

MRes Mathematics of Planet Earth

This document provides a definitive record of the main features of the programme and the learning outcomes that a typical student may reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities provided. This programme specification is intended as a reference point for students and for academic and support staff involved in delivering the programme and enabling student development and achievement, for its assessment by internal and external examiners, and in subsequent monitoring and review.

Programme Information

Award(s)	Master of Research (MRes)	
Programme Title	Mathematics of Planet Earth	
Programme code	G1U8 (Full-time) / G1U824 (Part-time)	
Awarding Institution	Imperial College London and University of Reading	
Teaching Institution	Imperial College London and University of Reading	
Faculty	Natural Sciences (Imperial) / Science (Reading)	
Department	Mathematics (Imperial) / Mathematics & Statistics (Reading)	
Mode and Period of Study	Full-time (12 months) or Part-time (24 months)	
Cohort Entry Points	Annually in September	
Relevant QAA Benchmark Statement(s) and/or other external reference points	Mathematics, Statistics and Operational Research	
Total Credits	ECTS:	90
FHEQ Level	Level 7 - Master's	
EHEA Level	2 nd cycle	
External Accrator(s)	None	
Specification Details		
Student cohorts covered by specification	2016-17 entry	
Person Responsible for the specification	Dr Colin Cotter, co-Director of Studies (Imperial) Dr Tristan Pryer, co-Director of Studies (University of Reading)	
Date of introduction of programme	September 2014	

Date of programme specification/revision

November 2016

Description of Programme:

This a joint Master's level degree programme which is offered on full-time basis lasting 1 academic year (12 months) or on a part-time basis lasting 2 academic years (24 months). It leads to a MRes degree and is assigned 90 ECTS overall.

The programme education aims/objectives are to:

- 1) Provide high quality training in research in Mathematics applicable to weather and climate, within an environment committed to excellence in both teaching and research.
- 2) To attract well-qualified students and to develop them as a cohort of Mathematicians with expertise in weather and climate applications.
- 3) To provide intellectual challenge in a structure containing an appropriate amount of flexibility, so that students can develop their specialist interests.
- 4) Teach and provide the opportunities to learn a core of interdisciplinary Mathematical topics that will bring them to the cutting edge of climate research, together with a range of more specialised options.
- 5) Introduce students to a wide range of applications of Mathematics in the field of weather, climate and ocean modelling.
- 6) Equip students with a range of mathematical skills – in problem-solving, extended project work, computation and presentation – to enable them to take prominent roles in a wide spectrum of employment and research.
- 7) Provide further breadth and depth of Mathematics and Statistics, at a level beyond the 4th year of an MSci, including an extended research project.

A Kick-Off residential camp (3 ECTS) will take place two weeks before Term 1 at Reading campus. As well as an induction programme and starting the project selection process, it comprises group activities, including an intensive background course on the key processes in the climate system, and a series of computer labs introducing Python programming in the context of manipulating large climate datasets, leading to student presentations.

In the first term, all students will take four core modules (6 ECTS each) on the topics of PDEs, Data and Uncertainty, Dynamical Systems and Numerical Methods, each consisting of 20 hours of lectures plus 6 hours of tutorials. Normally, half of the lectures will be given at Imperial College, and the other half at the University of Reading, using a live videocast system so that students will be able to attend the lectures at either location. Group tutorial sessions will be duplicated at both locations. Access to lecturers will be available informally, but also during MPE Wednesday (described below). The examinations for the core modules will take place at Imperial. In the second term students will take one elective module (8 ECTS), choice subject to approval from the MRes Programme Organisers, from an approved list of relevant modules from other Mathematics and Statistics Master's level programmes at Imperial and Reading.

