

Engineering Tripos, Part IIA, 2016-17: Notice

The Faculty Board of Engineering give notice that the modules prescribed for the examinations to be held in 2017, and the mode of examination for each module, will be as follows:

Unit	Title	Set	Mode	Notes
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Group A: Energy, Fluid Mechanics, and Turbomachinery

3A1	Fluid Mechanics I	IIAM8&L7	p	Double module
3A3	Fluid Mechanics II	IIAM1&L1	p	Double module
3A5	Thermodynamics and Power Generation	IIAM7	p	
3A6	Heat and Mass Transfer	IIAL3	p	

Group B: Electrical Engineering

3B1	Radio Frequency Electronics	IIAM3	p	
3B2	Integrated Digital Electronics	IIAL3	p	
3B3	Switch-Mode Electronics	IIAM2	p	
3B4	Electric Drive Systems	IIAL2	p	
3B5	Semiconductor Engineering	IIAM11	p	
3B6	Photonic Technology	IIAL7	p	

Group C: Mechanics, Materials, and Design

3C1	Materials Processing and Design (Engineering)	IIAM5	p	Also runs as MET 3P1
3C5	Dynamics	IIAM6	p	
3C6	Vibration	IIAL6	p	
3C7	Mechanics of Solids	IIAM4	p	
3C8	Machine Design	IIAM3	p	
3C9	Fracture Mechanics of Materials and Structures	IIAL5	p	

Group D: Civil, Structural, and Environmental Engineering

3D1	Geotechnical Engineering I	IIAM1	p	
3D2	Geotechnical Engineering II	IIAL1	p	
3D3	Structural Materials and Design	IIAM2	p	
3D4	Structural Analysis and Stability	IIAL2	p	
3D5	Water Engineering	IIAM11	p	
3D7	Finite Element Methods	IIAL4	p	
3D8	Building Physics and Environmental Geotechnics	IIAM3	p	

Key:

Sets M = Michaelmas L = Lent
Assessment p = exam only p+c = exam and coursework

Unit	Title	Set	Mode	Notes
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Group E: Management and Manufacturing

3E1	Business Economics	IIAL9	p	
3E2	Marketing	IIAM10	p	
3E3	Modelling Risk	IIAM9	p	
3E5	Human Resource Management	IIAM10	p	
3E6	Organisational Behaviour	IIAL10	p	
3E10	Operations Management for engineers	IIAL9	p	

Group F: Information Engineering

3F1	Signals and Systems	IIAM4	p	
3F2	Systems and Control	IIAL5	p	
3F3	Statistical Signal Processing	IIAM1	p	Moves from LT to MT
3F4	Data Transmission	IIAL6	p	
3F7	Information Theory	IIAM5	p	
3F8	Inference	IIAL4	p	-

Group G: Bioengineering

3G1	Introduction to Molecular Bioengineering	IIAM7	p	
3G2	Mathematical Physiology	IIAL3	p	
3G3	Introduction to Neuroscience	IIAL2	p	
3G4	Medical Imaging and 3-D Computer Graphics	IIAL11	p	
3G5	Biomaterials	IIAM9	p	

Group M: Multidisciplinary modules

3M1	Mathematical Methods	IIAL10	p	
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Group S: Modules shared with Part IIB

4C4	Design Methods	IIAM11	p	Shared module
4D16	Construction Management	IIAM8/IIBM9	p	Shared module. Alts with 4D8
4M12	Partial Differential Equations and Variational Methods	IIAL11	p	Shared module
4M16	Nuclear Power Engineering	IIAL11	p	Shared module

Candidates must offer 10 modules for examination. Candidates may offer only one module from any one of the sets. Students may not take more than two management modules.

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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	
	3D3	Structural Materials and Design	p	
IIAM3	3B1	Radio Frequency Electronics	p	
	3C8	Machine Design	p	
	3D8	Building Physics and Environmental Geotechnics	p	
IIAM4	3C7	Mechanics of Solids	p	
	3F1	Signals and Systems	p	
IIAM5	3C1	Materials Processing and Design	p	
	3F7	Information Theory	p	
IIAM6	3C5	Dynamics	p	
IIAM7	3A5	Thermodynamics and Power Generation	p	
	3G1	Introduction to Molecular Bioengineering	p	
IIAM8	3A1	Fluid Mechanics I	p	Double module
	4D16	Construction Management	p	Shared module. Alts with 4D8
IIAM9	3E3	Modelling Risk	p	
	3G5	Biomaterials	p	
IIAM10	3E2	Marketing	p	
	3E5	Human Resource Management	p	
IIAM11	4C4	Design Methods	p	Shared module
	3B5	Semiconductor Engineering	p	
	3D5	Water Engineering	p	

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Set	Unit	Title	Mode	Notes
IIAL1	3A3	Fluid Mechanics II	p	Double module
	3D2	Geotechnical Engineering II	p	
IIAL2	3B4	Electric Drive Systems	p	
	3D4	Structural Analysis and Stability	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	
IIAL5	3C9	Fracture Mechanics of Materials and Structures	p	
	3F2	Systems and Control	p	
IIAL6	3C6	Vibration	p	
	3F4	Data Transmission	p	
IIAL7	3A1	Fluid Mechanics I	p	Double module
	3B6	Photonic Technology	p	
IIAL9	3E1	Business Economics	p	
	3E10	Operations Management for engineers	p	
IIAL10	3E6	Organisational Behaviour	p	
	3M1	Mathematical Methods	p	
IIAL11	4M12	Partial Differential Equations and Variational Methods	p	Shared module
	4M16	Nuclear Power Engineering	p	Shared module
	3G4	Medical Imaging and 3-D Computer Graphics	p	

Key: **Blue** – module has moved set or term **Red** - new module for 2016-17