These programme regulations should be read in conjunction with the University's core regulations for undergraduate programmes, and the marking and classification conventions for undergraduate programmes.

BSc Natural Sciences (CFG0)

1. This programme is available at Durham City, in a full-time mode of study.

2. All module selections must be approved by the Deputy Head of Faculty (Natural Sciences) and be compatible in the timetable.

3. At Level 1 students take modules from at least two and no more than four subjects, to a maximum of 80 credits per subject.

4. At Level 2 students take modules from at least two and no more than four subjects, to a maximum of 80 credits per subject.

5. At Level 3 students take modules from at least two and no more than three subjects, to a maximum of 100 credits per subject.

6. Within the Natural Sciences programme certain combinations of modules are known as "Joint Honours degrees". Students who follow these combinations of modules will be awarded a specific title for their degree.

7. Students who follow an approved Joint Honours degree will be awarded a BSc Honours in A and B within the Natural Sciences programme, where A and B are replaced by the approved subject titles. Normally each subject will have a single subject title.

8. In order to qualify for the degree BSc Honours in A and B within the Natural Sciences programme, students in Levels 2 and 3 must select modules from the same two subjects and the number of credits in either subject cannot exceed 80 in each of Levels 2 and 3. In the following table the following abbreviations apply:

An	Anthropology	Ec	Economics
Ar	Archaeology	Gg	Geography
Bi	Biology	Ma	Mathematics
Bs	Business	Ph	Philosophy
Ch	Chemistry	Py	Physics
CS	Computer Science	Ps	Psychology
ES	Earth Sciences	St	Statistics

The following combinations are currently available:

	An	Ar	Bi	Bs	Ch	CS	ES	Ec	Gg	Ma	Ph	Py	Ps	St
An			•										•	
Ar							•							
Bi	•				•		•		•	•			•	
Bs						•								
Ch			•				•			•		•		
CS				•						•		•		
ES		•	•		•				•	•				
Ec										•			•	
Gg			•				•			•			•	•
Ma			•		•	•	•	•	•		•	•	•	
Ph										•		•		
Py					•	•			•	•				
Ps	•		•			•		•	•	•				•
St									•					•

Table 1: Joint Honours Combinations available in the A and B degree

The table above shows the combinations that are currently available (an • indicates that combining these two subjects is possible and the abbreviations represent the subjects in the above list)

9. The degree certificate issued to successful students who have taken a BSc Natural Sciences degree shall list all subjects in which they have taken at least 40 credits during Levels 2 and 3 of the degree programme.

10. Students studying for a BSc Natural Sciences degree must take modules to the value of at least 180 credits from the Faculty of Science over the three years of study. Students studying for a Joint Honours degree are exempt from the requirement. The subjects within the Faculty of Science are: Biology, Chemistry, Computer Science, Earth Sciences, Mathematics, Physics, Psychology and Statistics.

Anthropology Modules Available to Natural Sciences Students

11. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Human Origins and Diversity	ANTH1071	20
Peoples and Cultures	ANTH1061	20
Level 2		
Evolutionary Anthropology	ANTH2061	20
Human Ecology, Genetics and Health	ANTH2011	20
Biology, Culture and Society	ANTH2021	20
Methods and Explanations	ANTH2031	20
Political and Economic Organisation	ANTH2051	20
Kinship and Belief Systems	ANTH2041	20
Level 3		
Business Anthropology	ANTH3041	20
Change and Development	ANTH3111	20
Current Issues in Sociocultural Anthropology	ANTH3011	20
Dissertation in Anthropology	ANTH3141	20
Material Culture	ANTH3081	20
Nutritional and Disease Ecology	ANTH3151	20
Palaeoanthropology	ANTH3061	20
Recent Developments in Biological Anthropology	ANTH3171	20
Anthropology of Science and Ethics	HUSS3141	20
Mental Health, Illness and Drug Use	HUSS3241	20
Power and Governance	HUSS3501	20
Understanding Behaviour	HUSS3301	20

12. Students studying for BSc Joint Honours degrees involving Anthropology are required to take the following modules:

Level 1	Human Origins and Diversity	ANTH1071
	People and Cultures	ANTH1061
Level 2	**All students are required to take at least:**	
	Evolutionary Anthropology	ANTH2061
	AND/ OR Human Ecology, Genetics and Health	ANTH2011
Level 3	All students can take up to four modules from the Level 3 Anthropology modules. If three or more Anthropology modules are taken, one of the modules can be at Level 2.	