A key part of the MRes programme is the MPE Wednesday (7 ECTS), a day-long weekly meeting of the full MRes cohort in term time, alternating between Reading and Imperial (so that each student only needs to travel once every two weeks). The Mathematics of Planet Earth seminar will take place on this day. The aim is support peer learning, to develop the cohort and their transferable skills, and to train the students to become professional scientists. The morning will begin with a two hour tutorial, in which students will work together on open-ended tasks arising from the material of the core modules, often with an applications focus. In the second term, this will be replaced by a two

hour journal club, training students how to read journal papers and build up a bibliography. In the third term this time will also be used for students to present progress from their MRes projects, and throughout the year one slot a month will be used for bespoke transferable skills training in collaboration with our Graduate Schools. These two hours will also allow for discussing any problems or issues about the MRes programme with the Cohort Mentors. The MRes students will then have lunch with the seminar speaker (either internal or external). After lunch, the students will spend an hour preparing for the seminar, with guided discussion on background material needed to understand the seminar. After the seminar, discussion will continue with the speaker.

Students will also carry out, throughout the year, a research project (48 ECTS), in the same subject area as the taught modules. Students will receive a list of available projects on topics relating to the theme of the CDT during the kick-off meeting, and Wednesday seminars early in Term 1 will be from prospective project supervisors, so that students have enough information to make a decision. The final allocation of Year 1 projects will be made by the beginning of Term 2 by the MRes Director of Studies based on student choices and staff workload.

Learning Outcomes

By the end of the MRes programme, all students are expected:

- To acquire a broad and solid foundation on a range of foundational topics in Mathematics and Statistics that are relevant to weather and climate: analysis and solution on a computer of partial differential equations, statistical techniques for inference and data assimilation, deterministic and stochastic techniques for taking a systems view of earth systems and processes.
- To gain an appreciation for the key processes in the earth system and their role in climate.
- To develop mastery of research techniques and skills in a specific area of Mathematics of Planet Earth, and to apply them in a research project.
- Write up, explain, and answer questions about this research.
- To acquire a comprehensive mastery of research techniques and skills applicable to their own intended doctoral research.
- continue working in their research area, either towards a PhD or in industry.
- To develop transferable skills and attributes necessary for research or employment requiring both the exercise of initiative and personal responsibility and the independent learning and research ability required for continuing professional and intellectual development.
- To communicate their conclusions both orally and written in form clearly to specialist and non-specialist audiences.

1. Knowledge and Understanding

Knowledge and Understanding of:

- 1* The fundamentals of Mathematics and Statistics as a living discipline in its own right.
- 2* The key earth system processes relevant to weather and climate.
- 3* The development of the application of Mathematics and Statistics in a wide range of situations relevant to research in weather and climate, and in industry.
- 4* The importance of precision of argument.
- 5* The importance of collaborating with other disciplines in the field of climate and weather, and the role of Mathematics and Statistics in these collaborations.
- 6* Problem-solving strategies and methods.
- 7* Computational skills.

8* A selection of subjects which students study in greater depth, according to their interests leading to current developments at the frontiers of the subject.

Students should already have acquired some of the above through their undergraduate programme. This knowledge will be developed to a higher level by the taught modules in this degree; the research project is intended to develop points 2-8 even further.

2. Skills and other Attributes

Intellectual Skills:

1. Derivation, theoretical analysis and approximate solution on a computer of partial and stochastic differential equations that are to be used in the field of weather and climate.
2. Knowledge and understanding of the key earth system processes in the climate system.
3. Design, analysis and software implementation of statistical techniques for making inferences about Earth system data and climate model output, and for assessing the predictive power of earth system models.
4. Design, analysis and software implementation of algorithms for blending Earth system data with models.
5. Mathematical techniques for describing qualitative properties of deterministic and stochastic dynamical systems, and their application to earth system models.
6. Ability to assimilate and understand a large body of complex concepts and their inter-relationships.
7. Knowledge and understanding of the role of logical mathematical argument and deductive reasoning, together with formal processes of mathematical proof and development of mathematical theories.
8. Use of a structured mathematical analytical approach to problem solving, including the importance of assumptions made and consequences of violation.
9. Use of Mathematics to describe and model applications, including appropriate solution methods, and interpretation of results.
10. Carry out extended investigative mathematical work as an individual.

