# Imperial College London

## **Programmes Committee (PC) Minutes**

Thursday 21 March 2024 10.30-13.00

#### **Present**

Dr Clemens Brechtelsbauer (Chair), Ms Laura Gardner (Secretary), Dr Tiffany Chiu, Dr Cloda Jenkins, Dr Michael Weatherburn, Mr Scott Tucker, Dr Vijay Tymms, Dr Jeffrey Vernon, Dr Lorraine Craig, Ms Kate Ippolito, Ms Yi Yang, Ms Betty Yue, and Ms Judith Webster

### **Apologies**

Dr Magdalena Jara, Professor Alessandro Astolfi and Ms Camille Boutrolle.

#### In attendance

Ms Amy Huynh and Ms Annemarie Gupta

1	Welcome and Apologies
	The Chair welcomed attendees to the meeting and apologies, as above, were noted.
	Michael Weatherburn and Tiffany Chiu were welcomed as new members to PC.
	Annemarie Gupta was welcomed as an observer.
2	Minutes of the previous meeting The minutes of the previous meeting held on Thursday 25 January 2024 were confirmed
	as an accurate record.
3	Matters Arising There were no matters arising.
Items for co	pnsideration
4.	Curriculum Review
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4.1	PC.2023.33 Department of Chemistry MRes Nanomedicine and Nanodiagnostics (formerly MRes Bioimaging Sciences)
4.1.1	PC considered the redesigned programme named above with effect from October 2024.
4.1.2	PC thanked the programme team for responding to, and addressing, the recommendations agreed at the previous meeting.
	PC discussed the benefits of programme teams developing and reviewing modules specifications with EDU colleagues. It was noted that EDU is represented at both Faculty Education Committees and Programmes Committee and were always available for engagement across the College.
	A question was raised regarding the application of compensation on the programme. PC were advised that as there is no progression point on postgraduate programmes, compensation would be applied at the final exam board.
	PC were supportive of the proposal, but suggested some feedback for the programme team:
	Reconsider reweighting the 50-minute oral examination component in the 'Nanomedicine and Nanodiagnostics Research Project' module. PC noted that

	the weighting for this component aligns with all other MRes programmes in the department. As such, the department is encouraged to consider reviewing the component across all MRes programmes, taking into account the effort it will take a student to prepare for, and deliver, a 50-minute oral examination.  • Ensure that all learning outcomes in the 'Nanomedicine' module can be assessed in a one-hour examination.  The above feedback is not preventative in progressing the proposal.
4.1.3	PC agreed to recommend the proposal to the QAEC for approval.
5	Major Modifications to Existing Programmes
	Faculty of Engineering
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5.1	PC.2023.34 Department of Bioengineering BSc Biomedical Technology Ventures (B800)
5.1.1	PC considered an in-session modification with effect from October 2023:
	<ul> <li>Update the module descriptor, amend the study hours, and replace the written exam with a practical assessment for the compulsory module BIOE40014 'Sensors and Actuation'.</li> </ul>
	PC considered the following major modifications with effect from October 2024:
	<ul> <li>update the learning outcomes for the compulsory module BIOE40014 'Sensors and Actuation'.</li> </ul>
	b) Remove the compulsory modules BIOE50004 'Fluid and Solid Mechanics 2' and BIOE50014 'Programming and Interfacing'.
	c) Change the ECTS value of the compulsory modules BIOE50013 'Medical Device Entrepreneurship 1', BIOE60023 'Medical Device Entrepreneurship' and BIOE70028 'Medical Device Certification' from 7.5 to 5.
	<ul> <li>d) Change the ECTS value of the compulsory module BIOE50012 'An Introduction to Biomaterials' from 5 to 7.5.</li> </ul>
	e) Add 'Principles of Design' and BIOE50010 'Programming 2' and BIOE60011 'Probability and Statistics for Bioengineering' as compulsory modules.
5.1.2	PC commended the clear presentation of the proposed modifications in the documentation, noting they are quite significant.
	<ul> <li>PC supported the proposal and suggested the following feedback:</li> <li>PC noted the positives of introducing a project-based learning outcome, agreeing that it will enhance the students' practical skills through the degree.</li> <li>There are a high number of compulsory modules in autumn term of year two. The programme team are encouraged to ensure students are not overloaded.</li> <li>A list of the Bioengineering elective modules offered in year three should be made available to students.</li> <li>The programme team are encouraged to review the number of written exams across the programme and consider alternative authentic assessments.</li> </ul>
	The above feedback is not preventative in progressing the proposal.
5.1.3	PC agreed to recommend the proposal to the QAEC for approval.
5.2	PC.2023.35 Department of Bioengineering MRes Medical Device Design and Entrepreneurship (H673U)
5.2.1	PC considered the following major modifications with effect from October 2024:

	<ul> <li>Introduce two new core modules, 'Financial Forecasting, Deal Structuring and Negotiations', and 'Effective Communication Skills'.</li> <li>Change the ECTS value of the compulsory module BIOE70041 'Medical Device Design and Entrepreneurship Research Project' from 60 to 55.</li> <li>Update the assessment for BIOE70041 'Medical Device Design and Entrepreneurship Research Project'.</li> <li>Change the ECTS of BIOE70042 'Topics in Biomedical Entrepreneurship and</li> </ul>
	Business' from 10 to 5.
5.2.2	PC noted the proposal is informed by student feedback and sector developments. In particular, the inclusion of financial forecasting and communication as core modules was commended, to better demonstrate skills required by employers.
5.2.3	PC agreed to recommend the proposal to the QAEC for <b>approval</b> .
5.3	PC.2023.36 Department of Civil and Environmental Engineering MEng Civil Engineering (H201) MEng Civil Engineering with a Year Abroad (H202)
5.3.1	PC considered the following major modifications with effect from October 2024:
	a) Change the programming language used in the core module CIVE40004 'Computational Methods 1' from MATLAB to Python b) Add a new learning outcome to the core module CIVE50001 'Business and
	Project Management'. c) Update the learning outcomes and learning and teaching approach for the core module CIVE50002 'Civil Engineering Design 2'. d) Add a new learning outcome and update the module content for the core
	module CIVE50009 'Structural Design'.  e) Add two new learning outcomes and change the assessment weightings for the core module CIVE60004 'Environmental Engineering: Water and Wastewater Treatment, Waste and Resource Management'.  f) Withdraw the elective module CIVE70002 'Applied Dynamics'.
5.3.2	PC were supportive of the proposal, noting clear and reasonable rationales were provided for each modification.
5.3.3	PC agreed to recommend the proposal to the QAEC for approval.
5.4	PC.2023.37 Department of Civil and Environmental Engineering MSc Geotechnical Engineering (H2U3)
5.4.1	PC considered a major modification to create a new programme stream, MSc Geotechnical Engineering with Offshore Renewables, based on the existing programme named above with effect from October 2024.
5.4.2	PC commended the inclusion of diagrams to clearly outline the proposed programme stream in the documentation.
	PC noted that the programme stream is pending external accreditation with Joint Board of Moderators (JBM). If successful, the proposed programme stream will require the inclusion of a programme-specific regulation allowing a maximum of 10 ECTS for compensation.
	PC were supportive of the proposal but suggested some feedback:     Clarify on the programme specification if students will be required to choose this stream at the point of application. Whilst there is a need for this stream in the sector, it is recommended that this specialism is fully explained to applicants.     Confirm that the MSc Geotechnical Engineering programme will continue to be delivered alongside the new stream.