Archaeology Modules Available to Natural Sciences Students

13. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Ancient Civilisations of the East	ARCH1111	20
Discovering World Prehistory	ARCH1121	20
From Roman Empire to Nation State	ARCH1101	20
Introduction to Archaeology	ARCH1071	20
Scientific Methods in Archaeology 1	ARCH1041	20
Level 2		
Ancient Empires of the East	ARCH2141	20
Scientific Methods in Archaeology 2	ARCH2041	20
Archaeology of Medieval and Post-Medieval Britain in its European Context	ARCH2131	20

Experimental Methods of Archaeological Science (EMAS)	ARCH2111	20
Field Archaeology of Britain	ARCH2101	20
Mediterranean Expansion: Rome and Native Societies	ARCH2091	20
Prehistoric Europe: from Foragers to State Formation	ARCH2081	20
Level 3		
Archaeological Surveying †	ARCH3491	20
Archaeology Dissertation	ARCH3371	20
Bones and Human Societies †	ARCH3461	20
Palaeoethnobotany: Plants and Human Societies	ARCH3551	20
Scientific Methods in Archaeology 3	ARCH3051	20
Specialised Aspects in Archaeology (20 Credits)	ARCH3451	20
Specialised Aspects in Archaeology (40 Credits)	ARCH3472	40
Dissertation	ARCH4003	60

14. Students studying for BSc Joint Honours degrees involving Archaeology are required to take the following modules:

Level 1	Scientific Methods in Archaeology 1	ARCH1041
	Plus at least 20 credits from the following:	
	Discovering World Prehistory	ARCH1121
	From Roman Empire to Nation State	ARCH1101
	Ancient Civilisations of the East	ARCH1111
	If modules to the value of 60 credits or more in Archaeology are taken, the third 20 credit module must be ARCH1071 Introduction to Archaeology.	
Level 2	Scientific Methods in Archaeology 2	ARCH2041
	AND modules up to the value of 60 credits from the Level 2 Archaeology modules listed above. If modules to the value of 60 credits or more are taken, one 20 credit module can be at Level 1, unless Level 1 modules to the value of 80 credits have been taken	
Level 3	Scientific Methods in Archaeology 3	ARCH3051
	AND modules up to the value of 60 credits from the Level 3 Archaeology modules listed above. If modules to the value of 60 credits or more are taken then Archaeology Dissertation (20 credits) must be taken, unless a dissertation module is being taken in the other subject	ARCH3371

Biology Modules Available to Natural Sciences Students

15. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Diversity of Life	BIOL1121	20
Cells, Tissues and Systems	BIOL1081	20
Introduction to Plants, Animals and Ecology	BIOL1131	20
Genetics	BIOL1111	20
Molecular Basis of Life	BIOL1071	20
Chemistry for the Biosciences	BIOL1141	20
Level 2		
Animal Physiology	BIOL2351	20
Behaviour	BIOL2391	20
Biochemistry	BIOL2381	20
Cell Structure and Function	BIOL2341	20
Development	BIOL2361	20
Ecology	BIOL2411	20
Evolutionary Biology	BIOL2331	20
Plant Physiology	BIOL2401	20
Molecular Biology	BIOL2371	20
Level 3		
Ageing	BIOL3501	20
Behavioural and Evolutionary Ecology	BIOL3561	20
Biology into Schools	BIOL3431	20
Biotechnology	BIOL3511	20

Cell Architecture	BIOL3481	20
Conservation Biology	BIOL3551	20
Genes and Development	BIOL3521	20
Global Change Biology	BIOL3541	20
Literature Review	BIOL3451	20
Stress and Responses to the Environment	BIOL3491	20
Stem Cells and Tissue Engineering	BIOL3531	20

16. There are two Joint Honours routes through Biological Sciences: the Whole Organisms route and the Cell Biology route.