1, 3, 4 and 5 will be addressed by the core courses. 2 will be addressed by the Kick Off Camp, MPE Wednesdays, and the project. 6, 7, 8, 9 and 10 will be addressed by the project.

Practical Skills:

1. Carry out investigative project work as an individual and as part of a small group,
2. Scientific writing, library and bibliography skills, and presentation skills.
3. Use high performance numerical software as part of practical computation.

1 is addressed by the research project. 2 is addressed by the literature project, the Kick Off Camp, MPE Wednesdays, and the research project. 3 is addressed by the Kick Off Camp and the computer laboratories within the core courses.

Professional Skills Development:

1. Solve open-ended problems and problems with well-defined solutions by formulating problems in precise terms, identifying key issues and trying different approaches in order to make progress.
2. Professional ethics and scientific ethos, particularly when communicating with the public about

climate science.

3. Carry out an independent investigation using textbooks and other available literature, searching databases and interacting with colleagues and staff to extract important information.
4. Communicate effectively by listening carefully and presenting complex information in a clear and concise manner orally, in paper and using IT.
5. Use analytical skills, paying attention to detail and using technical language correctly, to manipulate precise and intricate ideas, to construct logical arguments.
6. Use IT skills for communication and analysis.
7. Work independently, use their initiative, organize themselves to meet deadlines, plan and execute an extended project
8. Work in groups, interacting constructively with others.

1 is addressed by Kick Off Camp, MPE Wednesdays, the research project. 2 is addressed by Kick Off Camp and MPE Wednesdays. 3 is addressed by the literature project and the research project. 4 is addressed by presentations in: the Kick Off Camp, MPE Wednesdays, literature project presentations, research project presentations, and by written work in the Literature project and the research project. 5 is addressed by the courses, MPE Wednesdays and the research project. 6 is addressed by the Kick Off Camp, the computer laboratories in the core courses and the research project. 7 is addressed by the literature project and the research project. 8 is addressed by the Kick Off Camp, and MPE Wednesdays.

The Imperial Graduate Attributes are a set of core competencies which we expect students to achieve through completion of any Imperial College degree programme. The Graduate Attributes are available at: www.imperial.ac.uk/students/academic-support/graduate-attributes

Entry Requirements

Academic Requirement

Normally at least an Upper Second Class Honours degree in mathematics or a related subject (or equivalent)

Additional Requirements

All short-listed candidates will be interviewed by at least two members of academic staff from the MPE CDT

The MRes is the first year of 1+3 (MRes + PhD) programme, applicants showing evidence of an aptitude for research will be preferred.

English Language Requirement

IELTS 7 with a minimum of 6.5 in each element or equivalent

The programme's competency standards documents can be found at: [TBC](#)

