Imperial College London

DEPARTMENT OF BIOENGINEERING Regulations for the award of Honours

BEng/MEng Biomedical Engineering 2024-25

Modules

Compulsory Modules
You must take all seven modules in this table

Code	Title	ECTS	Weight %	Pass- mark	Assessments		
BIOE60005	Bioengineering Group Project	20	36.3	40%	Written report	15%	Literature mind map
					Written report	10%	Literature highlights
					Presentation	20%	Project pitch
					Written report	40%	Final report
					Other	15%	Brochure pitch
BIOE60003	Biomedical Instrumentation	5	9.1	40%	Written exam	50%	Main exam
					Written report	50%	Impedometric respirometer lab report
DIOFOCAL	Probability, Statistics and Data Analysis	5	9.1	40%	Written exam	80%	Main exam
BIOE60011					Problem sheet	20%	Matlab assignment
BIOE60014	Biomechanics	5	9.1	40%	Written exam	70%	Main exam
					Problem sheet	15%	Coursework 1
					Problem sheet	15%	Coursework 2
BIOE60024	Modelling in Biology	5	9.1	40%	Written exam	80%	Main exam
					Problem sheet	10%	Part 1: Deterministic Nonlinear Dynamics
					Problem sheet	10%	Part 2: Stochastic Processes and Networks
BIOE60034	Biomaterials for Bioengineers	5	9.1	40%	Written exam	75%	Main exam
					Quiz	25%	Multiple choice quiz
I-EXPLORE	I-Explore	5	0	Pass/Fail	Set by I- Explore		

Elective modules

You must take two electives from this table

Code	Title	ECTS	Weight %	Pass- mark	Assessments		
BIOE60002	Biomedical Advanced and Computational Stress Analysis	5	9.1	40%	Written exam	75%	Main exam
					Problem sheet	5%	Technical drawing coursework
					Problem sheet	8%	FEA coursework
					Written report	12%	Technical report - stress analysis of a part or assembly
BIOE60006	Digital Biosignal Processing	5	9.1	40%	Written exam	82%	Main exam
					Lab report	6%	Lab exercises report 1
					Lab report	6%	Lab exercises report 2
					Lab report	6%	Lab exercises report 3
BIOE60007	Human Centred Design of Assistive and Rehabilitation Devices	5	9.1	40%	Oral exam	30%	Oral exam
					Written report	10%	Individual report on design
					Written report	10%	Individual report on lecture
					Presentation	40%	Competition
					Written report	10%	Group report
BIOE60008	Image Processing	5	9.1	40%	Written exam	80%	Main exam
					Quiz	20%	Quiz
BIOE60009	Physiological Fluid Mechanics	5	9.1	40%	Written exam	50%	Main exam
					Problem sheet	15%	Problem sheet 1
					Problem sheet	15%	Problem sheet 2
					Quiz	20%	Quiz

Elective table continued on next page...

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BIOE60010	Software Engineering for		9.1	40%	Written report	70%	Project report
		5			Progress test	15%	Programming test
	Bioengineers				Presentation	15%	Planning presentation
BIOE60012	Foundations of Synthetic	5	9.1	400/	Written exam	67%	Main exam
	Biology		9.1	40%	Written report	33%	Experimental lab report
BIOE60013	Tissue Engineering and Regenerative Medicine	5	9.1	40%	Written exam	60%	Main exam
		3			Poster	40%	Poster coursework
BIOE60015	Advanced Imaging Technologies for Systems Biology	5	9.1	40%	Written exam	100%	Main exam
BIOE70012	Biomimetics	5	9.1	50%	Presentation	20%	Journal club
					Poster	80%	Group poster & proposal
BIOE70076	Communicating Biomedical Science and Engineering		9.1	50%	Written report	30%	Teaching activity report
		5			Other	20%	Teacher
					Presentation Written report	20% 30%	Summary presentation Reflective e-journal
COMP60005	Graphics	5	9.1	40%	Set by DoC		
ELEC60002	Statistical Signal Processing and Inference	5	9.1	40%	Set by EEE		
ELEC60004	Machine Reasoning	5	9.1	40%	Set by EEE		
ELEC60008	Control Engineering	5	9.1	40%	Set by EEE		
ELEC60023	Optoelectronics	5	9.1	40%	Set by EEE		
ELEC60029	Semiconductor Devices	5	9.1	40%	Set by EEE		
MECH60001	Machine Dynamics and Vibrations	5	9.1	40%	Set by Mech Eng		
MECH60008	Computational Continuum Mechanics	5	9.1	40%	Set by Mech Eng		
MECH60019	Tribology	5	9.1	40%	Set by Mech Eng		

Explanation of table

For each module:-

- 'ECTS' is an indication of how much time should be spent on the module in total, where 1 ECTS credit is 25-30 hours. This includes all teaching, private study, revision and assessment. There are 60 ECTS in the year.
- 'Weight' shows the contribution to the year mark in percent. I-Explore must be passed but does not contribute to the overall year mark.
- Module 'pass-mark' indicates what mark must be achieved in the module to pass it, taking all assessments in that module into account. This is normally 40% for level 6 and 50% for level 7 modules. A pass/fail module must be passed.
- 'Assessments' indicate the type of each assessment within the module, the weighting of each assessment within the module, and the name of the assessment

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GUIDANCE NOTES

Contribution to final degree marks

MEng year weightings

The weightings of years 1,2,3,4 for the MEng are 7.5%, 20%, 36.25%, 36.25% respectively

Rules for Year 3

- In year 3 students must take all seven compulsory modules and 2 electives
- In order to pass year 3, a student must:
 - o Achieve a Pass in I-Explore
 - Achieve the pass-mark in all other modules
 - o Achieve an aggregate year mark of at least 40%.

What if I fail modules?

Compensation

A module is failed if its overall mark is below the pass-mark. However, under the following circumstances the module may be 'compensated' – ie considered a pass:-

- The module mark can be no further than 10% below the pass-mark.
- Compensation is at Exam Board discretion.
- A student can have no more than 15 ECTS of compensated modules across their whole degree.

Resits

Students are permitted resits in accordance with the Departmental resit policy:-

- In the absence of approved mitigating circumstances, and following any application of any compensation as described above, Year 3 students who have failed modules at first attempt will normally be:
 - offered a capped in-year re-assessment opportunity of failed modules (normally if they have passed at least 45 ECTS in that year of programme.)
 - required by the Exam Board to retake the year in attendance, retake the failed modules, or resit the failed modules'
 assessments in the following year, (normally if they have passed at least 30 ECTS but fewer than 45) in that year of
 programme.
 - o required to withdraw from the programme if they have demonstrated significant failure (as determined by the Exam Board but normally defined as less than 30 ECTS passed at the first assessment opportunity).
- For non-progressing students after in-year re-assessments have taken place, the Board of Examiners' decisions will normally be determined by clauses 163 and 166 of the Regulations of Taught Programmes of Study.
- For students with accepted mitigating circumstances affecting assessments:
 - o It is ultimately the Exam Board that decides on any action to be taken in response to accepted mitigation.
 - o If the module is passed, there is normally no further action, but the mitigation can be taken into account at the final degree exam board (clause 158 of the Regulations of Taught Programmes of Study).
 - If the module is not passed, a deferred attempt at the affected assessment will normally be offered in the summer resit period as an opportunity to progress. If the student has multiple affected assessments, the student can choose to take all or some of these during the summer re-assessment period or return to take them at the next available opportunity. However, advice will be offered to the student by Board of Examiners, the Director of Teaching, the Academic Tutor and the Student Well-being Adviser.