves	15	Autumn	7	MA791
MAST7024	Metric and Normed Spaces	15	Spring	7	MA7524
MAST7032	Topology	15	Autumn	7	MA7532
MAST7044	Nonlinear Systems and Applications	15	Autumn	7	MA7544
MAST8710	Asymptotics and Perturbation methods	15	Spring	7	MA871
MAST9640	Applied Algebraic Topology	15	Spring	7	MA964
MAST9720	Algebraic Curves in Nature	15	Autumn & Spring	7	MA972
MAST9950	Graphs and Combinatorics	15	Spring	7	MA995

STAGE 2 - 60 credits

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

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	CREDIT LEVEL	SDS CODE
MAST9600	Dissertation	60	7	MA960

MATHEMATICS AND ITS APPLICATIONS WITH AN INDUSTRIAL PLACEMENT**MATHAPS-S:MSC-T****STAGE 1 – 300 credits**

You must take the following compulsory module (15 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7703	Communicating Mathematics	15	Autumn	7	MA7503

You must take 105 credits from the following optional modules (no more than 30 credits of Level 6 modules):

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST5610	Introduction to Lie Groups and Algebras	15	Autumn	6	MA561
MAST5740	Polynomials in Several Variables	15	Autumn	6	MA574
MAST5870	Numerical Solution of Differential Equations	15	Autumn	6	MA587
MAST6018	Games and Strategy	15	Spring	6	MA6518
MAST7002	Linear and Nonlinear Waves	15	Autumn	7	MA791
MAST7024	Metric and Normed Spaces	15	Spring	7	MA7524
MAST7032	Topology	15	Autumn	7	MA7532
MAST7044	Nonlinear Systems and Applications	15	Autumn	7	MA7544
MAST8710	Asymptotics and Perturbation methods	15	Spring	7	MA871
MAST9640	Applied Algebraic Topology	15	Spring	7	MA964
MAST9720	Algebraic Curves in Nature	15	Autumn & Spring	7	MA972
MAST9950	Graphs and Combinatorics	15	Spring	7	MA995

(Year 2) 180 credits (12 months) – PLACEMENT MODULES

You must take the following compulsory modules (180 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST9740	Short Dissertation (Mathematics)	30	Spring	7	MA974
MAST7801	Industrial Placement Report and Presentation	30	Autumn & Spring	7	MA976
MAST7805	Industrial Placement Experience (12 Months)*	120	Year Long	7	MA991

*Module cannot be compensated or condoned

MATHEMATICS AND ITS APPLICATIONS (INTERNATIONAL MASTERS)**MATHAPS-I:MSC-T****STAGE 1 - 120 credits - credit imbalance permitted (up to 75 credits per term)**

At least 80 credits must be at level 6.

You must take 30 credits from the following compulsory modules:

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
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

You must take 90 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST5610	Introduction to Lie Groups and Algebras	15	Autumn	6	MA561
MAST5670	Topology	15	Autumn	6	MA567
MAST5740	Polynomials in Several Variables	15	Autumn	6	MA574
MAST5870	Numerical Solution of Differential Equations	15	Autumn	6	MA587
MAST5950	Graphs and Combinatorics	15	Spring	6	MA595
MAST6002	Linear and Nonlinear Waves	15	Autumn	6	MA691
MAST6018	Games and Strategy	15	Spring	6	MA6518
MAST6024	Metric and Normed Spaces	15	Spring	6	MA6524
MAST6044	Nonlinear Systems and Applications	15	Autumn	6	MA6544
MAST6170	Asymptotics and Perturbation methods	15	Spring	6	MA617

STAGE 2 - 120 credits - credit imbalance permitted (up to 75 credits per term)**You must take the following compulsory module (15 credits):**

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7703	Communicating Mathematics	15	Autumn	7	MA7503

You must take 105 credits from the following optional modules (no more than 30 credits of level 6 modules):