Learning & Teaching Strategy

Scheduled Learning & Teaching Methods

- Lectures
- Tutorials
- Computer labs
- Journal club

	<ul style="list-style-type: none"> • Guided discussions
E-learning & Blended Learning Methods	
Project Learning Methods	<ul style="list-style-type: none"> • Individual research project includes an interim report and final research project
Assessment Strategy	
Assessment Methods	<ul style="list-style-type: none"> • Written Examinations • Group and individual presentations • Coursework
Academic Feedback Policy	
<p>Students will obtain feedback via the following routes:</p> <ul style="list-style-type: none"> • Marked coursework. • Tutorials and extended activities during MPE Wednesdays. • Meetings with research project supervisors. • Feedback on presentations from Kick Off Camp, MPE Wednesdays, Jamboree. • Feedback on interim project report. • Meetings with Cohort mentor as part of MPE Wednesdays. • Meetings with the co-Directors of Studies as necessary. <p>Any assessed coursework done as part of the programme will be marked promptly and returned to the student during MPE Wednesdays, when students are encouraged to discuss difficulties with the lecturer. On the project, students will meet their supervisor at least weekly to discuss their progress. If the Cohort Mentor or student supervisor should report any problems with the student's progress, either on the project work or on the other parts of the course, the Co-Directors of Studies will discuss these with them and the student.</p>	
Re-sit Policy	
<p>Students will be permitted to re-enter a failed examination on a single occasion. An in-year re-sits option is permitted at discretion of the co-Directors of Studies to allow students to progress to the PhD part of the programme. Students may be counselled to wait until the following year to re-sit. Re-sits will normally take place at the campus where the student originally sat the examination.</p> <p>A failed piece of coursework can be resubmitted on one occasion, with a deadline to be agreed with the relevant module leader and the co-Directors of Studies, normally between 1 week and 2 months after the original submission deadline.</p> <p>If the MRes research project is failed, students may resubmit on one occasion in the following academic year, with a deadline to be agreed with their project supervisor and the co-Directors of Studies.</p>	

Mitigating Circumstances Policy

Consideration of mitigating circumstances for Imperial owned modules, projects and for the award as a whole will be dealt with via Imperial's Mitigating Circumstances Policy and Procedures for Undergraduate and Taught Master's Level Programmes. This is available at:

<http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/>

When the mitigating circumstances are to do with the overall award assessment the Mitigation Advisory Panel will include at least one member of Reading academic staff.

Consideration of mitigating circumstances for Reading owned modules and projects will be dealt with via Reading's procedure for mitigating circumstances: Procedures for the consideration of Extenuating Circumstances.

Viva voce examinations may be held exceptionally and at the discretion of the Joint Board of Examiners to inform the Board's decision on the award of the MRes solely in cases where a candidate has extenuating circumstances. In such an event, the viva voce examination will be held at the campus where the student is based.

See also the section on Marking Scheme.

Programme Structure (The programme structure for part-time students is available on request)

Full-time	Pre-session	Term One	Term Two	Term Three	Term Four
Kick-camp in September (3 ECTS)	1	0	0	0	0
Core Modules (24 ECTS)	0	4	0	0	0
Elective Module (8 ECTS)	0	0	1	0	0
MPE Wednesdays (7 ECTS)	0	1	0	0	0
Journal Club	0	0	1	0	0
Projects (48) ECTS	0	0	1		

Assessment Dates & Deadlines

Written Examinations	Examinations for the core modules will normally take place at Imperial and examinations for the elective modules will normally take place at that campus of the university providing the module.
Coursework Assessments	Continuous
Project Deadlines	Interim report in March Final research project in September
Practical Assessments	Literature presentation Oral research project presentation in September

Assessment Structure		
Programme Component	ECTS	% Weighting
<p>Taught Component: 4 x core modules (6 ECTS each) and 1 x elective module (8 ECTS). Students must also pass the Kick-off camp (3 ECTS) and MPE Wednesdays (7 ECTS), these are not graded.</p> <p><i>NB. Students must take 8 ECTS of elective modules. Reading modules of 5 ECTS may be supplemented by a Mastery Component, worth 3 ECTS.</i></p>	42	47%
<p>Research Component: A final research project (worth 88%) with oral presentation (worth 12%)</p>	48	53%
Total	90	100%
Rules of Progression		
<p>The MRes Programme forms the first part of the MPE CDT offering an integrated Master's and PhD programme with Imperial and Reading. Students are normally required to achieve a minimum mark of 60% in the MRes Programme as a prerequisite for continuing onto the PhD programme at either Imperial or Reading.</p>		
Marking Scheme		
<p>Students are required to pass the taught component and research component in order to pass the MRes award.</p> <p>The Pass Mark for the programme is 50%.</p> <p>Examiners have the discretion to award a result of merit or distinction to candidates who have fulfilled the requirements for the award of the Master's degree as specified in the Examination Regulations.</p> <p>In order to be awarded a result of merit, a candidate must achieve at least 60% in each element; in order to be awarded a result of distinction, a candidate must achieve at least 70% in each element.</p> <p>Where appropriate, the Joint Board of Examiners may award a result of merit where a candidate has achieved an aggregate mark of 60% or greater across the programme as a whole AND has obtained a mark of 60% or greater in each element with the exception of one element AND has obtained a mark of 50% or greater in this latter element.</p> <p>Where appropriate, the Joint Board of Examiners may award a result of distinction where a candidate has achieved an aggregate mark of 70% or greater across the programme as a whole AND has obtained a mark of 70% or greater in each element with the exception of one element AND has obtained a mark of 60% or greater in this latter element.</p> <p>The programme will follow Imperial's procedure for determining degree classification for borderline candidates. Candidates should only be considered for promotion to pass, merit or distinction if their</p>		

