#### Recommended Study Plan

# A suggested course schedule for BEng in Materials Engineering (For HKDSE students admitted to CityU in 2014-15 and admitted to BEngMAE major in 2015/16)

Year 2

-	General Physics I (3)	AP2102	Introduction to		
			Materials Engineering (3)	AP2243	Workshop Practice (3)
	General Physics II (3)	AP2104	Mechanics of Solids (3)		
	General Physics III (3)	AP3169	Materials Testing Techniques (3)		
	Linear Algebra and Calculus (3)/ Multi-variable Calculus and Linear Algebra (3)/ Applied Statistics for Sciences and Engineering (3)/	AP3172	Electronic Properties of Solids (3)		
		BCH1100*	Chemistry (3)		
MA2172/		MBE2016	Engineering Graphics (3)		
MA2177/	Engineering Mathematics and Statistics (3)/ Mathematical				
	Methods for Engineering (3)				
Gateway Educ (3)	cation Course				
Gateway Educ (3)	cation Course				
Sub-total = 15	units	Sub-total = 1	5 units	Sub-total =	: 3 units
Year 2 Total =	= 33 units				

<sup>\*</sup>Optional for students who would like to strengthen their background and it will be counted as free elective

Remarks: More update version please refer to <a href="http://www.ap.cityu.edu.hk/index.aspx?id=20061213174918&lang=e">http://www.ap.cityu.edu.hk/index.aspx?id=20061213174918&lang=e</a> for details

Year 3

Sem A (credit unit)		Sem B (credit unit)		Summer (credit unit)	
AP3171	Materials Characterization Techniques (3)	,			Industrial Attachment Scheme (3)
AP3190	Thermodynamics of Materials (3)	AP3244	Design Laboratory (3)		
Elective A1 (3)		Elective A3 (3)			
Elective A2 (3)		Elective A4 (3)			
Free Elective 1 (3)		Free Elective 2 (3)		Sub-total =	0 or 3 units
Sub-total = 15 units		Sub-total = 15 units			
Year 3 Total = 30 or 33 units					

<sup>#</sup> FS4002 can be considered as elective B5

Year 4

Sem A (credit unit)		Sem B (credit unit)		
AP4116	Dissertation (3)	AP4116 Dissertation (3)		
EE3013	Engineers in Society (0)	Elective B3 (3)		
Elective B1 (3)		Elective B4 (3)		
Elective B2 (3)		Elective B5 (3)		
Free Elective 3 (3)		Free Elective 4 (3)		
Sub-total = 12 units		Sub-total = 15 or 12 units		
Year 4 Total = 27 or 24 units				

On top of the above 72 required credits in major requirement, students have to satisfy the degree requirement of 30 credits in Gateway Education and 6 credits in College Requirement as specified by the University and 12 credits Free Electives.

### Recommended Study Plan

# A suggested course schedule for BEng in Materials Engineering (For AS I students admitted to BEngMAE Major in 2015/16)

Year 2

Sem A (credit unit)		Sem B (cre	edit unit)	Summer (	credit unit)
AP1201*	General Physics I (3)	AP2102	Introduction to Materials Engineering (3)	AP2243	Workshop Practice (3)
AP1202	General Physics II (3)	AP2104	Mechanics of Solids (3)		
AP1203	General Physics III (3)	AP3169	Materials Testing Techniques (3)		
BCH1100*	Chemistry (3)	MA2158/	Linear Algebra and Calculus (3)/		
CS1102/ CS1302	Introduction to Computer Studies/ Introduction to Computer Programming (3)	MA2001/	Multi-variable Calculus and Linear Algebra (3)/ Applied Statistics for Sciences and Engineering (3)/ Engineering Mathematics and Statistics (3)/ Mathematical Methods for Engineering (3)		
MA1201/ MA1301	Calculus and Basic Linear Algebra II/ Enhanced Calculus and Linear Algebra II (3)	MA2177/ MA2181			
		MBE2016	Engineering Graphics (3)		
Sub-total = *	12 units	Sub-total = 15 units		Sub-total =	3 units
Year 2 Total	= 30 units				

