Amendments to Undergraduate Programmes from 2020-21

If you have been made an offer to study at Queen's, you will have received a copy of the University's terms and conditions which states that you will be made aware of any significant amendments made to the programmes for entry in 2020-21.

Faculty of Engineering and Physical Sciences

Chemistry and Chemical Engineering (candce@qub.ac.uk)

MEng Chemical Engineering MEng Chemical Engineering with a Year in Industry	We wrote to you earlier in the year to advise you that following feedback from the Institution of Chemical Engineers (IChemE) to modernise the pathway, improve student experience and add depth to the content of Level 4 Chemical Engineering pathways, we are changing the assessment of module CHE4109 Advanced Chemical Reaction Engineering. The module will be assessed by 50% written examination and 50% coursework, instead of 100% coursework that was originally proposed. We have also changed the way module CHE4004 Design and Environmental Engineering (20 CATS) is delivered. The module will be split to create two new modules CHE4108 Environmental Engineering Design (10CATS) and CHE4109 Advanced Chemical Reaction Engineering (10CATS).

BEng Chemical Engineering BEng Chemical Engineering with Year in Industry MEng Chemical Engineering MEng Chemical Engineering Sandwich	In response to comments by external examiners on the level and assessment of this module, coursework assignments have been restructured. Module CHE1105 Introduction to Engineering Design is 100% coursework assessed and new elements of design work have been introduced into the module.
BEng Chemical Engineering BEng Chemical Engineering with Year in Industry BEng Chemical Engineering (with International Year One) MEng Chemical Engineering MEng Chemical Engineering Sandwich	In response to the School's ongoing effort to better distribute student workload in Level 2, we have made the following changes: Modules CHE2101Chemical Process Thermodynamics and CHE2106 Safety and Mechanical Design change from Full-year to Winter Semester delivery. Modules CHE2103 Process Control and CHE2104 Fluid Mechanics change from Full-year to Spring Semester delivery.
BEng Chemical Engineering BEng Chemical Engineering with Year in Industry BEng Chemical Engineering (with International Year One) MEng Chemical Engineering MEng Chemical Engineering Sandwich	We have made the following changes to Level 3: Module CHE3004 Transport Phenomena changes from 70% Exam – 30% Coursework to 80% Exam – 20% Coursework.

MEng Chemical Engineering MEng Chemical Engineering Sandwich	To modernise the pathway, assessment changes are part of the ongoing effort to reduce over-assessment in the final year of Chemical Engineering programme. The standalone module CHE4104 Technology Management and Entrepreneurship is now incorporated in CHE4102 Research Project. Module CHE4109 Advanced Chemical Reaction Engineering is upgraded to 20 CATS. CHE4102 Research Project is also upgraded to 40 CATS.
MSci Chemistry MSci Chemistry with Study Abroad MSci Chemistry with Year in Industry MSci Chemistry with French MSci Chemistry with Professional Studies MSci Chemistry with Spanish MSci Medicinal Chemistry MSci Medicinal Chemistry with Year in Industry MSci Medicinal Chemistry with Professional Studies	To reduce duplication of assessment and manage student workload in the final year of study the following changes have been made: Modules CHM4005, Advanced Inorganic Chemistry, CHM 4006 Options in Applied, Technical and Macromolecular Chemistry and CHM 4007 Frontiers in Drug Development (Medicinal Chemistry 4) will be 100% exam assessed.

Electronics, Electrical Engineering and Computer Science (eeecs@qub.ac.uk)

BSc Business Information Technology BSc Business Information Technology with Year of Professional Experience BSc Computer Science with International Year One BSc Computer Science BSc Computer Science with Year of Professional Experience BEng Software Engineering BEng Software Engineering with Year of Professional Experience MEng Computer Science MEng Computer Science with Year of Professional Experience MEng Software Engineering MEng Software Engineering with Year of Professional Experience BSc Computer and Information Technology	We wrote to you earlier in the year to advise that, following the new stage one curriculum introduced in 2019-20, that stage two now requires revision to maintain curriculum alignment between years. Additionally, in response to the local and global industrial needs, new specialist modules in cyber security and data science have been introduced. Within our computing provision, all of our first-year modules are curriculum specific and contain fundamental knowledge essential to success at the later stages of study. Accordingly, this change will enable the school to ensure that all students entering final year are academically equipped to undertake the challenges of stage 3 and successfully complete the course to their full potential. Students progressing into stage two in 2020-21 will be offered a broader curriculum with more choices aligned to current industrial needs.