aggregate mark is within 2.5% of the relevant borderline. Nevertheless, candidates whom the Joint Board of Examiners deems to have exceptional circumstances may be considered for promotion even if their aggregate mark is more than 2.5% from the borderline. In such cases the necessary extra marks should be credited to bring the candidate's aggregate mark into the higher range. Detailed records of all decisions should be recorded in the minutes of the meeting of the Board

Viva voce examinations will not be held, in the absence of extenuating circumstances, to deal with borderline cases.

Indicative Module List											
Module Code	Module Title	Core/ Elective	Total L&T	Total Ind. Study	Total Place- ment	Total Hours	% Written Exam	% Course- work	% Prac- tical	FHEQ Level	ECTS
MAMCKC	Kick off camp	Core	50	25	0	75	0%	0%	100%	7	3
MAMCDTE	PDEs	Core	26	124	0	150	50%	50%	0%	7	6
MAMCDTU	Data and Uncertainty	Core	26	124	0	150	50%	50%	0%	7	6
MAMCDTN	Numerical Methods	Core	36	114	0	150	50%	50%	0%	7	6
MAMCDS	Dynamical Systems	Core	26	124	0	150	50%	50%	0%	7	6
MAMMPEW	MPE Wednesdays	Core	175	0	0	175	0%	0%	100%	7	7
	Integral Equations (Reading)	Elective	24	76	0	100	100%	0%	0%	7	5
MA4NSP	Numerical Solution of Partial Differential Equations (Reading)	Elective	24	76	0	100	80%	20%	0%	7	5
MA3PT	Probability Theory (Reading)	Elective	20	80	0	100	75%	25%	0%	7	5
MAMSMA	Statistical Mechanics and Applications (Reading)	Elective	20	80	0	100	100%	0%	0%	7	5
MTMD01	Environmental Data Exploration & Visualisation (Reading)	Elective	20	80	0	100	0%	100%	0%	7	5
MTMD02	Operational Data Assimilation Techniques (Reading)	Elective	30	70	0	100	100%	0%	0%	7	5

MTMD03	Monte-Carlo Techniques and Particle Filters (Reading)	Elective	22	78	0	100	70%	30%	0%	7	5
MTMG06	Statistics for Weather and Climate Science (Reading)	Elective	18	82	0	100	0%	100%	0%	7	5
MT38B	Climate Change (Reading)	Elective	20	80	0	100	70%	30%	0%	6	5
MT4YD	Tropical weather systems (Reading)	Elective	18	82	0	100	80%	20%	0%	7	5
MT4XF	Oceanography (Reading)	Elective	20	80	0	100	80%	20%	0%	7	5
MTMG25	Hazardous weather analysis (Reading)	Elective	18	82	0	100	0	100%	0%	7	5
MTMG38	Remote Sensing (Reading)	Elective	22	78	0	100	45%	35%	20%	7	5
MTMG44	Hydrology and global environmental change (Reading)	Elective	18	82	0	100	67%	33%	0%	7	5
MTMG49	Boundary Layer Meteorology and Micrometeorology (Reading)	Elective	27	73	0	100	55%	45%	0%	7	5
MTMW14	Numerical Modelling of Atmospheres and Oceans (Reading)	Elective	27	73	0	100	30%	70%	0%	7	5
MTMW15	Extra-tropical Weather Systems (Reading)	Elective	20	80	0	100	75%	0%	25%	7	5
MTMW20	Global Circulation of the Atmosphere & Ocean (Reading)	Elective	18	82	0	100	100%	0%	0%	7	5
MAMCDTX	Mastery Component (Reading) - for students doing 5 ECTS elective modules	Elective	3	72	0	75	0%	100%	0%	7	3