17. Students studying for BSc Joint Honours degrees in the Whole Organisms route are required to take the following modules:

Level 1	Diversity of Life	BIOL1121
	Introduction to Plants, Animals and Ecology	BIOL1131
Level 2	Evolutionary Biology	BIOL2331
	Ecology	BIOL2411
	Students taking three Level 2 modules must also take:	
	Behaviour	BIOL2391
Level 3	**If two modules are taken they must be picked from:**	
	Behavioural and Evolutionary Biology	BIOL3561
	Conservation Biology	BIOL3551
	Global Change Biology	BIOL3541
	If three or more modules are taken they must be picked from:	
	Behavioural and Evolutionary Biology	BIOL3561
	Biology into Schools	BIOL3431
	Conservation Biology	BIOL3551
	Global Change Biology	BIOL3541
	Literature Review	BIOL3451
	If three modules are taken then BIOL3451 Literature Review and BIOL3431 Biology into Schools cannot be taken together	

18. Students studying for BSc Joint Honours degrees in the Cell Biology route are required to take the following modules:

Level 1	Genetics	BIOL1111
	Students following a BSc Joint Honours degree with Chemistry:	
	Molecular Basis of Life	BIOL1071
	Other students:	
	Cells, Tissues and Systems	BIOL1081
Level 2	**Students following a BSc Joint Honours degree with Chemistry:**	
	Animal Physiology	BIOL2351
	Plant Physiology	BIOL2401
	Biochemistry	BIOL2381
	Other students taking two Level 2 modules:	
	Molecular Biology	BIOL2371
	Cell Structure and Function	BIOL2341
	Other students taking three or more Level 2 modules:	
	Molecular Biology	BIOL2371
	Cell Structure and Function	BIOL2341
	Development	BIOL2361
	Students taking four Level 2 modules must also pick one of:	
	Animal Physiology	BIOL2351
	Plant Physiology	BIOL2401
Level 3	**Students following a BSc Joint Honours degree with Chemistry:**	
	Molecular Biology	BIOL2371
	Stress and Responses to the Environment	BIOL3491
	And either Biotechnology	BIOL3511
	Or Literature Review	BIOL3451
	Other students taking two Level 3 modules:	
	Ageing	BIOL3501
	Cell Architecture	BIOL3481

Other students taking three or more Level 3 modules should pick from:

Ageing	BIOL3501
Biology into Schools	BIOL3431
Cell Architecture	BIOL3481
Genes and Development	BIOL3521
Literature Review	BIOL3451
Stress and Responses to the Environment	BIOL3491
Stem Cells and Tissue Engineering	BIOL3531

If three modules are taken then BIOL3451 Literature Reviewand BIOL3431 Biology into Schools cannot be taken together

Business Modules Available to Natural Sciences Students

19. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Enterprise and Business Development	BUSI1121	20
Introduction to Entrepreneurship	BUSI1111	20
People, Management and Organisations	BUSI1??1	20
Marketing Principles	BUSI1??1	20
Business Accounting and Finance	ECON1041	20
Economic Methods	ECON1021	20
Elements of Economics	ECON1011	20
The World Economy	ECON1071	20
Introduction to the History of Economic Thought	ECON1??1	20
Level 2		
Marketing Management	BUSI2111	20
Organisational Behaviour	BUSI2121	20
Level 3		
Asia and the Pacific Rim	BUSI3041	20
Dissertation in Business (20 Credits)	BUSI3091	20
Dissertation in Business (40 Credits)	BUSI3122	40
Marketing Research	BUSI3141	20
Public Administration and Management	BUSI3031	20
Consumer Psychology	BUSI3131	20
Corporate Governance	BUSI3061	20
Work and Organisation	BUSI3151	20

20. Students studying for BSc Joint Honours degrees involving Business are required to take the following modules:

Level 1	People, Management and Organisations	BUSI1??1
	Elements of Economics	ECON1011
Level 2	Modules taken from the Level 2 Business module list above	
Level 3	Modules taken from the Level 3 Business module list above	

Chemistry Modules Available to Natural Sciences Students

21. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Core Chemistry 1A	CHEM1012	40
Core Chemistry 1B	CHEM1022	40
Molecules in Action	CHEM1061	20
Level 2		
Biological Chemistry	CHEM2051	20
Chemistry of the Elements	CHEM2021	20
Computational Chemistry	CHEM2061	20
Core Chemistry 2	CHEM2012	40
Properties of Molecules	CHEM2041	20
Structure and Reactivity in Organic Chemistry	CHEM2031	20
Level 3		
Advanced Computational Chemistry	CHEM3071	20

Advanced Organic Chemistry	CHEM3031	20
Chemistry and Society	CHEM3061	20
Core Chemistry 3	CHEM3012	40
Inorganic Concepts and Applications	CHEM3021	20
Materials Chemistry	CHEM3051	20
Molecules and their Interactions	CHEM3041	20