BSC Computer and Information Technology with Year of Professional Experience	
BEng Computer Science with International Year One BSc Computer Science with Year of Professional Experience MEng Computer Science with Year of Professional Experience BEng Software Engineering with Year of Professional Experience MEng Software Engineering with Year of Professional Experience BSc Computing and Information Technology with Year of Professional Experience BEng Software Engineering with Digital Technology Partnership	We have made changes to assessment in the following modules: CSC3056 (Software Testing), CSC1028 (Computer Science Challenges), CSC3064 (Network Security), CSC1027 (Programming), CSC1029 (Object Oriented Programming), CSC3031 (Software Design Principles, Patterns, Practice and Innovation), CSC3059 (Malware Analysis), CSC2056 (Cyber Security Fundamentals), CSC4009 (Fairness, Privacy and Interpretability in Machine Learning The content of the following modules has been refreshed: CSC3056 (Software Testing), CSC1022 (Architecture & Networks), CSC1028 (Computer Science Challenges), CSC3059 (Malware Analysis), CSC3045 (Contemporary Team-Based Computing Projects, CSC1031 (Software Design Principles), CSC2063 (Self-Oriented Programming and CSC4009 (Fairness, Privacy and Interpretability in Machine Learning
BSc Business Information Technology with Year of Professional Experience	We are writing to let you know that the following changes have been made to your programme:

	Assessment has been revised in the following modules: CSC3064 (Network Security) and MGT3019 (Strategic Management).
BEng Electrical & Electronic Engineering with International Year One BEng Electrical & Electronic Engineering with Year of Professional Experience MEng Electrical & Electronic Engineering with Year of Professional Experience BEng Software and Electronic Systems Engineering with Year of Professional Experience MEng Software and Electronic Systems Engineering with Year of Professional Experience	We are writing to let you know that the following changes have been made to your programme: Changes to assessment have been made to ECS1001 (Embedded Systems), ECS3003 (Connected Health), ELE1052 (Electronics 1), ELE4023 (Control Methods for Cyber-Physical Systems), ELE3045 (Power Electronics and Motor Drives), ELE3046 (Advanced Electronics), ELE3044 (MEng Engineering Entrepreneurship), ECS4003 (Advanced Computing Engineering). Changes to module content have been made to modules: ELE1052 (Electronics 1), ELE2024 (Circuits and Control), ELE4023 (Control Methods for Cyber-Physical Systems) and ECS4003 (Advanced Computing Engineering.)
BEng Electrical & Electronic Engineering with International Year One BEng Electrical & Electronic Engineering with Year of Professional Experience	We are writing to let you know that we have changed the assessment profile of module ELE2035 (Mathematics & Algorithms) to Class Test: 20%, Coursework: 20% Exam: 60%. The module will have the following Pre-Requisites module ELE1012 Mathematics 1 (or equivalent)

MEng Electrical & Electronic Engineering with Year of Professional Experience BEng Software and Electronic Systems Engineering with Year of Professional Experience MEng Software and Electronic Systems Engineering with Year of Professional Experience	

Natural and Built Environment (snbe@qub.ac.uk)

BSc Geography with a Language (Returning) BSc Geography	We are writing to let you know that the physical geography field destination for module GGY2057 International Fieldwork will now be to Belgium rather than Mallorca. No changes have been made to the module learning outcomes and the other two field destinations to Mallorca and Malta also remain the same. The number of assessments for module GGY3066 Geography, Science and Society have been reduced from three to two following recommendations from the external examiners to reduce assessments. The assessment for the module will now be a 40% bibliography and a 60% essay.

BSc Planning Environment and Development MPlan in European Planning	Incoming Level 1 students ordinarily take module EVP1004 Planning Skills and GIS, which has been moved to semester 2 due to the workshop-based nature of the module.
BSc Planning Environment and Development (Returning)	We are letting you know that Level 3 students ordinarily take their international field trip module (EVP3003) in semester 1 – this has now been moved to semester 2.
MPlan in European Planning (Returning)	We are writing to let you know that there are some potential changes for Level 4 students who may be unable to undertake their compulsory year of study abroad at a partner University. A series of contingency options have been identified and these have been communicated to you already by the School.
BA (S) Archaeology BA (S) Archaeology with French BA (S) Archaeology with Spanish BA (S) Archaeology with Portuguese BA (JS) Archaeology and History BA (JS) Archaeology and Irish BSc (S) Archaeology-Palaeoecology BSc (JS)Archaeology-Palaeoecology and Geography MSci (S) Archaeology	We are writing to let you know that we have made changes to assessment in modules ARP1008 Europe in Prehistory and ARP1013 Introduction to World Archaeology. Class Test 2 (15%) has been changed to a Report (15%) for both modules.