	Analytic Methods in Partial Differential Equations (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Computational Stochastic Processes (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Bifurcation Theory (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Ergodic Theory (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Geometric Mechanics I: Dynamics and Symmetry (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Geometric Mechanics II; Rotating, Translating and Rolling (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Scientific Computation (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Computational Stochastic Processes (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Stochastic Simulation (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Machine Learning (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Bayesian Statistics (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Stochastic Filtering (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Statistics for Extreme Events (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
	Non-parametric Smoothing and Wavelets (Imperial)	Elective	38	162	0	200	100%	0%	0%	7	8
MAMCPROJ	Research Project	Core	20	955 - 1180	0	975-1200	0%	95%	5%	7	48

Supporting Information

The Programme Handbook is available at: http://mpecdt.org/wp-content/uploads/2016/09/MRes_Mathematics_Planet_earth_handbook_2016.pdf

The Module Handbook is available at: http://mpecdt.org/wp-content/uploads/2016/09/MRes_Mathematics_Planet_earth_handbook_2016.pdf

Entry Requirements

The Imperial's entry requirements for postgraduate programmes can be found at: www.imperial.ac.uk/study/pg/apply/requirements

The University of Reading's entry requirements for postgraduate programmes can be found at: <http://www.reading.ac.uk/ready-to-study/study/how-to-apply/entry-requirements-pg.aspx>

Quality Assurance

The MRes is subject to the quality assurance procedures of both parties as set out in a Memorandum of Agreement for the programme.

Imperial's Quality & Enhancement Framework is available at:

www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance

The University of Reading's Quality Policies and Procedures are available at:

<http://www.reading.ac.uk/cqsd/QualityAssurance/PoliciesandProcedures/cqsd-PoliciesandProcedures.aspx>

Regulations

Except where agreed otherwise under the terms of this Agreement or where the JMC has given prior approval to alternative arrangements, MRes Students will be required to comply with the Academic Regulations and other Regulations of Imperial at all times during the MRes Programme.

For modules which are offered by Imperial, Imperial academic and examination regulations will apply, for modules which are offered by Reading, Reading academic and examination regulations will apply.

For the project, Imperial College academic and examination regulations will apply where the lead supervisor for the project is employed by Imperial. Reading's academic and examination regulations apply where the lead supervisor for the project is employed by Reading.

The programme will follow Imperial's: [Procedure for Dealing with Complaints by Applicants](#).

The programme will follow Imperial's procedure: [Student Withdrawals and Appeals – Procedure for Dealing with Cases of Unsatisfactory Academic Progress](#)

The programme will follow Imperial's [Conduct of Oral Assessments including Viva Voce](#)

[Examinations for Undergraduate and Master's Level programmes.](#)

The programme will follow Imperial's [examination procedures for consideration of arrangements for students with disabilities](#). The Special Examinations Panel will include at least one member of Reading academic staff.

The programme will follow Imperial's [Procedure for Consideration of Representations concerning decisions of Boards of Examiners](#) in consultation with the Academic Registrar of the University of Reading. The Representations Panel will include a member of academic staff from the University of Reading.

