

Part IIA Modules 2026-27

The Faculty Board of Engineering give notice that the modules prescribed for examination in 2027, and the mode of examination for each module, will be as listed below. Candidates must offer 10 modules for examination. Candidates may offer only one module from any one of the sets. Two optional shared Management modules are offered to Part IIA students, with a new compulsory Management module in Part IIB to be taken in 2027-28. Students wishing to gain an accredited degree in Civil Engineering Engineering Area are required to take modules 3D1, 3D3, 3D5 & 3D9 (which counts as a Management module) along with the surveying ExA. Candidates are advised to take note of the conditions of exemption which are set by the professional engineering institutions that accredit the course:
<http://teaching.eng.cam.ac.uk/content/accreditation-meng#coe>.
 p=examination only

Set	Unit	Title	Mode	Notes
Group A: Energy, Fluid Mechanics, and Turbomachinery				
IIAM8&L7	3A1	Fluid Mechanics I	p	Double module
IIAM1&L1	3A3	Fluid Mechanics II	p	Double module
IIAM7	3A5	Thermodynamics and Power Generation	p	
IIAL3	3A6	Heat and Mass Transfer	p	
Group B: Electrical Engineering				
IIAM3	3B1	Radio Frequency Electronics	p	
IIAL3	3B2	Integrated Digital Electronics	p	
IIAM2	3B3	Switch-Mode Electronics	p	
IIAL2	3B4	Electric Drive Systems	p	
IIAM8	3B5	Semiconductor Engineering	p	
IIAL7	3B6	Photonic Technology	p	
Group C: Mechanics, Materials, and Design				
IIAM5	3C1/3P1	Materials Processing and Design (Engineering)	p	Offered by MET as 3P1
IIAL6	3C5	Dynamics	p	
IIAM6	3C6	Vibration	p	
IIAM4	3C7	Mechanics of Solids	p	
IIAM3	3C8	Machine Design	p	
IIAL5	3C9	Fracture Mechanics of Materials and Structures	p	3C7 assumed
Group D: Civil, Structural, and Environmental Engineering				
IIAM1	3D1	Geotechnical Engineering I	p	
IIAL1	3D2	Geotechnical Engineering II	p	3D1 assumed
IIAL2	3D3	Structural Materials and Design	p	
IIAM2	3D4	Structural Analysis and Stability	p	
IIAM10	3D5	Hydraulics	p	
IIAL4	3D7	Finite Element Methods	p	
IIAL5	3D9	Construction Management	p	E module for Civils.
Group E: Management and Manufacturing				
		No modules in Group E		
Group F: Information Engineering				
IIAM5	3F1	Signals and Systems	p	
IIAL5	3F2	Systems and Control	p	
IIAM1	3F3	Statistical Signal Processing	p	
IIAL6	3F4	Data Transmission	p	
IIAM4	3F7	Information Theory and Coding	p	
IIAL4	3F8	Inference	p	3F3 assumed
Group G: Bioengineering				
IIAM2	3G1	Molecular Bioengineering I	p	

IIAL3	3G2	Mathematical Physiology	p	
IIAL2	3G3	Introduction to Neuroscience	p	
IIAL1	3G4	Medical Imaging and 3-D Computer Graphics	p	
IIAM8	3G5	Biomaterials	p	
Group M: Multidisciplinary modules				
IIAL10	3M1	Mathematical Methods	p	
Group S: Modules shared with Part IIB				
IIAM7	4C4	Design Methods	p	Shared module
IIAM10	4E4	Management of Technology	p	Shared module
IIAM7	4E6	Accounting and Finance	p	Shared module
IIAL9	4M12	Partial Differential Equations and Variational Methods	p	Shared module
IIAL9	4M16	Nuclear Power Engineering	p	Shared module
IIAL9	4M21	Software Engineering and Design	p	Shared module
Part IIA Sets Michaelmas Term 2026-27				
Set	Unit	Title	Mode	Notes
IIAM1	3A3	Fluid Mechanics II	p	Double module
	3D1	Geotechnical Engineering I	p	
	3F3	Statistical Signal Processing	p	
IIAM2	3B3	Switch-Mode Electronics	p	
	3G1	Molecular Bioengineering I	p	
	3D4	Structural Analysis and Stability	p	
IIAM3	3B1	Radio Frequency Electronics	p	
	3C8	Machine Design	p	
IIAM4	3C7	Mechanics of Solids	p	
	3F7	Information Theory and Coding	p	
IIAM5	3C1	Materials Processing and Design	p	Offered by MET as 3P1
	3F1	Signals and Systems	p	
IIAM6	3C6	Vibration	p	
IIAM7 - Shared and non-shared modules	3A5	Thermodynamics and Power Generation	p	
	4C4	Design Methods	p	Shared with IIB
	4E6	Accounting and Finance	p	Shared with IIB and Judge
IIAM8	3A1	Fluid Mechanics I	p	Double module
	3B5	Semiconductor Engineering	p	
	3G5	Biomaterials	p	
IIAM9 (Lectures) - Shared modules - No modules 26/27				
IIAM10 (PM) - Shared and non-shared	4E4	Management of Technology	p	Shared with IIB

modules	3D5	Hydraulics	p	
Part IIA Sets Lent Term 2026-27				
Set	Unit	Title	Mode	Notes
IIAL1	3A3	Fluid Mechanics II	p	Double module
	3D2	Geotechnical Engineering II	p	3D1 assumed
	3G4	Medical Imaging & 3-D Computer Graphics	p	
IIAL2	3B4	Electric Drive Systems	p	
	3D3	Structural Materials and Design	p	
	3G3	Introduction to Neuroscience	p	
IIAL3	3A6	Heat and Mass Transfer	p	
	3B2	Integrated Digital Electronics	p	
	3G2	Mathematical Physiology	p	
IIAL4	3D7	Finite Element Methods	p	
	3F8	Inference	p	3F3 assumed
IIAL5	3C9	Fracture Mechanics of Materials & Structures	p	3C7 assumed
	3D9	Construction Management	p	E module for Civils
	3F2	Systems and Control	p	
IIAL6	3C5	Dynamics	p	
	3F4	Data Transmission	p	
IIAL7	3A1	Fluid Mechanics I	p	Double module
	3B6	Photonic Technology	p	
IIAL8 (PM lectures) - no modules 26/27				
IIAL9	4M12	Partial Differential Equations and Variational Methods	p	Shared with IIB.
	4M16	Nuclear Power Engineering	p	Shared with IIB.
	4M21	Software Engineering	p	Shared with IIB.
IIAL10	3M1	Mathematical Methods	p	