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST5740	Polynomials in Several Variables	15	Autumn	6	MA574
MAST5870	Numerical Solution of Differential Equations	15	Autumn	6	MA587
MAST6018	Games and Strategy	15	Spring	6	MA6518
MAST7002	Linear and Nonlinear Waves	15	Autumn	7	MA791
MAST7024	Metric and Normed Spaces	15	Spring	7	MA7524
MAST7032	Topology	15	Autumn	7	MA7532
MAST7044	Nonlinear Systems and Applications	15	Autumn	7	MA7544
MAST8710	Asymptotics and Perturbation methods	15	Spring	7	MA871
MAST9720	Algebraic Curves in Nature	15	Autumn & Spring	7	MA972
MAST9950	Graphs and Combinatorics	15	Spring	7	MA995

STAGE 3 - 60 credits**You must take the following compulsory module (60 credits):**

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	CREDIT LEVEL	SDS CODE
MAST9600	Dissertation	60	7	MA960

**MATHEMATICS AND ITS APPLICATIONS
(INTERNATIONAL MASTERS WITH AN INDUSTRIAL PLACEMENT)**

MATHAPS-S-I:MSC-T

STAGE 1 (Year 1) – 420 Credits

You must take 30 credits from the following compulsory modules:

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
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

You must take 90 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST5610	Introduction to Lie Groups and Algebras	15	Autumn	6	MA561
MAST5670	Topology	15	Autumn	6	MA567
MAST5740	Polynomials in Several Variables	15	Autumn	6	MA574
MAST5870	Numerical Solution of Differential Equations	15	Autumn	6	MA587
MAST5950	Graphs and Combinatorics	15	Spring	6	MA595
MAST6002	Linear and Nonlinear Waves	15	Autumn	6	MA691
MAST6018	Games and Strategy	15	Spring	6	MA6518
MAST6024	Metric and Normed Spaces	15	Spring	6	MA6524
MAST6044	Nonlinear Systems and Applications	15	Autumn	6	MA6544
MAST6170	Asymptotics and Perturbation methods	15	Spring	6	MA617

(Year 2)

You must take the following compulsory module (15 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7703	Communicating Mathematics	15	Autumn	7	MA7503

You must take 105 credits from the following optional modules (no more than 30 credits of level 6 modules):

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST5740	Polynomials in Several Variables	15	Autumn	6	MA574
MAST5870	Numerical Solution of Differential Equations	15	Autumn	6	MA587
MAST6018	Games and Strategy	15	Spring	6	MA6518
MAST7002	Linear and Nonlinear Waves	15	Autumn	7	MA791
MAST7024	Metric and Normed Spaces	15	Spring	7	MA7524
MAST7032	Topology	15	Autumn	7	MA7532
MAST7044	Nonlinear Systems and Applications	15	Autumn	7	MA7544
MAST8710	Asymptotics and Perturbation methods	15	Spring	7	MA871
MAST9640	Applied Algebraic Topology	15	Spring	7	MA964
MAST9720	Algebraic Curves in Nature	15	Autumn & Spring	7	MA972
MAST9950	Graphs and Combinatorics	15	Spring	7	MA995

180 credits (12 months) – PLACEMENT MODULES

You must take the following compulsory modules (180 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST9740	Short Dissertation (Mathematics)	30	Summer	7	MA974
MAST7801	Industrial Placement Report and Presentation	30	Autumn & Spring	7	MA976
MAST7805	Industrial Placement Experience (12 Months)*	120	Year Long	7	MA991

*Module cannot be compensated or condoned

STAGE 1 – 180 credits - credit imbalance permitted (up to 120 credits per term)

You must take the following compulsory modules (150 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST8580	Computational Statistics	15	Spring	7	MA858
MAST8670	Project	60	Yearlong	7	MA867
MAST8810	Probability and Classical Inference	15	Autumn	7	MA881
MAST8820	Advanced Regression Modelling	15	Autumn	7	MA882
MAST8830	Bayesian Statistics	15	Autumn	7	MA883
MAST8840	Principles of Data Collection	15	Autumn & Spring	7	MA884
MAST9420	Data Science with R	15	Autumn	7	MA942