Allegations of non-academic misconduct in breach of a Party's Regulations (including issues relating to abusive or unreasonable behaviour, damage to property, use of computing facilities, etc.,) shall be dealt with under [Imperial's Ordinance E2 – Code of Student Discipline](#), in consultation with Reading, if the misconduct took place on Imperial's premises and shall be dealt with under [Reading's procedure Regulations for Conduct](#), in consultation with Imperial, if the misconduct took place whilst on Reading's premises. In the event that (i) it is not apparent where any non-academic misconduct took place or (ii) non-academic misconduct did not take place at either Party's premises, such misconduct shall be dealt with under [Imperial's Ordinance E2 – Code of Student Discipline](#), in consultation with Reading.

Allegations of academic misconduct by a MRes student (including cheating, plagiarism, conduct affecting the security of examinations or other conduct of a similar character) shall be handled by Imperial in consultation with Reading. Cases will be dealt with in accordance with Imperial's [Cheating Offences Policies and Procedures](#). The Review Panel should include an appropriate member of Reading staff.

Any complaint raised by a MRes student shall be dealt with by the Party against whom the complaint has been raised, according to the appropriate procedures: the *Student complaints procedure* at Reading and the [Procedure for Dealing with Complaints by Students](#) at Imperial. Complaints relating to the overall programme will be dealt with jointly by Reading and Imperial in accordance with Imperial's [Procedure for Dealing with Complaints by Students](#).

Any intellectual property developed by a MRes student during the MRes programme will be governed by Imperial's policy on the ownership of Intellectual Property (as amended from time to time) a copy of which is available at: <http://www.imperial.ac.uk/research-and-innovation/research-office/ip/>

Imperial's Academic and Examination Regulations can be found at: <http://www.imperial.ac.uk/about/governance/academic-governance/regulations/>

The University of Reading's Academic and Examination Regulations can be found at: <http://www.reading.ac.uk/internal/Calendar/> and <http://www.reading.ac.uk/internal/exams/Policies/exa-policies.aspx>

When MRes students are on Imperial premises, they will be required to comply with any Imperial Regulations which relate to their presence on Imperial premises, including, but not limited to Imperial health and safety policies. When MRes students are on Reading premises, they will be required to comply with any Reading Regulations which relate to their presence on Reading premises, including, but not limited to Reading's health and safety policies.

Wellbeing and Pastoral Support

Students will have access to welfare and support services, including library facilities, at both Parties. They will also be members of both Parties' Students' Union.

Imperial College's student [welfare services](#) are the responsibility of the Director of Student Support who manages the Head of the Student Counselling Service, the Senior Disability Officer, and the College Tutors. The Director of Student Support acts as liaison between the College and the College Health Centre (NHS) and the Chaplaincy and works closely with the ICU Deputy President (Welfare) to enhance welfare, advice and support

University of Reading's student welfare services are the responsibility of the Director of Student Learning and Teaching Services which encompasses Student Wellbeing, Disability Advisory Service, Student Service Centre and Study Advice.

Each cohort of students will be assigned two Cohort Mentors, one from Reading and one from Imperial, who will take responsibility for individual student support, pastoral care, monitoring feedback and direction, meeting monthly with the students individually and weekly with the full cohort. Student progress will be carefully tracked during the MPE Wednesdays.

Governance and Regulation

Imperial College is an independent corporation whose legal status derives from a Royal Charter granted under Letters Patent in 1907. In 2007 a Supplemental Charter and Statutes was granted by HM Queen Elizabeth II. This Supplemental Charter, which came into force on the date of the College's Centenary, 8th July 2007, established the College as a University with the name and style of "The Imperial College of Science, Technology and Medicine".

<http://www.imperial.ac.uk/admin-services/secretariat/college-governance/charters-statutes-ordinances-and-regulations/>

The University of Reading operates under the terms of its Royal Charter granted in 1926.

Imperial College London and the University of Reading are regulated by the Higher Education Funding Council for England (HEFCE)

<http://www.hefce.ac.uk/reg/of/>