22. Students studying for BSc Joint Honours degrees involving Chemistry are required to take the following modules:

Level 1	Core Chemistry 1A	CHEM1012
Level 2	Core Chemistry 2	CHEM2012
	Students taking 60 credits or more at Level 2 must take at least one of the following modules:	
	Chemistry of the Elements	CHEM2021
	Structure and Reactivity in Organic Chemistry	CHEM2031
	Properties of Molecules	CHEM2041
Level 3	Core Chemistry 3	CHEM3012

Computer Science Modules Available to Natural Sciences Students

23. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Computer Systems	COMP1071	20
Data Structures	COMP1081	20
Formal Aspects of Computer Science	COMP1021	20
Introduction to Programming	COMP1011	20
Level 2		
Computer Systems II	COMP2161	20
Programming and Reasoning	COMP2171	20
Software Applications	COMP2071	20
Software Engineering	COMP2092	20
Systems Thinking	COMP2111	20
Theory of Computation	COMP2181	20
Web Engineering	COMP2091	20
Level 3		
Advanced Artificial Intelligence (20 credits)	COMP3311	20
Advanced Computer Systems	COMP3121	20
Advanced Software Applications and Methods (20 credits)	COMP3331	20
Advanced Software Engineering (20 credits)	COMP3221	20
Advanced Software Engineering (40 credits)	COMP3152	40
Advanced Theory of Computation (20 credits)	COMP3341	20
Advanced Theory of Computation (40 credits)	COMP3342	40
Computer Science Project	COMP3012	40
Software Engineering Project	COMP3282	40

24. Students studying for BSc Joint Honours degrees involving Computer Science are required to take the following modules:

Level 1	Introduction to Programming	COMP1011
	Formal Aspects of Computer Science	COMP1021
Level 2	Modules selected from the Level 2 Computer Science modules listed above	
Level 3	Modules selected from the Level 2 and Level 3 Computer Science modules listed above	

Earth Sciences Modules Available to Natural Sciences Students

25. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Earth Materials	GEOL1021	20
Field Studies	GEOL1051	20
Further Mathematics in Geoscience	GEOL1081	20

Principles of Earth Sciences	GEOL1091	20
Mathematical Methods in Geoscience	GEOL1061	20
Understanding Earth Sciences	GEOL1101	20
Environment and Resources	GEOL1111	20
Physics for Geoscientists	GEOL1121	20
Level 2		
Earth Visualisation L2	GEOL2221	20
Fieldwork (Environmental)	GEOL2201	20
Fieldwork (Geophysical)	GEOL2241	20
Fieldwork (Geological)	GEOL2191	20
Fossils and Dynamic Stratigraphy of the British Isles	GEOL2051	20
Geophysical Methods in Geology	GEOL2081	20
Igneous and Metamorphic Geochemistry and Petrology	GEOL2231	20
Sedimentary Environments	GEOL2031	20
Structural Geology and Tectonics	GEOL2011	20
Water and Climate	GEOL2171	20
Modelling Earth Processes II	GEOL2251	20
Level 3		
Dissertation	GEOL3022	40
Dynamic Earth I	GEOL3011	20
Dynamic Earth II	GEOL3181	20
Earth Sciences into Schools	GEOL3251	20
Earth Structure and Dynamics	GEOL3151	20
Earth System and Climate	GEOL3231	20
Environmental Geochemistry	GEOL3041	20
Evolutionary Palaeobiology	GEOL3071	20
Magmatism	GEOL3051	20
Modelling Earth Processes	GEOL3261	20
Petroleum Geophysics	GEOL3221	20
Rheology and Deformation Processes	GEOL3091	20
Sedimentary and Petroleum Systems	GEOL3031	20

26. There are two Joint Honours routes through Earth Sciences: the Geological Sciences route and the Geophysics route.

27. Students studying for BSc Joint Honours degrees in the Geological Sciences route are required to take the following modules:

Level 1	Principles of Earth Sciences	GEOL1091
	Earth Materials	GEOL1021
	To obtain accreditation the following modules must be taken at either Level 1 or Level 2:	
	Field Studies	GEOL1051
Level 2	Modules selected from the Level 1 and Level 2 Earth Sciences modules listed above	
	To obtain accreditation modules to the value of 60 credits or more must be taken and must include (the latter module may be taken at level 1):	
	Fieldwork (Geological)	GEOL2191
	Environment and Resources (if not already taken)	GEOL1111
Level 3	Modules selected from the Level 3 modules listed above. If modules to the value of 60 credits or more are taken, one 20 credit module can be at Level 2.	
	To obtain accreditation modules to the value of 80 credits or more must be taken and must include:	
	Dissertation	GEOL3022