Review the proposed 100%-2-hour written exam assessments on the 'Offshore Geotechnical Engineering' and 'Structural Dynamics' module specifications and consider alternative methods to balance the assessment-load.  Provide more assessment detail on the 'Design Project: Offshore Renewables' module specification:  As the module is core, consider what provisions are in place if an issue arises between a student and industry partner which makes it difficult to complete the project.  Clarify if the individual contribution is self-reported, peer assessed or from industry partners.  Consider how the assessment components relate to the final dissertation, if at all.  Consider emphasising the group presentation includes academic rigour, not just the quality of visuals.  Clarify who reviews the group progress component and ensure marketing criteria for individual contribution and progress is clearly set out.  Review the learning outcomes on the 'Hydrodynamic Loading' module specification to ensure they are appropriate for the level of active learning required for postgraduate study. Consider why the examination on this module is three hours, compared to two on other modules.  The above feedback is not preventative in progressing the proposal.  5.4.3 PC agreed to recommend the proposal to the QAEC for approval  5.5. PC.2023.38 Department of Computing MRes AI and Machine Learning (GSZB)  5.5.1 PC considered the following major modifications with effect from October 2024:  a) Replace the core module COMP70052 'Ethics, Privacy, AI in Society' with COMP70076' Ethics, Fairness and Explanation in AI'.  b) Change the module designation from computiony to elective for COMP70053 'Python Programming'.  c) Introduce a suite of electives to the programme.  5.5.2 PC agreed that part (b) of the proposal reflected a reasonable adjustment in response to student feedback and commended the inclusion of the module as an elective instead.  PC noted the proposal suite of electives in part (c) of the proposal have been through Curriculum Revie		
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5.6.2	PC discussed part (a) of the proposal, noting the programme specification is a university wide approved template.
	PC agreed that while it may be more mathematically accurate to present module weightings as fractions, there is potential for misunderstanding or misapplication of having this non-standard information in the specification, with ECTS not being weighted in line with College regulations.
	PC noted part (b) of the proposal has been informed by student feedback and commended the inclusion of more practical elements in an engineering programme.
5.6.3	PC <b>rejected</b> part (a) of the proposal. The programme specification should be revised to remove the column presenting module weightings as either fractions or percentages.
	PC agreed to recommend parts (b) and (c) of the proposal to the QAEC for <b>approval</b> .
5.7	PC.2023.40 Department of Electrical and Electronic Engineering MEng Electrical and Electronic Engineering (H604) MEng Electrical and Electronic Engineering with Management (H6N2) MEng Electrical and Electronic Engineering with a Year Abroad (H601) MEng Electronic and Information Engineering (GH56) MEng Electronic and Information Engineering with a Year Abroad (H6GM)
5.7.1	PC considered the following major modifications with effect from October 2024:
	<ul> <li>a) Change the assessment and ECTS value of the core module ELEC70017 'Individual Project MEng' from 35 to 30.</li> <li>b) Change the ECTS value of the compulsory module ELEC70107 'Professional Competencies Portfolio with Industrial Experience' from 20 to 25.</li> <li>c) Withdraw the elective module COMP70018 'Privacy Engineering' on the MEng Electronic and Information Engineering (GH56) programme.</li> </ul>
5.7.2	PC were supportive of the proposal, noting it sought to rebalance the ECTS from a core to compulsory module.
5.7.3	PC agreed to recommend the proposal to the QAEC for <b>approval</b> .
5.8	PC.2023.41 Department of Electrical and Electronic Engineering
	MSc Applied Machine Learning (I460)
5.8.1	PC considered the following major modifications with effect from October 2024:
	<ul> <li>a) Redesign the core module ELEC70060 'AML Lab' and create a new 5 ECTS compulsory module 'Smart Sensing Devices'.</li> <li>b) Revise the learning outcomes for the core module ELEC70061 'Deep Learning' to establish a clearer distinction between the level 6 module of the same name.</li> </ul>
5.8.2	PC were supportive of the proposal but suggested that the learning outcomes are reviewed for both modules. The inclusion of seven or eight learning outcomes for a 5 ECTS module was quite high.
	PC agreed that the programme team should also reconsider how each learning outcome is taught and assessed in each module.
	The above feedback is not preventative in progressing the proposal.
5.8.3	PC agreed to recommend the proposal to the QAEC for approval.
5.9	PC.2023.42 Department of Electrical and Electronic Engineering MSc Future Power Networks (H6U7)