<sup>\*</sup> Optional for students who would like to strengthen their background and it will be counted as free elective

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Year 3

Sem A (credit unit)		Sem B (cre	edit unit)	Summer (credit unit)	
AP3171	Materials Characterization Techniques (3)	AP3109	Kinetic Processes in Engineering Materials (3)	FS4002 Industrial (elective B5) # Attachment Scheme (3)	
		AP3172	Electronic Properties of Solids (3)		
AP3190	Thermodynamics of Materials (3)	AP3244	Design Laboratory (3)		
Elective A	Elective A1 (3)		Elective A3 (3)		
Elective A	Elective A2 (3)		Elective A4 (3)		= 3 or 0 units
Sub-total = 12 units		Sub-total = 15 units			
Year 3 To	Year 3 Total = 30 or 27 units				

<sup>#</sup> FS4002 can be considered as elective B5

Year 4

Sem A (credit unit)		Sem B (credit unit)		
AP4116	Dissertation (3)	AP4116 Dissertation (3)		
EE3013	Engineers in Society (0)	Elective B3 (3)		
Elective B1 (3)		Elective B4 (3)		
Elective B2 (3)		Elective B5 (3)		
Sub-total = 9 units		Sub-total = 9 or 12 units		
Year 4 Tota	al = 18 or 21units			

On top of the above 72 required credits in major requirement, students have to satisfy the degree requirement of 21 credits in Gateway Education as specified by the University.

### **Recommended Study Plan**

A suggested course schedule for BEng in Materials Engineering (For AS II students admitted to BEngMAE in 2015/16)

Year 3

Sem A (credit unit)		Sem B (cred	it unit)	Summer (	credit unit)
AP3171	Materials Characterization Techniques (3)	AP2102	Introduction to Materials Engineering (3)	AP2243	Workshop Practice (3)
AP3172	Electronic Properties of Solids (3)	AP3109	Kinetic Processes in Engineering Materials (3)		
AP3190	Thermodynamics of Materials (3)	AP3169	Materials Testing Techniques (3)		
*AP1200	Foundation Physics (0)	MA2158/ MA2170/ MA2172/ MA2177/ MA2181	Linear Algebra and Calculus (3)/ Linear Algebra and Multi-variable Calculus (3)/ Applied Statistics for Sciences and Engineering (3)/ Engineering Mathematics and Statistics (3)/ Mathematical Methods for Engineering (3)		
*AP1201	General Physics I (3)	MBE2016	Engineering Graphics (3)		
*AP1202	General Physics II (3)	Elective A1 (3	3)		
*AP1203	General Physics III (3)	*CS1302	Introduction to Computer Programming		
*MA1201	Calculus and Basic Linear Algebra II				
Sub-total = 9	units	Sub-total = 1	8 units	Sub-total =	= 3 units
Year 2 Total	= 30 units				

<sup>\*</sup>Optional for students who would like to strengthen their background

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Year 4

Sem A (credit unit)		Sem B (credit unit)		Summer (credit unit)	
AP2104	Mechanics of Solids (3)	AP3244	Design Laboratory (3)	FS4002 (elective B5)	Industrial Attachment Scheme (3)
AP4116	Dissertation (3)	AP4116	Dissertation (3)		
EE3013	Engineers in Society (0)	Elective A4 (3)			
Elective A2	Elective A2 (3)		Elective B2 (3)		
Elective A3	3 (3)	Elective B3 (3)			
Elective B1	(3)	Elective B4 (3)			
		Elective B5 (3) (Optional)			
Sub-total =	Sub-total = 15 units		Sub-total = 18 or 21 units		or 0 units
Year 4 Tota	al = 36 units				

<sup>\*</sup> FS4002 can be considered as elective B5

On top of the above 66 required credits in major requirement, students have to satisfy the degree requirement of 12 credits in Gateway Education as specified by the University.