

**City University of Hong Kong**  
**Department of Physics & Materials Science**

**Course List for Inbound Exchange Students Offer on Semester A 2009/10 (tentative)**

<b>Course Code</b>	<b>Course Title</b>	<b>Credit Units</b>	<b>Prerequisite(s)</b>	<b>Precursor(s)</b>	<b>Remarks</b>
AP2102	Introduction to Materials Engineering	3	Nil	Nil	
AP2190	Mechanics	3	Nil	Nil	
AP2212	Measurement & Instrumentation	3	Nil	1. MA2176	
AP2240	Laboratory IA	2	Nil	Nil	
AP2290	Classical Mechanics	3	Nil	Nil	
AP2900	Astronomy – The Sky Around Us	3	Nil	Nil	
AP3110	Deformation and Fracture	3	Nil	1. AP2102 2. AP2104	
AP3113	Polymer Engineering	3	Nil	1. AP2102 2. AP2104 3. MA2157 or MA2176	
AP3170	Materials Testing Techniques	2	Nil	1. AP2102 2. AP2104	
AP3190	Thermodynamics of Materials	3	Nil	Nil	
AP3243	Laboratory IIA	2	Nil	1. AP2241	
AP3251	Quantum Physics	3	1. AP2202 or AP3202 2. AP3204	1. MA2158 or MA3158	
AP3253	Energy, Technology and Environment	3	Nil	Nil	
AP3267	Principle of Noise Pollution	3	Nil	Nil	
AP3290	Thermodynamics	3	1. AP2290	1. MA2158	
AP4121	Thin Film Technology and Nanocrystalline Coatings	3	Nil	AP2102 AP3170 AP3172 MA2176	

AP4124	Failure Analysis and Case Studies	3	Nil	1. AP2102	
AP4126	Electroceramics	3	1. AP2102	1. AP2101	
AP4170	Environmental Degradation	3	Nil	Nil	
AP4173	Biomedical Materials: From Engineering to Clinical Applications	3	Nil	1. AP2102	
AP4254	Fundamentals of Laser Optics	3	1. AP3205	1. AP3204	
AP4257	Physics of the Atmosphere	3	Nil	1. AP3290 2. MA2158 3. MA2176	
AP4264	Instrumentation Systems for Remote Sensing and Atmospheric Monitoring	3	Nil	1. AP2202 or AP3202 2. AP3204 3. AP3205	
AP4265	Semiconductor Physics and Devices	3	1. AP2202 or AP3202 2. AP3272	1. AP3251	
AP4271	Environmental Radiation	3	1. AP3206	Nil	
AP4280	Advanced Optics Laboratory	3	1. AP3204 or AP3280	Nil	
AP4283	Medical Physics I	3	Nil	Nil	
AP4307	Building Materials	3	Nil	Nil	

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**Course List for Inbound Exchange Students Offer on Semester B 2009/10 (tentative)**

<b>Course Code</b>	<b>Course Title</b>	<b>Credit Units</b>	<b>Prerequisite(s)</b>	<b>Precursor(s)</b>	<b>Remarks</b>
AP1200	Foundation Physics	3	1. High-school physics and Mathematics	Nil	
AP2104	Mechanics of Solids	3	Nil	Nil	
AP2191	Electricity and Magnetism	3	Nil	1. AP2190 or AP2290 2. MA2176	
AP2241	Laboratory IB	2	Nil	1. AP2240	
AP2250	Earth Systems	3	Nil	Nil	
AP2291	Electricity and Magnetism	3	Nil	1. AP2190 or AP2290 2. MA2176	
AP3109	Kinetic Processes in Engineering Materials	3	Nil	1. AP2102 2. AP2103 2. AP3170	
AP3111	Ceramic Processing and Microstructure Development	3	1. AP2102	Nil	
AP3171	Materials Characterization Techniques	3	Nil	1. AP2102 2. AP3170 3. AP3172 4. MA2176	
AP3172	Electronic Properties of Solids	3	Nil	1. AP2102 2. MA2157 or MA2176	
AP3202	Modern Physics	3	Nil	1. AP2290 2. AP2291	
AP3204	Waves and Optics	3	Nil	1. MA2176 or MA2158 or MA3158	
AP3205	Electromagnetism	3	1. AP2291	1. AP3204 2. MA2158 or MA3158	
AP3206	Nuclear Radiation and Detection	3	Nil	1. AP2202 or AP3202 2. MA2176	

AP3244	Laboratory IIB	2	Nil	1. AP3243	
AP3272	Introduction to Solid State Physics	3	1. AP2290 2. AP2291	1. AP2202 or AP3202	
AP3280	Geometrical and Instrumental Optics	3	1. MA2001 or MA2176	1. AP3204	
AP3281	Optical Fabrication and Testing	3	1. AP3204	Nil	
AP4114	Stress Analysis	3	Nil	1. AP2104 2. AP2201 3. MA2157 4. MA3158	
AP4118	Composite Materials – with An Introduction to Nanocomposites	3	Nil	1. AP2102 2. AP2104 3. AP3113 4. MA2157 or MA2176	
AP4120	Microelectronic Materials and Processing	3	Nil	Nil	
AP4171	Electronic Packaging and Materials	3	Nil	1. AP2102	
AP4172	Simulation and Modelling in Materials Science	3	Nil	1. AP2102 2. AP2190 3. AP3190	
AP4255	Optoelectronic Devices and Systems	3	Nil	1. AP3205	
AP4258	Atmospheric Circulation Systems and Climate	3	Nil	Nil	
AP4260	Air Pollution	3	Nil	Nil	
AP4267	Imaging Instruments, Spectral Analysis and Digital Image Processing for Environmental Applications	3	Nil	1. AP4264	
AP4268	Environmental Modelling	3	1. MA2158 2. MA2176	Nil	
AP4274	Radiation Biophysics	3	Nil	Nil	
AP4275	Radiological Physics and Dosimetry	3	Nil	Nil	
AP4282	Physical Optics	3	1. AP3204 2. MA2001 or MA2176	1. AP3280	
AP4284	Medical Physics II	3	Nil	Nil	
AP4714	Special Topics in Materials Engineering and Nanotechnology	3	Nil	1. AP2102 2. AP3109 3. AP3113	

Please refer to <http://www.ap.cityu.edu.hk/index.aspx?id=20061207174416&lang=e> for course syllabus