5.9.1	PC considered the following major modifications with effect from October 2024:
	<ul> <li>a) Add a new programme learning outcome.</li> <li>b) Change the programme structure by changing the module designation from compulsory to elective for ELEC70047 'HVDC Technology and Control', ELEC70074 'Power System Dynamics, Stability and Control', and ELEC70087 'Stability of Low Carbon Power Systems'.</li> <li>c) Change the rules by which students choose their elective modules.</li> <li>d) Remove the elective modules ELEC70067 'Traffic Theory and Queuing Systems', ELEC70077 'Digital Signal Processing and Digital Filters', ELEC70001 'Adaptive Signal Processing and Machine Intelligence' and ELEC70039 'Wavelets'.</li> <li>e) Updates to the compulsory module ELEC70044 'Role and Value of Smart Grid Technologies'. This includes introducing data science elements, reducing the scope of risk modelling and assessment, changing the module title to 'Smart Grid and Data Science' and updating the module descriptors.</li> </ul>
	Ond and Data ocience and apparing the module descriptors.
5.9.2	<ul> <li>PC were supportive of the proposal, and suggested the following feedback:</li> <li>The education rationale for the proposed modifications was noted, as it aims to rebalance the curriculum and encourage diversity in elective selection.</li> <li>The learning outcomes for 'Smart Grid and Data Science' were commended but the Module Lead may wish to review the inclusion of a 75% closed-book exam component and consider alternative authentic assessment methods.</li> </ul>
	The above feedback is not preventative in progressing the proposal.
5.9.3	PC agreed to recommend the proposal to the QAEC for approval.
5.10	PC.2023.43 Department of Mechanical Engineering MSc Sustainable Energy Futures (H9A1)
5.10.1	PC considered an in-session and retrospective major modification to introduce a Postgraduate Diploma exit award to the MSc Sustainable Energy Futures programme with effect from October 2022.
5.10.2	PC noted that the proposal is, in part, informed by a student who has sufficient credits for a Postgraduate Diploma exit award, but is not eligible as the award is not currently offered on the programme.
	PC were reminded that departments were encouraged to consider the inclusion of exit awards as part of the Curriculum Review exercise. However, it was noted that programmes with a minimum 45-ECTS research project may not have included a Postgraduate Diploma exit award due to incompatibility with the programme structure as PG Dip awards are usually associated with taught elements for ease of association with distinct learning outcomes.
	PC agreed that the retrospective introduction of exit awards is not permitted within College regulations.
	PC agreed that the inclusion of exit awards should be discussed at the Regulations and Policy Review Committee.
5.10.3	PC have rejected the proposal to retrospectively introduce a Postgraduate Diploma exit award. It was agreed that the student case referred to in the modification form will be considered separately.
	Faculty of Medicine
5.11	PC.2023.44 Department of Surgery and Cancer MSc Digital Health Leadership (A3DHM)

	Postgraduate Diploma in Digital Health Leadership (A3DHD) Postgraduate Certificate in Digital Health Leadership (A3DHC)
5.11.1	PC considered the following major modifications with effect from September 2024:
	<ul> <li>Suspend the Postgraduate Certificate in Digital Health Leadership for one year.</li> </ul>
	<ul> <li>Remove the reflective journal assessment from six compulsory modules (SURG70090, SURG70091, SURG70092, SURG70094, SURG70095 and SURG70096) and replace with a holistic reflective practice assessment.</li> </ul>
	c) Update a learning outcome for the compulsory module SURG70092 Innovation in Healthcare.
	<ul> <li>d) Remove pre-requisite rules of compulsory modules across the programme.</li> <li>e) Update the learning outcomes and restructure the assessments on the core module SURG70056 'Dissertation'.</li> </ul>
5.11.2	PC commended the reduction in overassessment and replacement of the reflective journal with a range of distinct, Al-proof components. PC noted that the proposed assessment components were more engaging and relevant for the workplace.
	PC recommended that the programme team share their ideas about responding to AI in assessment with colleagues across the College.
5.11.3	PC agreed to recommend the proposal to the QAEC for <b>approval</b> .
5.12	PC.2023.45 Department of Surgery and Cancer MSc Healthcare and Design (A1HD)
5.12.1	PC considered the following in-session and retrospective major modification with effect
****	from October 2020:
	<ul> <li>Amend the programme specification to clearly indicate the exit awards available.</li> </ul>
	PC considered the following major modification with effect from October 2024:
	a) Change the campus from St. Mary's to South Kensington.
5.12.2	PC agreed that although the retrospective introduction of exit awards is not permitted within College regulations, there is justification to introduce the Postgraduate Certificate from October 2024.
	It was noted that no rationale had been provided for the retrospective introduction of the Postgraduate Certificate exit award in any case. PC requested that the programme team clarify the rationale for introducing a Postgraduate Certificate exit award from October 2024.
	PC discussed the campus change proposal and suggested that the programme team clarify whether the HELIX Centre will remain at St Mary's campus. It was noted that the HELIX Centre is referred to in the programme specification and 'Helix Design Dash' module specification.
5.12.3	PC <b>rejected</b> the proposal to retrospectively introduce a Postgraduate Certificate exit award.
	PC requested that the programme team provide a rationale for introducing the exit award from October 2024 and resubmit the proposal to the Quality Assurance and Enhancement team. Subject to a satisfactory response, PC agreed to recommend the proposal to introduce the exit award from October 2024 via Chair's Action to QAEC for approval.