You must take 30 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7009	Advances in Statistics	15	Spring	7	MA7510
MAST7029	Statistical Learning	15	Spring	7	MA7529
MAST8850	Stochastic Processes and Time Series	15	Autumn & Spring	7	MA885

STATISTICAL DATA SCIENCE WITH AN INDUSTRIAL PLACEMENT**STATDATASCI-S:MSC-T**

(Formerly Statistics with an Industrial Placement STATS-S:MSC-T)

STAGE 1 – 300 credits (12 months)

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

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST8580	Computational Statistics	15	Spring	7	MA858
MAST8810	Probability and Classical Inference	15	Autumn	7	MA881
MAST8820	Advanced Regression Modelling	15	Autumn	7	MA882
MAST8830	Bayesian Statistics	15	Autumn	7	MA883
MAST8840	Principles of Data Collection	15	Autumn & Spring	7	MA884
MAST9420	Data Science with R	15	Autumn	7	MA942
MAST9750	Short Dissertation (Statistics)	30	Yearlong	7	MA975

You must take 30 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7009	Advances in Statistics	15	Spring	7	MA7510
MAST7029	Statistical Learning	15	Spring	7	MA7529
MAST8850	Stochastic Processes and Time Series	15	Autumn & Spring	7	MA885

(Year 2)**150 credits (12 months) – PLACEMENT MODULES**

You must take the following compulsory modules (150 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7801	Industrial Placement Report and Presentation	30	Autumn & Spring	7	MA976
MAST7805	Industrial Placement Experience (12 Months)*	120	Year Long	7	MA991

*Module cannot be compensated or condoned

INTERNATIONAL MASTERS IN STATISTICAL DATA SCIENCE

(Formerly International Masters in Statistics STATS-I:MSC-T)

STATDATASCI-I:MSC-T

STAGE 1 – 120 credits - credit imbalance permitted (up to 75 credits per term)

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

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST4004	Linear Algebra	15	Spring	4	MA346
MAST5013	Real Analysis 2	15	Autumn	5	MA5513
MAST6007	Mathematical Statistics	15	Autumn	6	MA6507
MAST6008	Applied Statistical Modelling 1	15	Spring	6	MA6508
MAST6020	Project in Statistics or Probability	15	Autumn	6	MA602

You must take 45 credits from the following optional modules (15 credits in Autumn and 30 credits in Spring):

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
ENLA6001	Advanced English for Academic Study in the Applied Sciences	15	Autumn & Spring	6	ENLA6001
MAST5010	Statistics for Insurance	15	Spring	5	MA501
MAST6360	Stochastic Processes	15	Autumn	6	MA636
MAST6390	Time Series Modelling and Simulation	15	Spring	6	MA639
MAST6029	Statistical Learning	15	Spring	6	MA6529

STAGE 2 – 180 credits – credit imbalance permitted (up to 120 credits per term)

You must take the following compulsory modules (150 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST8580	Computational Statistics	15	Spring	7	MA858
MAST8670	Project	60	Yearlong	7	MA867
MAST8810	Probability and Classical Inference	15	Autumn	7	MA881
MAST8820	Advanced Regression Modelling	15	Autumn	7	MA882
MAST8830	Bayesian Statistics	15	Autumn	7	MA883
MAST8840	Principles of Data Collection	15	Autumn & Spring	7	MA884
MAST9420	Data Science with R	15	Autumn	7	MA942

You must take 30 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7009	Advances in Statistics	15	Spring	7	MA7510
MAST7029	Statistical Learning	15	Spring	7	MA7529
MAST8850	Stochastic Processes and Time Series	15	Autumn & Spring	7	MA885

INTERNATIONAL MASTERS IN STATISTICAL DATA SCIENCE WITH AN INDUSTRIAL PLACEMENT STATDATSCI-S-I:MSC-T

(Formerly International Masters in Statistics with an Industrial Placement STATS-S-I:MSC-T)

