

General Scheme 2020/21 (06-10-20)				Grey shading = to be confirmed		
Year	Paper	Course Title	Lecturer(s)	Student Hours per Term		
				MT	HT	TT
UG Y1	Y1 Coursework & Other Elements	Induction & Tour of the Department	Prof P.D. Nellist, Prof T.J. Marrow, Ms P.J. Moss & others	3		
UG Y1	Y1 Coursework & Other Elements	Introduction to the Prelims Programme	Prof C.R.M. Grovenor	1		
UG Y1	Y1 Coursework & Other Elements	Teaching, Study Skills & Learning Development	Prof T.J. Marrow + Prof P.D. Nellist	1		
UG Y1	Y1 Coursework & Other Elements	The IOM3 - Benefits of Student Membership	S. Boad, Institute of Materials	1		
UG Y1	Y1 Coursework & Other Elements	Engineering Drawing & CAD Classes	P. Balley (Eng Sci)		6	
UG Y1	Y1 Coursework & Other Elements	Looking to the Future - Career planning	Dr A. Evans (OUCaS)		1	
UG Y1	Y1 Coursework & Other Elements	*Foreign Language (optional)	OU Language Centre			
UG Y1	Y1 Coursework & Other Elements	*Industrial Visits (subject to availability of places)	Dr E. Liotti			
UG Y1	Y1 Coursework & Other Elements	*MatSoc Visits & Talks				
UG Y1	Y1 Coursework & Other Elements	Part I FHS Y2 Options Briefing	Prof T.J. Marrow, Ms P.J. Moss			1
UG Y1	Y1 Coursework & Other Elements	Practical Course Meetings	Prof S. Lozano-Perez	1	1	1
UG Y1	Y1 Coursework & Other Elements	Workshop on (i) Writing a Full Report on a Practical and (ii) Keeping a Good Laboratory Notebook	Prof S. Lozano-Perez	2		
UG Y1	Y1 Coursework & Other Elements	Introduction to Computing	Dr P.J. Warren	3		
UG Y1	Y1 Coursework & Other Elements	Introduction to Errors in Measurement ( 2 lectures + 1 class)	Prof J.M. Smith	2	1	
UG Y1	Y1 Coursework & Other Elements	Industrial Placements Briefing	tbc (vice AOT)		1	
UG Y1	Y1 Coursework & Other Elements	Summer Exchange Risk Assessment and Safety Briefing	tbc (vice AOT & PAJB)			1
UG Y1	Y1 Coursework & Other Elements	Individual Review of Summer Exchange Risk Assessments	tbc (vice AOT & PAJB)			0.25
UG Y1	Y1 Coursework & Other Elements	PC1:Practical Course (58h)	Various staff - see appendix for SDs and DSDs	22	24	12
UG Y1	Y1 Coursework & Other Elements	JCCU 1st Year 2-way feedback	Y1 JCCU Representatives	1	1	1
UG Y1	Y1 Coursework & Other Elements	Computing for Materials Science (MATLAB-based)	Prof J.R. Yates	6	6	
UG Y1	Y1 Coursework & Other Elements	Crystal model building class + Crystallography Classes	Prof M.R. Castell + Dr E. Dambrough & Dr. T. Slater	3+9	9	
UG Y1	<b>MS1: 40L; Paper Lead = PDN</b>					
UG Y1	MS1: Physical Foundations of Materials	The Study of Crystalline Materials by Diffraction	Prof A.I. Kirkland	8		
UG Y1	MS1: Physical Foundations of Materials	Electromagnetic Properties and Devices	Prof S.C. Speller		12	
UG Y1	MS1: Physical Foundations of Materials	Random Processes and Statistical Physics	Prof R.S. Weatherup	8		
UG Y1	MS1: Physical Foundations of Materials	Wave Mechanics, Quantum Theory and Bonding	Dr R.J. Nicholls + Prof P.D. Nellist		6	6
UG Y1	<b>MS2: 40L; Paper Lead = DEJA</b>					
UG Y1	MS2: Structure and Mechanical Properties of Materials	Elastic Deformation	Prof A.J. Wilkinson	8		