	PC agreed to recommend the proposal for the campus change to the QAEC for approval.
5.13	PC.2023.46 National Heart and Lung Institute MSc Medical Ultrasound (Echocardiography) (A3A2) MSc Medical Ultrasound (Vascular) (A3A1 / A3A124)
5.13.1	PC considered the following major modifications with effect from October 2024:
	<ul> <li>a) Introduce two new core modules 'Foundations in Echocardiography' for MSc Medical Ultrasound (Echocardiography) and 'Foundations in Vascular Ultrasound' for MSc Medical Ultrasound (Vascular).</li> <li>b) Change ECTS value for core modules NHLI70011 'Clinical Studies: Echocardiography' and NHLI70012 'Clinical Studies: Vascular Ultrasound' from 30 to 25.</li> <li>c) Change the ECTS value for core modules NHLI70034 'Clinical Studies 1: Arterial Ultrasound' and NHLI70035 'Clinical Studies 2: Venous Ultrasound' from 15 to 12.5 on the part-time programme.</li> <li>d) Add a new 20% weighted assessment to core modules NHLI70011 'Clinical Studies: Echocardiography' and NHLI70012 'Clinical Studies: Vascular Ultrasound and reweight the 2 remaining assessments from 50% to 40%.</li> </ul>
5.13.2	PC were informed at module specifications for NHLI70034 'Clinical Studies 1: Arterial
	Ultrasound' and NHLI70035 'Clinical Studies 2: Venous Ultrasound' have not been provided by the programme team.  PC commended the introduction of the two new core modules, noting students would be able to gain practical scanning experience and knowledge prior to their clinical placements.  It was agreed that PC could not fully consider the documentation at this meeting but the following recommendations were noted:  • The Module Leads to revise and reduce the number of learning outcomes on the new Foundations modules, so they are commensurate with a 5 ECTS module. Learning outcomes should be less technically detailed and, if useful, additional details should be moved to the module content section.  • The programme team should consider how the reduction in ECTS for NHLI70011 'Clinical Studies: Echocardiography' and NHLI70012 'Clinical Studies 2: Vascular Ultrasound' is reflected in the module specification. A rationale should be provided for the addition of a case-based discussion assessment and the difference in required logbook scans between the two modules. The length/duration of all three assessments should also be detailed in the module specifications.  • The programme team to provide revised module specifications, as requested, for NHLI70034 'Clinical Studies 1: Arterial Ultrasound' and NHLI70035 'Clinical Studies 2: Venous Ultrasound'. It was noted that 12.5 ECTS is not a recognised module size in College regulations.
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5.13.3	PC agreed to <b>reject</b> the proposal as the documentation was not complete. The Committee require the programme team to consider the recommendations noted above and resubmit the proposal, with complete documentation, for reconsideration at the next opportunity.  Faculty of Natural Sciences
5.14	PC.2023.47 Department of Chemistry  MRss Advanced Molecular Synthesis (E1VA / E1RST)
	MRes Advanced Molecular Synthesis (F1YA / F1RST)
5.14.1	PC considered the following major modifications with effect from October 2024:

5.15.3	PC agreed to recommend the proposal to the QAEC for approval.
5.16	PC.2023.49 Department of Mathematics MSc Statistics (G3U1) MSc Statistics (Applied Statistics) (G3U1A) MSc Statistics (Biostatistics) (G3U1B) MSc Statistics (Data Science) (G3U1D) MSc Statistics (Statistical Finance) (G3U1S) MSc Statistics (Theory and Methods) (G3U1T)
5.16.1	PC considered the following major modifications with effect from October 2024:  a) Withdraw the modules MATH70091 'Machine Learning' and MATH70075 'Contemporary Statistical Theory'.  b) Change the rules by which students choose their elective modules.  c) Change the module designation from core to elective for MATH70073 'Biostatistics', MATH70083 'Statistical Genetics and Bioinformatics, MATH70072 'Big Data', MATH70076 'Data Science', MATH70070 'Advanced Statistical Finance', MATH70079 'Introduction to Statistical Finance' and MATH70089 'Stochastic Processes'.
5.16.2	PC commended the clear and concise rationale, noting that full consultation had been sought for the proposal.
5.16.3	PC agreed to recommend the proposal to the QAEC for approval.
5.17	PC.2023.50 Department of Physics MSc Physics with Extended Research (F3U1R)
5.17.1	PC considered a major modification proposal to introduce a Postgraduate Diploma exit award for the named programme above with effect from October 2024.
5.17.2	PC discussed the proposals' rationale, noting that the introduction of the exit award is necessary as students are allowed to carry a small number of fails to their second year, at the discretion of the Course Director. It was also noted that discretion for progression is allowed because year one elective modules do not offer in-year resits.  PC discussed whether students should be allowed to progress to the 'Extended Research' module without passing all year one modules. It was agreed that the inclusion of in-year resits for all year one modules would likely mitigate the issue the programme team seeks to address.  PC considered the value of introducing the exit award, noting students are likely to progress from this programme to a PhD, where a Postgraduate Diploma is not relevant.  PC noted that the proposed requirements were not in the spirit of a Postgraduate Diploma exit award, which traditionally reflects the completion of only taught elements on a postgraduate programme. It was also acknowledged that the proposal may lead to situations whereby students achieve 105-credits for the exit award, whereas only 90-credits are required for an MSc.
5.17.3	PC agreed to <b>reject</b> the proposal. PC commended the intentions of the programme team to include a Postgraduate Diploma exit award. However, PC agreed that the proposal should be reconsidered, taking into account the non-traditional structure of the programme, as well as the merits of in-year resits and the removal of discretion for progression. PC agreed that support should be offered to the programme team, to further consider how the exit award aligns with the programme structure and discuss alternative options.
5.18	PC.2023.51 Department of Physics MSc Quantum Fields and Fundamental forces (F3UG / F3UG24)