28. Students studying for BSc Joint Honours degrees in the Geophysics route are required to take the following modules:

Level 1	Principles of Earth Sciences	GEOL1091
	Earth Materials	GEOL1021
	(Single Mathematics A **AND**	MATH1561

	Single Mathematics B)	MATH1571
	OR	
	(Mathematics for Scientists and Engineers	MATH1551
	OR Core Mathematics A	MATH1012
	OR Mathematical Methods in Geoscience)	GEOL1061
Level 2	Geophysical Methods in Geology	GEOL2081
	Fieldwork (Geophysical)	GEOL2241
Level 3	Dissertation	GEOL3022
	Petroleum Geophysics	GEOL3221
	Earth Structure and Dynamics	GEOL3151

Economics Modules Available to Natural Sciences Students

29. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Business Accounting and Finance	ECON1041	20
Economic Methods	ECON1021	20
Elements of Economics	ECON1011	20
Introduction to Environmental Economics	ECON1051	20
The World Economy	ECON1071	20
Level 2		
Behavioural and Experimental Economics	ECON2??1	20
Business Competition	ECON2081	20
Corporate Finance	ECON2101	20
Economic Data Analysis	ECON2061	20
Economic Principles I: Macroeconomics	ECON2011	20
Economic Principles II: Microeconomics	ECON2021	20
Economics of Social Policy	ECON2091	20
European Economics	ECON2071	20
Intermediate Methods for Economics and Finance	ECON2121	20
Level 3		
Advanced Macroeconomic Theory	ECON3211	20
Advanced Microeconomic Theory	ECON3201	20
Applied Econometrics	ECON3011	20
Development Economics	ECON3171	20
Dissertation in Economics	ECON3012	40
Financial Theory and Corporate Policy	ECON3251	20
History of Economic Thought	ECON3051	20
Industrial Organisation	ECON3061	20
International Economics	ECON3071	20
Labour Economics	ECON3081	20
Monetary Economics	ECON3111	20
Public Economics	ECON3191	20
Security Investment Analysis	ECON3241	20

30. Students studying for BSc Joint Honours degrees involving Economics are required to take the following modules:

Level 1	Elements of Economics	ECON1011
	Economic Methods	ECON1021
	If any Level 1 Maths modules are taken the following module should be taken in place of ECON1021:	
	The British Economy	ECON1031
Level 2	Economic Principles I: Macroeconomics	ECON2011
	Economic Principles II: Microeconomics	ECON2021
Level 3	Modules selected from the Level 3 Economics modules listed above. If modules to the value of 60 credits are take, one 20 credit module can be at Level 2	

Geography Modules Available to Natural Sciences Students

31. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Cities	GEOG1211	20
Environment and Society	GEOG1061	20
Human Geography: Space and Place in a Changing World	GEOG1071	20
Introduction to Geographical Research (BSc)	GEOG1232	40
Physical Geography: Earth Systems Science	GEOG1081	20
Level 2		
Development, Society and the Environment	GEOG2541	20
Environmental Processes and Management	GEOG2551	20
Fluvial Systems	GEOG2521	20
GIS and Remote Sensing	GEOG2591	20
Glaciers and Glaciation	GEOG2531	20
Global Climate Change	GEOG2571	20
Mountain Landscapes	GEOG2611	20
Political Geography	GEOG2581	20
Reconstructing Environmental Change	GEOG2601	20
Scientific Research in Geography	GEOG2462	40
Social and Cultural Geography	GEOG2561	20
Theory and Concepts in Human Geography	GEOG2621	20
Urban Geography	GEOG2511	20
Level 3		
Dissertation (40 credits) in Geography A	GEOG3232	40
Dissertation (40 credits) in Geography B	GEOG3432	40
Environmental Processes of Change: Field Case Studies	GEOG3491	20
Environmental Remote Sensing	GEOG3261	20
Geographies of Health and Healthcare	GEOG3631	20
Remaking Urban Landscapes	GEOG3741	20
Hazard and Risk	GEOG3621	20
Glacial Sedimentary Environments	GEOG3711	20
Politics/ Space: Drawing Lines, Writing the World	GEOG3661	20
River Dynamics	GEOG3461	20
Sea-Level Change and Coastal Evolution	GEOG3191	20
Specialised Aspects of Human Geography	GEOG3221	20
Specialised Aspects of Physical Geography	GEOG3431	20
Territory and Geopolitics *	GEOG3581	20
The Quaternary of Glaciated Regions	GEOG3511	20
Urban Transformations in the New Europe	GEOG3501	20