UG Y1	MS2: Structure and Mechanical Properties of Materials	Structures of Crystalline and Glassy Materials	Prof M.L. Galano + Prof K.A.Q. O'Reilly	8	4	
UG Y1	MS2: Structure and Mechanical Properties of Materials	Defects in Crystals	Prof M.R. Castell		8	
UG Y1	MS2: Structure and Mechanical Properties of Materials	Mechanical Properties	Prof D.E.J. Armstrong			12
UG Y1	<b>MS3: 40L; Paper Lead = CRMG</b>					
UG Y1	MS3: Transforming Materials	Thermodynamics	Prof M.P. Moody	8		
UG Y1	MS3: Transforming Materials	Introduction to Nanomaterials	Prof N. Grobert			8
UG Y1	MS3: Transforming Materials	Microstructure and Processing of Materials I	Prof C.R.M. Grovenor	8		
UG Y1	MS3: Transforming Materials	Electrochemistry	Prof M. Pasta		8	
UG Y1	MS3: Transforming Materials	Microstructure and Processing of Materials II	Prof C.R.M. Grovenor			8
UG Y1	<b>MS4: 37L; Paper Lead = JRY</b>					
UG Y1	MS4: Mathematics for Materials Science	Ordinary & Partial Differentiation	Dr E. Liberti	7		
UG Y1	MS4: Mathematics for Materials Science	Vectors & Matrices (inc. vector calculus)	Prof S.C. Benjamin	11		
UG Y1	MS4: Mathematics for Materials Science	Taylor Series and Limits	Dr N. Ares		3	
UG Y1	MS4: Mathematics for Materials Science	Integration + Complex Numbers	Dr A. Robertson		5+4	
UG Y1	MS4: Mathematics for Materials Science	Ordinary Differential Equations	Dr N. Ares		6	

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UG Y2	Y2 Coursework & Other Elements	Introduction to the Pt I Materials Programme	Prof. T.J. Marrow	1		
UG Y2	Y2 Coursework & Other Elements	Maths - Partial Differential Equations & Fourier Series + Tensors	Prof S.C. Benjamin + Prof. G.A.D. Briggs	8+4		
UG Y2	Y2 Coursework & Other Elements	Entrepreneurship / Business Plan (Understanding Intellectual Property)	Enterprising Oxford	2		
UG Y2	Y2 Coursework & Other Elements	Entrepreneurship / Business Plan (Workshop on 'Teams')	Dr E. Williams	2		
UG Y2	Y2 Coursework & Other Elements	Entrepreneurship / Business Plan (Workshop on 'Finance' & 'The Business Model Canvas')	Mr S.P. Newbury (Williams)	2		
UG Y2	Y2 Coursework & Other Elements	Entrepreneurship / Business Plan (Introductory Tutorial on the Business Plan Team Project)	Dr S.M. Wilkinson	3		
UG Y2	Y2 Coursework & Other Elements	Entrepreneurship / Business Plan (workshops)	Dr S.M. Wilkinson		4	
UG Y2	Y2 Coursework & Other Elements	Entrepreneurship / Business Plan (tutorials)	Dr S.M. Wilkinson		6	
UG Y2	Y2 Coursework & Other Elements	Entrepreneurship / Business Plan (case study)	Mr H. Dickinson (Nortall)			2
UG Y2	Y2 Coursework & Other Elements	Presentation Skills Workshop (Business Plan Team Presentations)	tbc (vice AOT)			1
UG Y2	Y2 Coursework & Other Elements	Business Plan Team Presentations	Mr S.P. Newbury (Williams), Mr H. Dickinson (Nortall) & Prof. H. Bhaskaran			4
UG Y2	Y2 Coursework & Other Elements	Introduction to Industrial Visits	Dr E. Liotti	1		
UG Y2	Y2 Coursework & Other Elements	Industrial Visits	Dr E. Liotti	4	4	4
UG Y2	Y2 Coursework & Other Elements	Industrial Talks	Johnson Matthey + Rolls Royce + Tata Steel	2	2	
UG Y2	Y2 Coursework & Other Elements	*MatSoc Visits & Talks				