STAGE 1 (Year 1) – 300 Credits

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

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST4004	Linear Algebra	15	Spring	4	MA346
MAST5013	Real Analysis 2	15	Autumn	5	MA5513
MAST6007	Mathematical Statistics	15	Autumn	6	MA6507
MAST6008	Applied Statistical Modelling 1	15	Spring	6	MA6508
MAST6020	Project in Statistics or Probability	15	Autumn	6	MA602

You must take 45 credits from the following optional modules (15 credits in Autumn and 30 credits in Spring):

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
ENLA6001	Advanced English for Academic Study in the Applied Sciences	15	Autumn & Spring	6	ENLA6001
MAST5010	Statistics for Insurance	15	Spring	5	MA501
MAST6029	Statistical Learning	15	Spring	6	MA6529
MAST6360	Stochastic Processes	15	Autumn	6	MA636
MAST6390	Time Series Modelling and Simulation	15	Spring	6	MA639

(Year 2)

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

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST8580	Computational Statistics	15	Spring	7	MA858
MAST8810	Probability and Classical Inference	15	Autumn	7	MA881
MAST8820	Advanced Regression Modelling	15	Autumn	7	MA882
MAST8830	Bayesian Statistics	15	Autumn	7	MA883
MAST8840	Principles of Data Collection	15	Autumn & Spring	7	MA884
MAST9420	Data Science with R	15	Autumn	7	MA942
MAST9750	Short Dissertation (Statistics)	30	Yearlong	7	MA975

You must take 30 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST8850	Stochastic Processes and Time Series	15	Autumn & Spring	7	MA885
MAST7009	Advances in Statistics	15	Spring	7	MA7510
MAST7029	Statistical Learning	15	Spring	7	MA7529

150 credits (12 months) – PLACEMENT MODULES

You must take the following compulsory modules (150 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7801	Industrial Placement Report and Presentation	30	Autumn & Spring	7	MA976
MAST7805	Industrial Placement Experience (12 Months)*	120	Year Long	7	MA991

*Module cannot be compensated or condoned

STAGE 1 – 180 credits – credit imbalance permitted (up to 127.5 credits per term)

You must take the following compulsory modules (135 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST8670	Project	60	Yearlong	7	MA867
MAST8810	Probability and Classical Inference	15	Autumn	7	MA881
MAST8820	Advanced Regression Modelling	15	Autumn	7	MA882
MAST8830	Bayesian Statistics	15	Autumn	7	MA883
MAST8860	Financial Econometrics	15	Spring	7	MA886
MAST9420	Data Science with R	15	Autumn	7	MA942

You must take 45 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7029	Statistical Learning	15	Spring	7	MA7529
MACT8350	Financial Economics and Asset and Liability Modelling	15	Autumn	7	MA835
MAST8360	Stochastic Processes	15	Autumn	7	MA836
MACT8370	Mathematics of Financial Derivatives	15	Spring	7	MA837

STAGE 1 – 300 credits - credit imbalance permitted (up to 75 credits per term)

You must take the following compulsory modules (105 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST8810	Probability and Classical Inference	15	Autumn	7	MA881
MAST8820	Advanced Regression Modelling	15	Autumn	7	MA882
MAST8830	Bayesian Statistics	15	Autumn	7	MA883
MAST8860	Financial Econometrics	15	Spring	7	MA886
MAST9420	Data Science with R	15	Autumn	7	MA942
MAST9750	Short Dissertation (Statistics)	30	Yearlong	7	MA975

You must take 45 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7029	Statistical Learning	15	Spring	6	MA7529
MACT8350	Financial Economics and Asset and Liability Modelling	15	Autumn	7	MA835
MAST8360	Stochastic Processes	15	Autumn	7	MA836
MACT8370	Mathematics of Financial Derivatives	15	Spring	7	MA837

(Year 2)

150 credits (12 months) – PLACEMENT MODULES

You must take the following compulsory module (150 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7801	Industrial Placement Report and Presentation	30	Autumn & Spring	7	MA976
MAST7805	Industrial Placement Experience (12 Months)*	120	Year Long	7	MA991