32. Students studying for BSc Joint Honours degrees involving Geography are required to take the following modules:

Level 1	**Two 20 credit modules from the following:**	
	Physical Geography	GEOG1081
	Human Geography	GEOG1071
	Introduction to Geographical Research (BSc)	GEOG1232
	Environment and Society	GEOG1061
	Cities	GEOG1211
Level 2	Scientific Research in Geography **OR**	GEOG2462
	(Social Research in Geography **AND**	GEOG2472
	Theory and Concepts in Contemporary Human Geography)	GEOG2621
	Students who take GEOG2462 must select between 20 and 40 credits from the following:	
	Environmental Processes and Management	GEOG2551
	Fluvial Systems	GEOG2521
	GIS and Remote Sensing	GEOG2591
	Glaciers and Glaciation	GEOG2531
	Global Climate Change	GEOG2571
	Mountain Landscapes	GEOG2611

	Reconstructing Environmental Change	GEOG2601
	Students who take GEOG2472 and GEOG2621 may select 20 credits from the following:	
	Development, Society and the Environment	GEOG2541
	Environmental Processes and Management	GEOG2551
	GIS and Remote Sensing	GEOG2591
	Political Geography	GEOG2581
	Social and Cultural Geography	GEOG2561
	Urban Geography	GEOG2511
Level 3	**Students who took GEOG2462 in Year 2 must select modules from the following:**	
	Dissertation (40 credits) in Geography B	GEOG3432
	Environmental Processes of Change: Field Case Studies	GEOG3491
	Environmental Remote Sensing	GEOG3261
	Hazard and Risk	GEOG3621
	Glacial Sedimentary Environments	GEOG3711
	River Dynamics	GEOG3461
	Sea-Level Change and Coastal Erosion	GEOG3191
	Specialised Aspects of Physical Geography	GEOG3431
	The Quaternary of Glaciated Regions	GEOG3511
	Students who took GEOG2472 and GEOG2621 in Year 2 must select from the following:	
	Dissertation (40 credits) in Geography A	GEOG3232
	Environmental Remote Sensing	GEOG3261
	Geographies of Health and Social Care	GEOG3631
	Remaking Urban Landscapes	GEOG3741
	Hazard and Risk	GEOG3621
	Politics/ Space: Drawing Lines, Writing the World	GEOG3661
	Specialised Aspects of Human Geography	GEOG3431
	Territory and Geopolitics	GEOG3581
	Urban Transformations in the New Europe	GEOG3501

Mathematics Modules Available to Natural Sciences Students

33. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Core Mathematics A	MATH1012	40
Core Mathematics B1	MATH1051	20
Core Mathematics B2	MATH1041	20
Data Analysis, Modelling and Simulation	MATH1711	20
Discrete Mathematics	MATH1031	20
Maths for Engineers and Scientists	MATH1551	20
Single Mathematics A	MATH1561	20
Single Mathematics B	MATH1571	20
Statistics	MATH1541	20
Level 2		
Algebra II	MATH2581	20
Analysis in Many Variables II	MATH2031	20
Codes and Actuarial Mathematics II	MATH2131	20
Codes and Geometric Topology II	MATH2141	20
Complex Analysis II	MATH2011	20
Contours and Actuarial Mathematics II	MATH2171	20
Elementary Number Theory and Cryptography	MATH2591	20
Mathematical Physics II	MATH2071	20
Numerical Analysis	MATH2051	20
Probability and Actuarial Mathematics II	MATH2161	20
Probability and Geometric Topology II	MATH2151	20
Statistical Concepts II	MATH2041	20
Level 3		