UG Y2	Y2 Coursework & Other Elements	Industrial Placements Briefing	tbc (vice AOT)		1	
UG Y2	Y2 Coursework & Other Elements	Summer Exchange Risk Assessment and Safety Briefing	tbc (vice AOT & PAJB)			1
UG Y2	Y2 Coursework & Other Elements	Individual Review of Summer Exchange Risk Assessments	tbc (vice AOT & PAJB)			0.25
UG Y2	Y2 Coursework & Other Elements	Practical Course meetings	Prof S. Lozano-Perez	1	1	1
UG Y2	Y2 Coursework & Other Elements	Practical Course (108h)	Various staff - see appendix for SDs and DSDs	36	36	36
UG Y2	Y2 Coursework & Other Elements	Poster presentation skills workshop	tbc (vice AOT) & D. Baker (OUCS)	2		
UG Y2	Y2 Coursework & Other Elements	JCCU 2nd Year 2-way feedback	Y2 JCCU Representatives	1	1	1
UG Y2	<b>GP1: Lifecycle, Processing &amp; Engineering of Materials; 38L; Paper Lead = HEA</b>					
UG Y2	GP1: Selection & Production of Engineering Materials	Materials Selection + Production of Base Materials	Prof H.E. Assender & Prof M.L. Galano (5+5)	4		6
UG Y2	GP1: Processing for Control of Materials Properties and Performance	Thermal & Chemical Treatments + Additive Manufacturing + Mechanical Treatments	Prof R.C. Reed & Prof A.J. Wilkinson			8+8
UG Y2	GP1: Materials End-of-Life	Introduction to Lifecycle of Materials + Environmental Degradation and Protection + Sustainability and Recycling	Prof H.E. Assender & Prof S. Lozano-Perez		1+8+3	
UG Y2	<b>GP2: Electronic Properties of Materials; 40L; Paper Lead = MRC</b>					
UG Y2	GP2: Electronic Properties of Materials	Electronic Structure of Materials	Dr C.E. Patrick	12		
UG Y2	GP2: Electronic Properties of Materials	Semiconductor Materials & Devices	Dr M. Rothmann & Dr R.S. Bonilla		10	
UG Y2	GP2: Electronic Properties of Materials	Magnetic Properties of Materials	Prof J.R. Yates			10
UG Y2	GP2: Electronic Properties of Materials	Electrical & Optical Properties of Materials	Prof M.R. Castell			8
UG Y2	<b>GP3: Mechanical Properties of Materials; 36L; Paper Lead = TJM</b>					
UG Y2	GP3: Elastic Deformation of Materials	Elasticity + Elastic Properties of Composites + Deformation of Polymers	Prof P.D. Nellist & Prof J.T. Czernuszka	5+2+3		
UG Y2	GP3: Plastic Deformation of Materials	Dislocations + Strengthening Mechanisms	Prof E. Tarleton & Prof T.J. Marrow		6+4	
UG Y2	GP3: Structural Failure of Materials	Fracture of Materials + Lifetime of Materials	Prof R.I. Todd & Prof R.C. Reed		8	8
UG Y2	<b>GP4: Structure &amp; Thermodynamics of Materials; 40L; Paper Lead = MPM</b>					
UG Y2	GP4: Statistical Mechanics & Thermal Properties of Materials	Statistical Mechanics & Thermal Properties of Materials	Prof J.M. Smith	8		
UG Y2	GP4: Structural & Compositional Characterisation of Materials	Structural & Compositional Characterisation of Materials	Prof M.P. Moody & Prof S. Lozano-Perez		8	8
UG Y2	GP4: Phase Transformations	Diffusion + Surfaces, Interfacial Structure and Mobility + Phase Transformations + Ternary Phase Diagrams	Prof C.R.M. Groveron	16		
UG Y2	Supplementary Subjects & Foreign Languages	History & Philosophy of Science: The Origins of Science	Prof R. Iliffe & Dr S. Allen	8	8	
