

Part IIA Modules 2019-20

The Faculty Board of Engineering give notice that the modules prescribed for examination in 2020, 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. Students may not take more than two management modules.

p=examination only

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

3A1	Fluid Mechanics I	IIM8&L7	p	Double module
3A3	Fluid Mechanics II	IIM1&L1	p	Double module
3A5	Thermodynamics and Power Generation	IIM7	p	
3A6	Heat and Mass Transfer	IIL3	p	

Group B: Electrical Engineering

3B1	Radio Frequency Electronics	IIM3	p	
3B2	Integrated Digital Electronics	IIL3	p	
3B3	Switch-Mode Electronics	IIM2	p	
3B4	Electric Drive Systems	IIL2	p	
3B5	Semiconductor Engineering	IIM8	p	
3B6	Photonic Technology	IIL7	p	

Group C: Mechanics, Materials, and Design

3C1/3P1	Materials Processing and Design (Engineering)	IIM5	p	Offered by MET as 3P1
3C5	Dynamics	IIM6	p	
3C6	Vibration	IIL6	p	
3C7	Mechanics of Solids	IIM4	p	
3C8	Machine Design	IIM3	p	
3C9	Fracture Mechanics of Materials and Structures	IIL5	p	

Group D: Civil, Structural, and Environmental Engineering

3D1	Geotechnical Engineering I	IIM1	p	
3D2	Geotechnical Engineering II	IIL1	p	
3D3	Structural Materials and Design	IIM2	p	
3D4	Structural Analysis and Stability	IIL2	p	
3D5	Water Engineering	IIM10	p	
3D7	Finite Element Methods	IIL4	p	
3D8	Building Physics and Environmental Geotechnics	IIM3	p	

Group E: Management and Manufacturing

3E1	Business Economics	IIM9	p	
3E2	Marketing	IIM9	p	
3E3	Modelling Risk	IIL8	p	
3E6	Organisational Behaviour	IIL8	p	
3E10	Operations Management for Engineers	IIL8	p	
3E11	Environmental Sustainability & Business	IIM9	p	

Group F: Information Engineering

3F1	Signals and Systems	IIM4	p	
3F2	Systems and Control	IIL5	p	
3F3	Statistical Signal Processing	IIM1	p	
3F4	Data Transmission	IIL6	p	
3F7	Information Theory and Coding	IIM5	p	
3F8	Inference	IIL4	p	

Group G: Bioengineering

3G1	Introduction to Molecular Bioengineering	IIM7	p	
3G2	Mathematical Physiology	IIL3	p	
3G3	Introduction to Neuroscience	IIL2	p	
3G4	Medical Imaging and 3-D Computer Graphics	IIL1	p	
3G5	Biomaterials	IIM8	p	

Group M: Multidisciplinary modules

3M1	Mathematical Methods	IIL10	p	
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Group S: Modules shared with Part IIB

4C4	Design Methods	IIM7	p	Shared module
4M12	Partial Differential Equations and Variational Methods	IIL9	p	Shared module
4M16	Nuclear Power Engineering	IIL9	p	Shared module

Part IIA Sets Michaelmas Term 2019-20

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	Offered by MET as 3P1
	3F7	Information Theory and Coding	p	
IIAM6	3C5	Dynamics	p	
IIAM7	3A5	Thermodynamics and Power Generation	p	
	3G1	Introduction to Molecular Bioengineering	p	
	4C4	Design Methods	p	Shared with IIB
IIAM8	3A1	Fluid Mechanics I	p	Double module
	3B5	Semiconductor Engineering	p	
	3G5	Biomaterials	p	
IIAM9 (PM lectures)	3E1	Business Economics	p	
	3E2	Marketing	p	
	3E11	Environmental Sustainability & Business	p	
IIAM10 (PM)	3D5	Water Engineering	p	

Part IIA Sets Lent Term 2019-20

Set	Unit	Title	Mode	Notes
IIAL1	3A3	Fluid Mechanics II	p	Double module
	3D2	Geotechnical Engineering II	p	
	3G4	Medical Imaging & 3-D Computer Graphics	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 & 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	
IIAL8 (PM lectures)	3E3	Modelling Risk	p	
	3E6	Organisational Behaviour	p	
	3E10	Operations Management for engineers	p	
IIAL9	4M12	Partial Differential Equations and Variational Methods	p	Shared with IIB
	4M16	Nuclear Power Engineering	p	Shared with IIB
IIAL10	3M1	Mathematical Methods	p	