Modules running 2012-2013		
Approximation Theory and Solutions of ODEs III	MATH3081	20
Bayesian Statistics III	MATH3341	20
Elliptic Functions III	MATH3221	20
Geometry III	MATH3201	20
Number Theory III	MATH3031	20
Probability III	MATH3211	20
Solitons III	MATH3231	20
Statistical Mechanics III	MATH3351	20
Modules running 2011-2012		
Algebraic Geometry III	MATH3321	20
Analysis III	MATH3011	20
Bayesian Methods III	MATH3311	20
Continuum Mechanics III	MATH3101	20
General Relativity III	MATH3331	20
Representation Theory III	MATH3371	20
Stochastic Processes III	MATH3251	20
Modules running every year		
Communicating Mathematics III	MATH3131	20
Decision Theory III	MATH3071	20
Differential Geometry III	MATH3021	20
Electromagnetism III	MATH3181	20
Galois Theory III	MATH3041	20
Mathematical Biology III	MATH3171	20
Mathematical Finance III	MATH3301	20
Mathematics Teaching III	MATH3121	20
Operations Research III	MATH3141	20
Partial Differential Equations III	MATH3291	20
Quantum Mechanics III	MATH3111	20
Statistical Methods III	MATH3051	20
Topology III	MATH3281	20

34. Students studying for BSc Joint Honours degrees involving Mathematics are required to take the following modules:

Level 1	Core Mathematics A	MATH1012
	Core Mathematics B1	MATH1051
Level 2	For a Joint Honours degree not involving Physics, any modules selected from the Level 2 Mathematics modules listed above	
	For a Joint Honours Degree with Physics, three 20 credit modules must be taken and must include:	
	Analysis in Many Variables II	MATH2031
	Complex Analysis II	MATH2011
Level 3	Modules selected from the Level 3 modules listed above. If modules to the value of 60 credits or more are taken, one 20 credit module can be at Level 2.	

35. Students studying for BSc Joint Honours degrees involving Statistics are required to take the following modules:

Level 1	Core Mathematics A	MATH1012
	Statistics	MATH1541
Level 2	Linear Algebra II	MATH2021
	Statistical Concepts II	MATH2041
Level 3	Statistical Methods III	MATH3051
	AND at least 40 credits from the following:	
	Decision Theory III	MATH3071
	Operations Research III	MATH3141
	Communicating Mathematics III	MATH3131

Philosophy Modules Available to Natural Sciences Students

36. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Ethics and Values	PHIL1011	20
Introduction to the History and Theory of Medicine	PHIL1051	20
Introduction to the History and Philosophy of Science	PHIL1081	20
Introduction to Logic	PHIL1031	20
Knowledge and Reality	PHIL1021	20
Philosophy and Science	PHIL1061	20
Reading Philosophy	PHIL1041	20
Level 2		
Ancient Philosophies West and East	PHIL2161	20
Biomedical Ethics Past and Present	PHIL2051	20
Modern Philosophy I	PHIL2031	20
Moral Theory	PHIL2041	20
Philosophical Logic	PHIL2021	20
Philosophy of Mind	PHIL2011	20
Philosophy of Religion	PHIL2091	20
Philosophy of the Sciences	PHIL2151	20
Political Philosophy	PHIL2081	20
Science and Religion	PHIL2071	20
Theory, Literature and Society	PHIL2131	20
Level 3		
20th Century European Philosophy	PHIL3051	20
Aesthetics	PHIL3031	20
Applied Ethics	PHIL3071	20
Issues in Contemporary Ethics	PHIL3131	20
Language and Mind	PHIL3061	20
Metaphysics	PHIL3171	20
Modern Philosophy II	PHIL3011	20
Philosophical Issues in Contemporary Science	PHIL3021	20
Philosophy Long Dissertation	PHIL3112	40
Philosophy Short Dissertation	PHIL3101	20
History and Philosophy of Psychiatry	PHIL3181	20
History of the Body	HEAS3001	20

37. Students studying for BSc Joint Honours degrees involving Philosophy are required to take the following modules:

Level 1	Two 20 credits modules selected from the Level 1 Philosophy modules listed above
Level 2	Modules selected from the Level 2 Philosophy modules listed above
Level 3	Modules selected from the Level 3 Philosophy modules listed above. If modules to the value of 60 credits or more are taken, one 20 credit module can be at Level 2.