5.18.1	PC considered a major modification to change the overall degree classification for the named programme above with effect from October 2024.
5.18.2	PC suggested that the programme team make it clear what degree classification would apply to interrupted and resit students. The programme team are also encouraged to consider the inclusion of postgraduate borderline regulations.
	The above feedback is not preventative in progressing the proposal.
5.18.3	PC agreed to recommend the proposal to the QAEC for approval.
	Imperial College Business School
5.19	PC.2023.52 Imperial College Business School BSc Economics, Finance and Data Science (L1N3)
<b>=</b> 40.4	
5.19.1	PC considered the following major modifications with effect from October 2024:
	<ul> <li>a) Change the learning outcomes for the core and compulsory modules BUSI40002 'Probability and Statistics', BUSI40005 'Accounting', BUSI40009 'Essential Skills 1: Creative Problem Solving', BUSI50002 'Econometrics 1', BUSI50003 'Machine Learning', BUSI50004 'Corporate Finance and Capital Markets', BUSI50007 'Essential Skills 2: Emotional Intelligence in the Workplace', BUSI50008 'Macroeconomics 2' and BUSI50009 'Econometrics 2'.</li> <li>b) Amend the learning and teaching hours for the compulsory modules</li> </ul>
	BUSI50001 'Microeconomics 2', BUSI50002 'Econometrics 1' and BUSI50004 'Corporate Finance and Capital Markets'.
5.19.2	PC commended the thorough approach in changing the learning outcomes and learning and teaching hours, which is clearly reflected in the documentation.
	PC approved the proposal subject to the following recommendation:  • Module Leads to review the learning outcomes for BUSI40002 'Probability and Statistics', BUSI50003 'Machine Learning' and BUSI50007 'Essential Skills 2: Emotional Intelligence in the Workplace', to ensure they are appropriate for the level of active learning required for postgraduate study. For example, avoid passive verbs such as 'Understand'.
5.19.3	The PC advised that the recommendation above be considered and that the updated documentation be submitted to the Quality Assurance and Enhancement team. Subject to a satisfactory response, PC agreed to recommend the proposal via Chair's Action to QAEC for approval.
5.20	PC.2023.53 Imperial College Business School MSc Economics & Strategy for Business (L100T)
5.20.1	PC considered the following major modifications with effect from October 2024:  a) Change the programme structure by changing the rules by which students choose their modules.  b) Withdraw the compulsory module BUSI70143 'ESB Report'.  c) Change the module title, learning outcomes, assessment, and credit value of the compulsory module BUSI70162 'Business Simulation' 5 ECTS, to 'Corporate Strategy and Economics Simulation' 10 ECTS.  d) Change the learning outcomes, assessment, and the module designation of BUSI70107 'Economics of Public Policy' from compulsory to elective.  e) Change the learning outcomes and module title of the compulsory module
5.20.2	BUSI70109 'Risk Management' to 'Financial Risk, Markets and Instruments'.  PC approved the proposal subject to the following recommendations:

Review the programme specification to remove references to the 'ESB Report', clarify what is the Extended Term is, and detail how students register for this Revise the 'Corporate Strategy and Economics Simulation' module, specifically to clarify the aims and what content will be covered in addition to the business simulation exercise. Also, provide an indication of the types of decisions students will be expected to make in the business simulation exercise, and for what functions. 5.20.3 The PC advised that the recommendations above be considered and that the updated documentation be submitted to the Quality Assurance and Enhancement team. Subject to a satisfactory response, PC agreed to recommend the proposal via Chair's Action to QAEC for approval. 5.21 PC.2023.54 Imperial College Business School **Full Time MBA (N1UD) MSc Management (N19J)** MSc Climate Change, Management & Finance (N304) MSc Economics & Strategy for Business (L100T) **MSc Business Analytics (N290T)** MSc Innovation, Entrepreneurship and Management (N201T) **MSc Global Health Management (N1EG)** MSc Global Health Management (Innovation & Entrepreneurship) (N1EGI) MSc Global Health Management (Economics & Data Science) (N1EGE) MSc Finance (N301) MSc Finance & Accounting (N302) MSc Financial Technology (N305) **MSc Investment & Wealth Management (N303)** MSc Risk Management & Financial Engineering (N34G) PC considered the following major modifications with effect from October 2024: 5.21.1 a) Introduce the option for students to extend the length of their programme from 12 to 16 months. The extended term requires students to complete an additional 30 ECTS credits, totalling 120 ECTS for the extended programme award. b) Add new elective module 'Extended Work Placement' to the Full-Time MBA programme. c) Add new elective module 'Extended Work Placement' to the MSc Finance, MSc Finance & Accounting, MSc Financial Technology, MSc Investment & Wealth Management and MSc Risk Management & Financial Engineering programmes. d) Add module BUSI70430 'Extended Work Placement' to the MSc Management, MSc Climate Change, Management & Finance, MSc Economics & Strategy for Business, MSc Business Analytics, MSc Innovation, Entrepreneurship and Management, MSc Global Health Management, MSc Global Health Management (Innovation & Entrepreneurship) and MSc Global Health Management (Economics & Data Science) programmes. PC commended the clear and concise rationale, noting that full consultation had been 5.21.2 sought for the proposal. PC were informed that the proposal aims to improve the marketability of programmes, noting the industry is reacting positively to extra credit, and require students to undertake longer internships. PC were informed that the Extended Term route expects to attract between 10-15 students each year, with potentially more for the FTMBA programme. It was confirmed that this proposal does not reflect an intention to make the FTMBA a twoyear programme. PC were supportive of the proposal and suggested the following feedback: With the extension of programmes from 12-16 months, there will be an overlap of two cohorts during the autumn term, i.e., students starting in September and