UG Y2	Supplementary Subjects & Foreign Languages	Quantum Chemistry	Prof D.E. Manolopoulos, Prof S. R. Mackenzie, Prof J.E. Mc Grady & Dr W. Barford	16	16	
UG Y2	Supplementary Subjects & Foreign Languages	Foreign Language Option	OU Language Centre			

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Year	Paper	Course Title	Lecturer(s)	Student Hours per Term		
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UG Y3	Y3 Coursework & Other Elements	Briefing for TDP (Full-time MT wks 1,2 plus presentations Fri pm MT wk3)	Prof. A.A.R. Watt	1		
UG Y3	Y3 Coursework & Other Elements	Workshop on Team Presentation Skills ( a one-off since CVD-19 prevented the usual training associated with the non-assessed Y2 Business Plan talks for this Y3 cohort)	Dr A.O. Taylor	1		
UG Y3	Y3 Coursework & Other Elements	TDP workshop on Markets & Market Disruptors	Mr S.P. Newbury (Williams)	1		
UG Y3	Y3 Coursework & Other Elements	TDP Presentations	FHS Examiners & others	4		
UG Y3	Y3 Coursework & Other Elements	Briefing for Characterisation/Modelling Courses	Prof M.P. Moody & Prof J.R. Yates	1		
UG Y3	Y3 Coursework & Other Elements	Introduction to Modelling in Materials Science (Taught elements full-time MT wk6; project work in parallel with OP1 lectures/classes MT wks 7,8)	Prof J.R. Yates + Prof R. Drautz + tbc	56?	56	
UG Y3	Y3 Coursework & Other Elements	Advanced Characterisation of Materials (Full-time HT wks 4,5)	Prof M.P. Moody, Prof M.L. Galano, Prof N. Grobert (includes specified lectures by CSA, PDN(2), tbc - vice SGR, JMT, tbc - vice KP, SCS & tbc SLP).		58?	
UG Y3	Y3 Coursework & Other Elements	Atomistic Modelling (Full-time HT wks 4,5)	Dr C.E. Patrick & Prof. J.R. Yates		56?	
UG Y3	Y3 Coursework & Other Elements	Industrial Visits	Dr E. Liotti	4	4	
UG Y3	Y3 Coursework & Other Elements	MatSoc Visits & Talks				
UG Y3	Y3 Coursework & Other Elements	Part II External Projects	Prof K.A.Q. O'Reilly	1		
UG Y3	Y3 Coursework & Other Elements	Part II Open Day	Prof K.A.Q. O'Reilly & Prof P.D. Nellist		3	
UG Y3	Y3 Coursework & Other Elements	DPhil Poster Competition	Dr A.O. Taylor		2	
UG Y3	Y3 Coursework & Other Elements	Workshop on Answering Finals Exam Questions (normally TT wk 0)	Prof T.J. Marrow	2		
UG Y3	Y3 Coursework & Other Elements	Summer Exchange Risk Assessment and Safety Briefing	tbc (vice AOT & PAJB)			1
UG Y3	Y3 Coursework & Other Elements	Individual Review of Summer Exchange Risk Assessments	tbc (vice AOT & PAJB)			0.25
UG Y3	Y3 Coursework & Other Elements	Industrial Placements Briefing	tbc (vice AOT)		1	
UG Y3	Y3 Coursework & Other Elements	Super-Collections' Feedback	Various Staff	4		
UG Y3	Y3 Coursework & Other Elements	JCCU 3rd Year 2-way feedback	Y3 JCCU Representatives	1	1	
UG Y3	OP1: Materials Options Lecture Courses; candidates select three from five lecture courses (each comprising 12 lectures and 3 tutorial classes). Taught mainly during MT wks 3,4,5,7,8 & HT wk1					
UG Y3	OP1 Materials Options 1	Materials & Devices for Optics & Optoelectronics	Prof J.M. Smith	12		