*Module cannot be compensated or condoned

STAGE 1 – 120 credits - credit imbalance permitted (up to 75 credits per term)

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

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST4004	Linear Algebra	15	Spring	4	MA346
MAST5013	Real Analysis 2	15	Autumn	5	MA5513
MAST6007	Mathematical Statistics	15	Autumn	6	MA6507
MAST6008	Applied Statistical Modelling 1	15	Spring	6	MA6508
MAST6020	Project in Statistics or Probability	15	Autumn	6	MA602

You must take 45 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
ENLA6001	Advanced English for Academic Study in the Applied Sciences	15	Autumn & Spring	6	ENLA6001
MAST5010	Statistics for Insurance	15	Spring	5	MA501
MAST6029	Statistical Learning	15	Spring	6	MA6529
MAST6360	Stochastic Processes	15	Autumn	6	MA636
MAST6390	Time Series Modelling and Simulation	15	Spring	6	MA639

STAGE 2 – 180 credits - credit imbalance permitted (up to 127.5 credits per term)

You must take the following compulsory modules (135 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST8670	Project	60	Yearlong	7	MA867
MAST8810	Probability and Classical Inference	15	Autumn	7	MA881
MAST8820	Advanced Regression Modelling	15	Autumn	7	MA882
MAST8830	Bayesian Statistics	15	Autumn	7	MA883
MAST8860	Financial Econometrics	15	Spring	7	MA886
MAST9420	Data Science with R	15	Autumn	7	MA942

You must take 45 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7029	Statistical Learning	15	Spring	7	MA7529
MACT8350	Financial Economics and Asset and Liability Modelling	15	Autumn	7	MA835
MAST8360	Stochastic Processes	15	Autumn	7	MA836
MACT8370	Mathematics of Financial Derivatives	15	Spring	7	MA837

INTERNATIONAL MASTERS STATISTICS WITH FINANCE WITH AN INDUSTRIAL PLACEMENT **STATS-FIN-S-I:MSC-T**

STAGE 1 (Year 1) – 420 Credits

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

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST4004	Linear Algebra	15	Spring	4	MA346
MAST5013	Real Analysis 2	15	Autumn	5	MA5513
MAST6007	Mathematical Statistics	15	Autumn	6	MA6507
MAST6008	Applied Statistical Modelling 1	15	Spring	6	MA6508
MAST6020	Project in Statistics or Probability	15	Autumn	6	MA602

You must take 45 credits from the following optional modules (15 credits in Autumn and 30 credits in Spring):

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
ENLA6001	Advanced English for Academic Study in the Applied Sciences	15	Autumn & Spring	6	ENLA6001
MAST5010	Statistics for Insurance	15	Spring	5	MA501
MAST6029	Statistical Learning	15	Spring	6	MA6529
MAST6360	Stochastic Processes	15	Autumn	6	MA636
MAST6390	Time Series Modelling and Simulation	15	Spring	6	MA639

(Year 2)

You must take the following compulsory modules (105 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST8810	Probability and Classical Inference	15	Autumn	7	MA881
MAST8820	Advanced Regression Modelling	15	Autumn	7	MA882
MAST8830	Bayesian Statistics	15	Autumn	7	MA883
MAST8860	Financial Econometrics	15	Spring	7	MA886
MAST9420	Data Science with R	15	Autumn	7	MA942
MAST9750	Short Dissertation (Statistics)	30	Yearlong	7	MA975

You must take 45 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7029	Statistical Learning	15	Spring	7	MA7529
MACT8350	Financial Economics and Asset and Liability Modelling	15	Autumn	7	MA835
MAST8360	Stochastic Processes	15	Autumn	7	MA836
MACT8370	Mathematics of Financial Derivatives	15	Spring	7	MA837

150 credits (12 months) – PLACEMENT MODULES

You must take the following compulsory modules (150 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	SDS CODE
MAST7801	Industrial Placement Report and Presentation	30	Autumn & Spring	7	MA976
MAST7805	Industrial Placement Experience (12 Months)*	120	Year Long	7	MA991

*Module cannot be compensated or condoned