Physics Modules Available to Natural Sciences Students

38. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Discovery Skills in Physics	PHYS1101	20
Foundations of Physics I	PHYS1122	40
Introduction to Astronomy	PHYS1081	20
Maths Toolkit for Scientists	PHYS1141	20
Level 2		
Foundations of Physics 2A	PHYS2581	20
Foundations of Physics 2B	PHYS2591	20
Mathematical Methods in Physics	PHYS2611	20
Stars and Galaxies	PHYS2621	20
Theoretical Physics 2	PHYS2631	20
Laboratory Skills and Electronics	PHYS2641	20
Level 3		
Astrophysics	PHYS3541	20
Condensed Matter Physics	PHYS3531	20

Foundations of Physics 3	PHYS3522	40
Key Skills A	PHYS3561	20
Key Skills B	PHYS3571	20
Laboratory Project	PHYS3601	20
Mathematics Workshop	PHYS3591	20
Team Project	PHYS3581	20
Theoretical Physics	PHYS3551	20
Physics into Schools	PHYS3611	20

39. Students studying for BSc Joint Honours degrees involving Physics are required to take the following modules:

Level 1	Foundations of Physics 1	PHYS1122
	Core Mathematics A **OR**	MATH1012
	(Single Mathematics A **AND**	MATH1561
	Single Mathematics B)	MATH1571
Level 2	**For a Joint Honours degree not involving Mathematics, the following modules must be taken:**	
	Foundations of Physics 2A	PHYS2581
	Mathematical Methods in Physics	PHYS2611
	Discovery Skills in Physics (if not taken previously)	PHYS1101
	Laboratory Skills and Electronics (may be taken at Level 2 or Level 3)	PHYS2641
	For a Joint Honours degree with Mathematics, the following modules must be taken:	
	Foundations of Physics 2A	PHYS2581
	Discovery Skills in Physics (if not taken previously)	PHYS1101
	AND at least 20 credits from the following:	
	Foundations of Physics 2B (must be taken at Level 2 or Level 3)	PHYS2591
	Stars and Galaxies	PHYS2621
	Laboratory Skills and Electronics (must be taken at Level 2 or Level 3)	PHYS2641
Level 3	Foundations of Physics 3	PHYS3522
	Modules selected from the Level 3 Physics modules listed above	

Psychology Modules Available to Natural Sciences Students

40. Candidates may study and be assessed in the following modules:

Level 1		**Credit value**
Introduction to Psychological Research	PSYC1062	40
Introduction to Psychology I	PSYC1071	20
Introduction to Psychology II	PSYC1081	20
Level 2		
Individual Differences and Abnormal Psychology	PSYC2071	20
Brain Processes of Cognition and Perception	PSYC2111	20
Memory and Cognition	PSYC2081	20
Social and Developmental Psychology	PSYC2021	20
Level 3		
Learning and Animal Cognition	PSYC3201	20
Cognitive Psychology	PSYC3151	20
Developmental Psychology	PSYC3031	20
Emotion and Social Cognition	PSYC3171	20
Neuropsychology	PSYC3011	20
Psychology Project and Statistics ~	PSYC3041	20
Social Psychology	PSYC3081	20
The Visual Brain	PSYC3181	20
The Evolution of Human Behaviour	PSYC3141	20
Child Health Psychology	PSYC3061	20
Advanced Applied Psychology	PSYS3211	20
Applied Developmental Psychology	PSYS3171	20
Clinical Cognitive Neuroscience	PSYS3191	20
Forensic Psychology	PSYS3241	20
The Science of Consciousness	PSYS3161	20

41. Students studying for BSc Joint Honours degrees involving Psychology are required to take the following modules:

Level 1	Introduction to Psychological Research	PSYC1062
	Introduction to Psychology I	PSYC1071
Level 2	Memory and Cognition	PSYC2081
	Brain Processes of Cognition and Perception	PSYC2111
	Social and Developmental Psychology	PSYC2021
Level 3	Psychology Project and Statistics ~	PSCY3041
	Individual Differences and Abnormal Psychology (if not taken previously)	PSYC2071
	Modules to the value of 20-40 credits from the Level 3 Psychology modules listed above	

Assessment, progression and award

42. Modules marker with a ~ must be passed at 40% or above or above for the award of an honours degree. A mark of 30-39% cannot be compensated.

Professional accreditation

43. The specified Joint-Honours approved pathway through Geological Sciences within Natural Sciences has been accredited by the Geological Society for six years with effect from March 2010.

44. The specified Joint-Honours approved pathways through Psychology within Natural Sciences have been accredited] from the 2008-09 intake to the 2012-13 intake as conferring eligibility for the Graduate Basis for Chartered Membership of the British Psychological Society. Students entering in and after October 2006 need to achieve a minimum of a second class honours degree to gain eligibility.