UG Y3	OP1 Materials Options 1	Nanomaterials	Prof N. Grobert + Prof. K. Porfyakis + Prof H. Bhaskaran	4+4+4		
UG Y3	OP1 Materials Options 1	Prediction of Materials Properties	Dr C.E. Patrick	12		
UG Y3	OP1 Materials Options 1	Engineering Ceramics: Synthesis & Properties	Prof R.I. Todd	12		
UG Y3	OP1 Materials Options 1	Advanced Manufacture with Metals & Alloys: Processing, Joining & Shaping	Dr E. Liotti + Prof K.A.Q. O'Reilly	6+6		
UG Y3	OP2: Materials Options Lecture Courses; candidates select three from five lecture courses (each comprising 12 lectures and 3 tutorial classes). Taught mainly during HT wks 1,2,3,6,7,8 & TT wk1					
UG Y3	OP2 Materials Options 2	Advanced Engineering Alloys & Composites	Prof M.L. Galano + Prof D.E.J. Armstrong		7+5	
UG Y3	OP2 Materials Options 2	Devices	Prof C.R.M. Grovenor + Prof S.C. Speller + Prof P.R. Wilshaw		4+4+4	
UG Y3	OP2 Materials Options 2	Biomaterials & Natural Materials	Prof J.T. Czernuszka		12	
UG Y3	OP2 Materials Options 2	Advanced Polymers	Prof H.E. Assender + Dr M. Lefferts		8+4	
UG Y3	OP2 Materials Options 2	Materials for Energy Production, Distribution & Storage	Prof T.J. Marrow + Dr P. Adamson		6+6	

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Year	Paper	Course Title	Lecturer(s)	Student Hours per Term		
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UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	MS Pt II Induction & Project Management	Prof K.A.Q. O'Reilly & G. Litchfield (QinetiQ)	7		
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	Information Skills. Managing Your References	L. Ristic (RSL)	2		
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	Workshops on Ethics & Sustainability, in the context of Part II	Prof L. Brimacombe & Dr S. Job (coordinated by Mr S.P. Newbury)	3	6	
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	Workshop on Engineering/Scientific Context in respect of Part II Projects	Prof R.C. Reed	1		
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	DPhil Open Day	Dr A.O. Taylor & Prof P.D. Nellist	2		
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	Part II Writing Skills, Plagiarism, Laboratory Notebooks, IPR and Patents	Prof H. E. Assender & Dr P.J. Warren		3	
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	MatLab Introduction (Refresher) + 'Next-level' (special version delivered in TT20)	Prof J.R. Yates	3+3		
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	LabVIEW Introduction (Refresher)	Prof A.A.R. Watt & Dr F. Vigneau & tbc	3		
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	Patent Literature	tbc (RSL)	2		
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	Presentation Skills: PowerPoint, Modern A/V Technology, PPT for Posters, Practical Tips	Dr A.O. Taylor & D. Baker (OUCS)		6	
UG Y4	<b>Y4 Coursework &amp; Other Elements</b>	DPhil Poster Competition	Dr A.O. Taylor		2	
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	Technology & Knowledge Transfer	Chim Chu & others (ISIS Innovation) tbc			2
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	MS Part II talks	Prof K.A.Q. O'Reilly & others			14