Level 2 BA (S) Archaeology BA (S) Archaeology with French BA (S) Archaeology with Spanish BA (S) Archaeology with Portuguese BA (JS) Archaeology and History BA (JS) Archaeology and Irish BSc (S) Archaeology-Palaeoecology BSc (JS)Archaeology-Palaeoecology and Geography MSci (S) Archaeology	We are letting you know that we have made changes to assessment and module content in ARP2058 The Archaeology of Islands module. The Log book (40%) has been changed to Report (40%) and a residential fieldtrip is no longer required.
Level 3 BA (S) Archaeology BA (S) Archaeology with French BA (S) Archaeology with Spanish BA (S) Archaeology with Portuguese BA (JS) Archaeology and History BA (JS) Archaeology and Irish BSc (S) Archaeology-Palaeoecology	We are letting you know that we have made a change to the assessment profile in module ARP3056 Archaeology/Palaeoecology Dissertation. The original assessment was 100% weighting- this has been changed to Report 10% Dissertation 90%.

BSc (JS)Archaeology-Palaeoecology and Geography MSci (S) Archaeology	

Mathematics and Physics mpts@qub.ac.uk

BSc Mathematics MSci Mathematics BSc Mathematics with Finance	We wrote to you earlier in the year to advise that we made changes to modules on your programme of study. The changes to the BSc Mathematics with Finance programme are: We have introduced Linear Models (SOR3004) as a compulsory module to be taken at Level 3, replacing the compulsory module Mathematical Modelling in Biology and Medicine. This module will also be available as a Level 3 option on the Mathematics programmes instead of a Level 2 option. With financial companies increasing their focus on data analysis, we wish to strengthen students' understanding of data analysis. Linear Models is a key module for the statistical techniques underpinning data analysis. We believe these changes will benefit students' employability.
BSc Mathematics, Statistics and Operational Research MSci Mathematics, Statistics and Operational Research	We wrote to you earlier in the year to advise that we moved the statistics module (SOR3004) Linear Models from Level 2 to Level 3, and changed the requirements for the choice of modules in Statistics and Operational Research (SOR). Instead of a minimum of 2 modules in SOR to be taken in Level 2 and in Level 3, we now require a

	minimum of 4 modules to be taken across Levels 2 and 3 combined, with a minimum of 1 at each Level. We have made this change to encourage more students to take up statistics modules at Level 3, and in particular Statistical Data Mining. (SOR3008). This module is particularly valued by employers.
BSc Physics with French, Spanish, Extended Studies in Europe MSci Physics with French, Spanish, Extended Studies in Europe	The School are in the process of gaining professional accreditation through the Institute of Physics for these pathways. Therefore, you will be required to take module PHY2002 Physics of the Solid State instead of PHY2005 Atomic and Nuclear Physics.
BSc Mathematics MSci Mathematics BSc Mathematics with Finance BSc Mathematics and Computer Sciences MSci Mathematics and Computer Sciences BSc Mathematics and Statistics and Operational Research MSci Mathematics and Statistics and Operational Research BSc Applied Mathematics and Physics	We are letting you know that we are changing the assessment profile of module MTH1002 Numbers, Vectors and Matrices. The 10% computer test in MTH1002 is more difficult to conduct due to anticipated social distancing measures. This assessment component has therefore been changed to two intermediate tests with a weighting of 15% each. We also have reduced the weight of the final exam in MTH2001 Linear Algebra and Complex Variables from 90% to 80% by increasing the weight of the 2 intermediate assignments from 5% to 10%.

MSci Applied Mathematics and Physics BSc Mathematics with Extended Studies in Europe BSc Theoretical Physics MSci Theoretical Physics	
BSc Mathematics with Finance BSc Mathematics MSci Mathematics BSc Mathematics, Statistics and Operational Research MSci Mathematics, Statistics and Operational Research	To reduce workload on students, the 45% logbook component in module SOR3012 Stochastic Processes and Risk is replaced by three 10% assignments. In addition, the weight of the final exam is increased from 45% to 60%. The module SOR1021 Introduction to Statistical and Operational Research Methods will swap from semester 1 to semester 2 to enable better use of the available computer facilities to students.
BSc Mathematics and Computer Science MSci Mathematics and Computer Science	Within Computer Science, following the new stage one curriculum introduced in 2019-20, stage two has required revision for 2020-21 to maintain curriculum alignment between years. In response to the local and global industrial needs, a new specialist module in data science has been introduced. The changes made will enable the school of EEECS to ensure that all students entering final year are academically equipped to undertake the challenges of stage 3 in Computer Science and successfully complete the course