	<ul> <li>those registered for the extended term. Consider how this will affect staff workload and the implications it may have for student support.</li> <li>The inclusion of pass/fail grading on the module specifications was commended as good practice, allowing students to focus on their engagement with industry.</li> <li>Include more detail regarding the formative 'online activities' in the 'Assessment Strategy' section of module specifications.</li> <li>Consider whether the title of the new 'Extended Work Placement' module could be made more specific, to better differentiate it from the other two 'Extended Work Placement' modules.</li> <li>The above feedback is not preventative in progressing the proposal.</li> </ul>
5.21.3	PC agreed to recommend the proposal to the QAEC for approval.
5.22	PC.2023.55 Imperial College Business School
	MRes Business (N1UQ2)
5.22.1	PC considered the following major modifications with effect from October 2024:  a) Remove the compulsory module BUSI70183 'Systematic Reviews' from the Economics and Public Policy pathway. b) Change the module designation of BUSI70165 'Data Analysis Tools' from compulsory to optional on the Management and Entrepreneurship pathway. c) Introduce the new compulsory module 'Macroeconomics 1' on year 1 of the Economics and Public Policy and Finance pathways, and as a year 2 elective for the Management and Entrepreneurship pathway. d) Change the module title for BUSI70195 'Macroeconomics' to 'Macroeconomics 2'. e) Withdraw the compulsory module BUSI70318 'Empirical Corporate Finance' from the Finance pathway. f) Add BUSI70190 'Applied Microeconomics 1' as a year 1 compulsory module on the Finance pathway. g) Withdraw the compulsory module BUSI70191 'Applied Microeconomics 2' from the Economics and Public Policy pathway and withdraw the elective of the same name from the Management and Entrepreneurship pathway. h) Withdraw the compulsory module BUSI70319 'Econometrics 2' from the Finance pathway. i) Introduce 'Empirical Industrial Organisation' as a year 1 compulsory module on the Economics and Public Policy pathway, and year 2 elective module on the Finance and Management and Entrepreneurship pathways. j) Change the module designation of BUSI70194 'Empirical Asset Pricing' from a year 1 compulsory module to a year 1 and 2 elective module on the Finance pathway. k) Add BUSI70198 'Microeconomics 2' on year 1 to the Management and Entrepreneurship and Finance pathways. l) Withdraw the elective module BUSI70320 'Machine Learning for Analytics, Marketing and Operations' from all pathways. PC were supportive of the proposal, and suggested the following feedback:
3.22.2	Clarify whether the proposed modifications will affect second-year students
	<ul> <li>continuing from October 2024. If so, consider how will this be managed.</li> <li>On the 'Macroeconomics 1' module specification, include more information in the 'Brief description of module' section so it better describes the module to potential students. Provide an indicative range of length/word-count for the homework assignments and include more detail regarding the formative 'in-class activities' in the 'Assessment strategy' section.</li> <li>With the view to avoid overassessment and improve student wellbeing, consider the purpose of the weekly one-page 'paper summaries' and 'problem sets' on the 'Empirical Industrial Organisation' module. Consider if a pass/fail grading method would be more appropriate.</li> </ul>
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5.22.3	PC agreed to recommend the proposal to the QAEC for approval.	
6. Programme suspensions and withdrawals		
6.1	PC.2023.57 Department of Chemical Engineering MEng Chemical with Nuclear Engineering (H890)	
6.1.1	PC considered a proposal to suspend the MEng Chemical with Nuclear Engineering programme for two years with effect from October 2024.	
6.1.2	PC noted the clear rationale and agreed to recommend the proposal to the QAEC for approval.	
6.2	PC.2023.58 Department of Chemical Engineering MSc Advanced Chemical Engineering with Materials Engineering (H8F2)	
6.2.1	PC considered a proposal to suspend the programme named above for three years with effect from October 2025.	
6.2.2	PC agreed to recommend the proposal to the QAEC for approval.	
7. Items to note		
7.1	PC.2023.59 Chair's Report	
7.1.1	PC noted the proposals that had been approved by via Chair's action on behalf of PC since the last meeting.	
	Faculty of Natural Sciences	
7.1.2	PC.2023.28 Department of Chemistry MSc Digital Chemistry (F1H6OC / F1H6O)	
	The revised documentation in response to the recommendations made at the PC meeting held on 25 January 2024.	
7.1.3	PC.2023. CA06 Department of Physics BSc Physics (F300) BSc Physics with Theoretical Physics (F325) MSci Physics (F303) MSci Physics with Theoretical Physics (F390) MSci Physics with a Year Abroad (F309)	
	An in-session modification to change the assessment for the core module PHYS60002 'Comprehensives' from a team-based problem-solving element to an interactive physics element with effect from October 2023.	
7.1.4	PC.2023.CA07 Department of Mathematics Machine Learning, Applied Statistics and Quantitative Finance Summer School	
	A proposal from the Department of Mathematics for the creation of a new Summer School programme composed of three new standalone short courses; 'Introduction to Modern Machine Learning', 'Systematic Trading' and 'Machine Learning and Statistics for Time Series Analysis, with effect from June 2024.	
	Faculty of Medicine	
7.1.5	PC.2023.27 Department of Surgery and Cancer	

	MSc Health Policy (A3G2B / A3GBC / A3G2D / A3G224 / A3G225)
	The revised documentation in response to the recommendations made at the PC meeting held on 25 January 2024.
7.2	Quality Assurance and Enhancement Committee (QAEC)
	PC noted the minutes from the previous QAEC found on the College webpages:
	www.imperial.ac.uk/about/governance/academic-governance/senate-
	subcommittees/quality-assurance-enhancement-committee/
8. Any Other Business	
8.1	The Chair advised that the remaining major modifications have been tabled on SharePoint and information will be distributed to members after the meeting. Members will be asked to review the modifications assigned to them by Friday 5 April 2024.
	The Chair reminded members to contact the Secretary as soon as possible if they have any questions, access issues or concerns about meeting the deadline.
	any questions, access issues of concerns about meeting the deadiline.
8.2	Committee members were thanked for their contributions and the meeting was closed.
0.2	Committee members were transcered to their contributions and the meeting was dissed.