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	Careers & Networking Evening with Alumni	Dr A.O. Taylor & others	2		
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	<sup>16</sup> Foreign Language	OU Language Centre			
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	<sup>17</sup> Industrial Visits (subject to availability of places)	Dr E. Liotti	4	4	4
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	<sup>18</sup> MatSoc Visits & Talks				
UG Y4	<b>Y4 Other Elements (bold = compulsory for MS)</b>	The OU Careers Service - Active Job Hunting	Dr A. Evans (OUcAS)	1		
UG Y4	<b>Y4 Coursework &amp; Other Elements</b>	JCCU 4th Year 2-way feedback	Y4 JCCU Representatives	1	1	

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Year	Paper	Course Title	Lecturer(s)	Student Hours per Term		
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PGR	Postgraduate Training (bold = compulsory)	Safety (Compulsory for new students)	Ian Bishop	1	1	1
PGR	Postgraduate Training (bold = compulsory)	Hydrofluoric Acid Safety	tbc Dr P.A.J. Bagot	1	1	1
PGR	Postgraduate Training (bold = compulsory)	Laser Safety	Dept of Physics	2	1	1
PGR	Postgraduate Training (bold = compulsory)	Induction course for Postgraduate students	Dr A.O. Taylor & others	9		
PGR	Postgraduate Training (bold = compulsory)	Intro to the MPLSD Graduate School and Grad Academic Programme (GAP)	Prof D. Gavaghan		1	
PGR	Postgraduate Training (bold = compulsory)	The IOM3 - Benefits of Student Membership	S. Boad, Institute of Materials	1		
PGR	Postgraduate Training (bold = compulsory)	Dept. of Materials Mechanical Workshop - Induction & Safety	Les Chorley & others	1	1 <sup>4</sup>	
PGR	Postgraduate Training (bold = compulsory)	Looking to the Future - What do Employers Seek?	tbc (OUCaS), Dr A.O. Taylor, tbc (vice Rolls Royce), Dr M. Saran (HSBC)	2		
PGR	Postgraduate Training (bold = compulsory)	Optical Microscopy	Prof P.D. Nellist	2		
PGR	Postgraduate Training (bold = compulsory)	Information Skills	tbc (RSL)	2		
PGR	Postgraduate Training (bold = compulsory)	Managing your References	tbc (RSL)		2	
PGR	Postgraduate Training (bold = compulsory)	Patent Literature	tbc (RSL)	2		
PGR	Postgraduate Training (bold = compulsory)	X-ray Diffractometry	Prof. S.C. Speller	2		
PGR	Postgraduate Training (bold = compulsory)	Project Management	Dr P.D. Warren (NSG) & Dr A.O. Taylor	4		
PGR	Postgraduate Training (bold = compulsory)	Presentation Skills: PowerPoint, Modern A/V Technology, PowerPoint for Posters, Practical Tips	D. Baker (OUCS) & Dr A.O. Taylor		6	
PGR	Postgraduate Training (bold = compulsory)	2nd Year DPhil Talks	Drs A.O. Taylor & J.L. Hutchison + All Academic Staff			-2
PGR	Postgraduate Training (bold = compulsory)	Writing Skills, Plagiarism, Laboratory Notebooks, IPR & Patents	Prof H. E. Assender & Dr P.J. Warren			3
PGR	Postgraduate Training (bold = compulsory)	Academic Writing (for overseas students)	tbc (OULC)			10
PGR	Postgraduate Training (bold = compulsory)	The OU Careers Service - Active Job Hunting	Dr A. Evans (OUCaS)	1		
PGR	Postgraduate Training (bold = compulsory)	Careers & Networking Evening with Alumni	Dr A.O. Taylor & others	2		