	to their full potential, and have additional flexibility to study modules aligned to industrial need.
BSc Physics BSc Physics with Astro-Physics BSc Physics with Medical Application BSc Physics with Extended Studies in Europe BSc Theoretical Physics	The conduct of experimental Level 3 projects may be affected by social-distancing measures. To provide more options for students in their final year, students will be able to satisfy their project work requirement by either taking PHY3010 Physics Projects, as in the current programme description, or taking the combination of PHY3007 Physics Single Project and PHY3009 Computational Projects, the single physics project module and the computational projects module.
MSci Physics MSci Physics with Astro-Physics MSci Physics with Medical Application MSci Physics with Extended Studies in Europe MSci Theoretical Physics	To provide students with the best experience for their research project, all modules in Level 4 Physics will swap semester. In addition, the assessment in modules PHY4005 Planetary Systems, PHY4006 High Energy Astrophysics, PHY4008 Plasma Physics and PHY4009 Materials Characterisation will change to 100% assessment by coursework instead of assessment through 40% by coursework and 60% by exam.

Psychology psychology@qub.ac.uk

BSc Psychology BSc Psychology with Professional Placement	The changes on this programme are: For module PSY1008 Foundations in Psychology the Tutorial contact has been increased to 20 hours (from 10 hours) meaning there will be a weekly 1 hour tutorial,

	rather than a fortnightly 1 hour tutorial. Also the compulsory tutorial attendance requirement to complete this module has increased to 16 hours (originally 8 hours), due to the increase in the tutorial contact. The assessment titled “Group Project 2” has been changed to “Research Proposal” for module PSY1010 Using Psychology in Everyday Life: .
BSc Psychology BSc Psychology with Placement (Returning)	The changes to this programme are: For module PSY2067 Psychological Methods the Tutorial contact has been increased to 20 hours (from 10 hours) meaning there will be a weekly 1 hour tutorial, rather than a fortnightly 1 hour tutorial. The compulsory tutorial attendance requirement to complete this module has increased to 16 hours (originally 8 hours), due to the increase in the tutorial contact.

Mechanical and Aerospace Engineering mech.aero@qub.ac.uk

Foundation Degree (FdEng) Mechanical Engineering	The changes to this programme are: The content of Year 1 remains unchanged. However, any practical and laboratory classes will be scheduled for semester 2 of 2020-21. Assignments will occur via the College's Virtual Learning Environment with online submission. For modules with specific software requirements, the College is implementing new remote access to its IT suites. This addresses potential issues over insufficient hardware/software on home computers.
Foundation Degree (FdEng) Mechanical Engineering (Returning)	We are writing to let you know that the content of Year 2 remains unchanged. However, teaching will be carried out online with the Work Based Learning (WBL) and any practical/laboratory classes scheduled for semester 2 of 2020-21.
BEng Aerospace Engineering MEng Aerospace Engineering (Sandwich) MEng Aerospace Engineering	The changes to this programme are:

BEng Aerospace Engineering (Sandwich)	Changes to the sequence of modules to allow practical elements to be undertaken later in 2020-21. The revised schedule of modules for Academic Year 2020-21 will be as follows: Stage 1 Semester 1: MEE1001 – Mathematics 1 MEE1018 – Thermodynamics and Fluid Mechanics 1 Both semesters: MEE1004 – Mechanics of Materials 1 MEE1027 – Engineering Design 1 Semester 2: MEE1035 – Introduction to Aerospace Engineering 1 MEE1008 – Dynamics Systems 1 Stage 2 Semester 1: AER2008 – Compressible Flow and Propulsion 2 MEE2098 – Employability 2 Both Semesters:

	AER2013 – Aircraft Design 2 AER2009 – Aircraft Structures 2 MEE2029 – Maths & Computing 2 AER2007 – Aircraft Aerodynamics and Performance 2 Semester 2: MEE2034 – Manufacturing Technology 2 MEE2005 – Professional Studies 2 AER2099 – Flight laboratory 2 Stage 3 Semester 1: AER3008 – Aeronautical Engineering 3 MEE3013 – Computer Aided Engineering 3 Both Semesters: MEE3030 – Project 3B (BEng) AER3011 – Aircraft Design 3M (MEng) Semester 2: ELE3030 – Avionic Systems 3