PGR	Postgraduate Training (bold = compulsory)	Industrial Visits (subject to availability of places)	Dr E. Lotti	4	4	4
PGR	Postgraduate Training (bold = compulsory)	Industrial Talks	Johnson Matthey + Rolls Royce + Tata Steel	2	2	
PGR	Postgraduate Training (bold = compulsory)	MatSoc Visits & Talks				
PGR	Postgraduate Training (bold = compulsory)	Poster Presentation Skills & DPhil Poster Competition	Dr A.O. Taylor	1	4	
PGR	Postgraduate Training (bold = compulsory)	Foreign Language	OU Language Centre			
PGR	Postgraduate Training (bold = compulsory)	Technology & Knowledge Transfer tbc	Chim Chu & others (ISIS Innovation) tbc			2
PGR	Postgraduate Training (bold = compulsory)	Preparing an Article for Submission to a Materials Journal	Prof R.I. Todd			1
PGR	Postgraduate Training (bold = compulsory)	Teaching Skills: Tutoring Maths Classes	Prof J.R. Yates	3		
PGR	Postgraduate Training (bold = compulsory)	Teaching Skills: Materials Options Classes (this workshop is run only if required)	Prof M.L. Galano			3
PGR	Postgraduate Training (bold = compulsory)	Teaching Skills: Tutoring Materials Science	Prof S.C. Speller	3		
PGR	Postgraduate Training (bold = compulsory)	Teaching Skills: Junior Demonstrating	Prof S. Lozano-Perez & tbc	3		
PGR	Postgraduate Training (bold = compulsory)	Teaching Skills: Delivering a UG Lecture Course (this workshop is run only if required)	tbc (vice AOT)	3		
PGR	Postgraduate Training (bold = compulsory)	MatLab Introduction	tbc	3		
PGR	Postgraduate Training (bold = compulsory)	LabVIEW Introduction	Prof A.A.R. Watt & Dr F. Vigneau & tbc	3		
PGR	Postgraduate Training (bold = compulsory)	Owning a successful DPhil	JCCG	2		
PGR	Modular training in electron microscopy	<sup>5</sup> Advanced microanalysis	tbc			8
PGR	Modular training in electron microscopy	<sup>6</sup> WDS and quantitative X-ray Analysis	Dr C.J. Salter			11
PGR	Modular training in electron microscopy	<sup>6</sup> Electron Backscattering Diffraction (EBSD)	Dr P. Karamched, Dr G.M. Hughes & J. Holter	2+6		
PGR	Modular training in electron microscopy	<sup>6</sup> Focussed ion-beam milling (FIB)	Dr G.M. Hughes	5	5	5
PGR	Modular training in electron microscopy	<sup>6</sup> Analysis of HREM Images	Dr N.P. Young			6
PGR	Postgraduate lecture courses	Foundation Topics for Electron Microscopy	Dr N.P. Young, Dr G.M. Hughes + Prof P.D. Nellist	4+2+2		
PGR	Postgraduate lecture courses	Spectroscopy with the (S)TEM	tbc, Dr R.J. Nicholls & Prof. S. Lozano-Perez		5+2+1	
PGR	Postgraduate lecture courses	Microscopy & Analysis of Surfaces	Dr C.S. Allen	8		
PGR	Postgraduate lecture courses	Imaging & Diffraction in (S)TEM	tbc Dr J.S. Kim + Dr N.P. Young			4+4

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PGR	Postgraduate lecture courses	Scientific Computing tbc	Prof N. Trefethen (Computing Lab)	12	12	
PGR	Postgraduate lecture courses	Early Metallurgy tbc	Dr C.J. Salter		8	
PGR	Postgraduate lecture courses	Fusion CDT: Lectures + Classes (at York)	Prof D.E.J. Armstrong, & tbc	8+4+6		
PGR	Postgraduate lecture courses	Fusion CDT: Materials for Fusion	Prof D.E.J. Armstrong & others	?		
PGR	Postgraduate lecture courses	Fusion CDT: Radiation Damage + classes	tbc	13+6		
PGR	Postgraduate lecture courses	Fusion CDT: Analytical Tools	Dr N.P. Young & others + Practicals		8+18	
PGR	Postgraduate lecture courses	Introduction to Quantum Information Processing	Prof S.C. Benjamin + tbc	6+2+1		
PGR	Postgraduate lecture courses	<sup>3</sup> Materials & Devices for Optics & Optoelectronics	Prof J.M. Smith	12		
PGR	Postgraduate lecture courses	<sup>3</sup> Nanomaterials	Prof N. Grobert + Prof. K. Porfyakis + Prof H. Bhaskaran	4+4+4		
PGR	Postgraduate lecture courses	<sup>3</sup> Prediction of Materials Properties	Dr C.E. Patrick	12		
PGR	Postgraduate lecture courses	<sup>3</sup> Engineering Ceramics: Synthesis & Properties	Prof R.I. Todd	12		
PGR	Postgraduate lecture courses	<sup>3</sup> Advanced Engineering Alloys & Composites	Prof. M.L. Galano + Prof D.E.J. Armstrong		7+5	
PGR	Postgraduate lecture courses	<sup>3</sup> Advanced Manufacture with Metals & Alloys: Processing, Joining & Shaping	Dr E. Liotti + Prof K.A.Q. O'Reilly	6+6		
PGR	Postgraduate lecture courses	<sup>3</sup> Devices	Prof C.R.M. Grovenor + Prof S.C. Speller + Prof P.R. Wilshaw		4+4+4	
PGR	Postgraduate lecture courses	<sup>3</sup> Biomaterials & Natural Materials	Prof J.T. Czernuszka		12	
PGR	Postgraduate lecture courses	<sup>3</sup> Advanced Polymers	Prof H.E. Assender + Dr M. Leferts		8+4	
PGR	Postgraduate lecture courses	<sup>3</sup> Materials for Energy Production, Distribution & Storage	Prof T.J. Marrow + Dr P. Adamson		6+6	
PGR	Research Colloquia	Materials Colloquia	Various	4	4	2
PGR	Research Colloquia	MML Seminars	Various	8	8	8
PGR	Research Colloquia	Begbroke Science Forum	Various	?	?	?
PGR	Research Colloquia	QIP Seminars	Various	4	4	4

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<b>APPENDIX 1 - PRACTICAL COURSES</b>						
	<b>PRACTICAL</b>	<b>SD</b>	<b>DSD</b>			
UG Y1	1P1a: Introduction to IT Tools	PJW	Rob Saunders	3		
UG Y1	1P1b: Introduction to Optical Microscopy	KAQOR	SLP	3		
UG Y1	1P2: Introduction to MATLAB and LabVIEW	AARW	RSB	6		
UG Y1	1P3: Young's Modulus & Stress Analysis (Acta-style write-up, formative only)	JMS / PDN		6.75		
UG Y1	1P4: Metallography	P. Karamched	RIT	6		
UG Y1	1P5: Polymers - Molecular Weight Effects	AARW	HEA		6	
UG Y1	1P6: Thermal Analysis (Acta-style write-up, summative)	E. Liotti	KAQOR		6	
UG Y1	1P7: Bubble Raft	J. Liu	SCB		6	
UG Y1	1P8: Electrode Potentials (Acta-style write-up, summative)	tbc	MP		6	
UG Y1	1P9: Energy Levels & Band Gaps	AARW	HB			6
UG Y1	1P10: Fabrication & Tensile Testing NB. Y2 pracs renumbered as per new sequence	JTC	tbc			6
UG Y2	2P1: Materials Selection (Peer-reviewed Poster 'write-up', formative only)	DEJA	SCS	10		
UG Y2	2P2: Steels	C.J. Salter	TJM	9		
UG Y2	2P3: Extrusion	M Danaie	AJW	9		
UG Y2	2P4: Casting (Acta-style write-up, summative)	KAQOR / J Malisano	MLG	9		
UG Y2	2P5: Dislocations & Plasticity	MRC	JTC		9	
UG Y2	2P6: Diffusion (Acta-style write-up, summative)	TJM	MLG		9	
UG Y2	2P7: Mechanical Properties of Polymers	HEA	AARW		9	
UG Y2	2P8: Corrosion	J. Haley	TJM		9	
UG Y2	2P9: X-ray Diffraction Detective	SCS	MRC			9
UG Y2	2P10: TEM (non-assessed training exercise)	tbc & J. Haley	NG			9
UG Y2	2P11: SEM & Fracture	P. Karamched	AJW			9
UG Y2	2P12: Semiconductor Devices (Acta-style write-up, summative)	RSB	RSW			9