	MEE3002 – Professional Studies 3 MEE3014 – Manufacturing 3 Stage 4 Semester 1: AER4016 – Mechanics of Aerospace Materials 4 MEE4039 – Professional Studies 4 (elective) Both Semesters: AER4002 – Project 4 AER4018 – Aerodynamics 4 Semester 2: MEE4023 – Computer Aided Engineering 4 MEE4019 – Manufacturing Automation & Simulation 4 (elective)
BEng Mechanical Engineering MEng Mechanical Engineering (Sandwich) BEng Mechanical Engineering (Sandwich) MEng Mechanical Engineering	The changes to this programme are: Change(s) to the sequence of modules to allow practical elements to be undertaken later in 2020-21. The revised schedule of modules for Academic Year 2020-21 will be as follows:

	Stage 1 Semester 1: MEE1001 – Mathematics 1 MEE1018 – Thermodynamics and Fluid Mechanics 1 Both semesters: MEE1004 – Mechanics of Materials 1 MEE1027 – Engineering Design 1 Semester 2: MEE1034 – Introduction to Aerospace Engineering 1 MEE1008 – Dynamics Systems 1 Stage 2 Semester 1: MEE2001 – Mechanics of Materials 2 MEE2007 – Thermodynamics and Fluid Mechanics 2 MEE2098 – Employability 2 Both Semesters: MEE2006 – Dynamics 2 MEE2029 – Maths & Computing 2

	Semester 2: MEE2012 – Design & Manufacturing 2 MEE2034 – Manufacturing Technology 2 MEE2005 – Professional Studies 2 Stage 3 Semester 1 MEE3033 – Mechanics of Materials 3 MEE3031 – Heat Transfer and Combustion 3 MEE3065 – Plastics Engineering 3 (elective) MEE3013 – Computer Aided Engineering 3 (elective) Both Semesters: MEE3030 – Project 3B (BEng) MEE3060 – Design Project 3M (MEng) Semester 2: MEE3038 – Dynamics 3 MEE3002 – Professional Studies 3 MEE3064 – Transportation Power and Systems 3 (elective)

	MEE3014 – Manufacturing 3 (MEng elective) Stage 4 Semester 1: MEE4010 – Compressible Flow 4 AER4016 – Mechanics of Aerospace Materials 4 (elective) MEE4039 – Professional Studies 4 (elective) MEE4021 – Advanced Materials 4 (elective) Both Semesters: MEE4040 – Project 4 Semester 2: MEE4004 – Engineering Dynamics 4 MEE4023 – Computer Aided Engineering 4 (elective) MEE4019 – Manufacturing Automation & Simulation 4 (elective) MEE4015 – IC Engines and Turbomachinery 4 (elective)
BEng Product Design Engineering BEng Product Design Engineering (Sandwich) MEng Product Design Engineering	The changes to this programme are: Change(s) to the sequence of modules to allow practical elements to be undertaken later in 2020-21. The revised schedule of modules for Academic Year 2020-21 will be as follows:

MEng Product Design Engineering (Sandwich)	Stage 1 Semester 1: MEE1001 – Mathematics 1 MEE1018 – Thermodynamics and Fluid Mechanics 1 Both semesters: MEE1004 – Mechanics of Materials 1 MEE1027 – Engineering Design 1 Semester 2: MEE1033 – Introduction to Aerospace Engineering 1 MEE1008 – Dynamics Systems 1 Stage 2 Semester 1: MEE2001 – Mechanics of Materials 2 MEE2026 – Design and Prototyping Projects 2 MEE2098 – Employability 2 Both Semesters:

	MEE2006 – Dynamics 2 MEE2029 – Maths & Computing 2 Semester 2: MEE2012 – Design & Manufacturing 2 MEE2034 – Manufacturing Technology 2 MEE2005 – Professional Studies 2 Stage 3 Semester 1 MEE3065 – Plastics Engineering 3 MEE3013 – Computer Aided Engineering 3 Both Semesters: MEE3030 – Project 3B (BEng) MEE3060 – Design Project 3M (MEng) Semester 2: MEE3053 – Product Design and Development Studies 3 MEE3002 – Professional Studies 3 MEE3014 – Manufacturing 3

	Stage 4 Semester 1: MEE4039 – Professional Studies 4 MEE4021 – Advanced Materials 4 Both Semesters: MEE4040 – Project 4 Semester 2: MEE4023 – Computer Aided Engineering 4 MEE4019 – Manufacturing Automation & Simulation 4

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