



香港城市大學  
City University of Hong Kong

專業 創新 胸懷全球  
Professional · Creative  
For The World

College of Science and Engineering  
科學及工程學院

**Department of Physics and Materials Science**  
物理及材料科學系

*(For students admitted to the University in 2015/16 and thereafter)*

**Bachelor of Engineering in Materials Engineering**  
工學士 (材料工程學)

*(For students admitted to the University in 2014/15 and before)*

**Bachelor of Engineering (Honours) in Materials Engineering**  
材料工程學榮譽工學士

Student Handbook

2015-2016

## TABLE OF CONTENTS

	Page
1. Aims of Major and Intended Learning Outcomes	1
2. Degree Requirement	
2.1 Minimum Number of Credit Units Required for the Award	3
2.2 Gateway Education Requirement	3
2.3 College/School Requirement	6
2.4 English Language Requirement	6
2.5 Chinese Language Requirement	6
2.6 Major Requirement	8
3. Accreditation by Professional / Statutory Bodies	11
4. Recommended Study Plan	11
5. Academic Regulations	15
6. Academic Honesty	15
7. Assessment	
7.1 Mitigation	16
7.2 Award Classifications	16
7.3 Academic Regulations on Termination of Study	16
8. Late Drop Policy	17
9. Laboratory Safety	17
10. Communication Channels	
10.1 Major Leader and Deputy Major Leader	18
11. Useful Information	19
12. Student Development Services (SDS)	21
13. Administrative Support from General Office	22
14. Appendix: Academic Staff Profile	23

## 1. Aims of Major

The major aims to educate and produce graduates who will be:

- equipped with working knowledge of the production, characterization, and service performance of engineering materials;
- proficient communicators equipped with a range of disciplines and skills, computer literacy, language proficiency, and the ability to think quantitatively and analyse problems critically;
- able to contribute their specialist skills, alongside other engineering specialists, to the design, manufacture, maintenance, testing and safety of engineering components, devices, structures and process plants;
- able to demonstrate an awareness of the context within which they work, and take responsibility for their own personal and professional development;
- demonstrate the ability to integrate knowledge learned in the major to support in at least an original discovery or creative design relevant to materials engineering.

### Intended Learning Outcomes of Major (MILOs)

Upon successful completion of these major, students should be able to:

No.	MILOs	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
		A1	A2	A3
1.	apply knowledge of mathematics, science, and engineering appropriate to the materials engineering discipline.		√	√
2.	design and conduct experiments, as well as analyze and interpret data.	√	√	
3.	design a system, component, or process to meet the desired needs within realistic constraints, such as economic, environmental, social, political and ethical expectations, health and safety, manufacturability and sustainability.	√	√	√
4.	function in multi-disciplinary teams.			√
5.	identify, formulate, and solve engineering problems.	√	√	√
6.	recognize professional and ethical responsibility.	√	√	
7.	communicate effectively.			√
8.	recognize the impact of engineering solutions in a global and societal context, especially the importance of health, safety and environmental considerations for both workers and the general	√		

	public.			
9.	recognize the need for, and to engage in life-long learning.		√	√
10.	stay abreast of contemporary issues.		√	
11.	use the techniques, skills, and modern engineering tools necessary for engineering practice appropriate to the materials engineering discipline.		√	√
12.	use computers and IT relevant to the materials discipline along with understanding of their processes and limitations.		√	
13.	create an original design, or explore the materials engineering area for discovery of new knowledge.	√	√	√

A1: *Attitude*

*Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.*

A2: *Ability*

*Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.*

A3: *Accomplishments*

*Demonstrate accomplishments of discovery/innovation/creativity through producing / constructing creative works/new artefacts, effective solutions to real-life problems or new processes.*

## 2. Degree Requirements

### 2.1. Minimum Number of Credit Units Required for the Award and Maximum Number of Credit Units Permitted

Degree Requirements	Normative 4-year Degree	Advanced Standing I	Advanced Standing II (Senior-year Entry)
Gateway Education requirement *	30 credit units	21 credit units	12 credit units
College/School requirement *	6 credit units	waived	waived
Major requirement	72 credit units (Core: 45 / 48 Elective: 27 / 24)	72 credit units (Core: 45 / 48 Elective: 27 / 24)	66 credit units (Core: 39 / 42 Elective: 27 / 24)
Free electives / Minor (if applicable)	12 credit units	0 credit unit	0 credit unit
<b>Minimum number of credit units required for the award</b>	<b>120 credit units</b>	<b>93 credit units</b>	<b>78 credit units</b>

### 2.2. Gateway Education Requirement

*(The catalogue term of the Gateway Education requirement that students will follow will be the same as their admission term.)*

#### For Normative 4-year students

Curriculum Catalogue Term	Semester A 2014/15
	<b>Normative 4-year Degree</b>
<u>University requirements</u>	
English	
• GE1401 University English	3 credit units
• Discipline-specific English	3 credit units
GE1501 Chinese Civilisation – History and Philosophy	3 credit units

<u>Distributional requirements</u> Area 1: Arts and Humanities Area 2: Study of Societies, Social and Business Organisations Area 3: Science and Technology	12 credit units  <i>(At least one course from each of the three areas)</i>
<u>College/School-specified courses</u> ^	9 credit units
<b>Total</b>	<b>30 credit units</b>

**^ College/School-specified courses for fulfilling the Gateway Education requirement**

Course Code	Course Title	Level	Credit Units	Remarks
<b>Normative 4-year Degree</b>				
MA1200/ MA1300	Calculus and Basic Linear Algebra I/ Enhanced Calculus and Linear Algebra I	B1	3	
MA1201/ MA1301	Calculus and Basic Linear Algebra II/ Enhanced Calculus and Linear Algebra II	B1	3	
CS1102/ CS1302	Introduction to Computer Studies/ Introduction to Computer Programming	B1	3	

**For Advanced Standing I and II Students**

Curriculum Catalogue Term	Semester A 2015/16 onwards	
	Advanced Standing I (Note 1)	Advanced Standing II (Senior-year Entry) (Note 2)
<u>University requirements</u>		
English		
• GE1401 University English	3 credit units	Not a compulsory requirement
• Discipline-specific English	3 credit units	3 credit units
GE1501 Chinese Civilisation – History and Philosophy	3 credit units	Not a compulsory requirement

<u>Distributional requirements</u> Area 1: Arts and Humanities Area 2: Study of Societies, Social and Business Organisations Area 3: Science and Technology	6 credit units  <i>(From two different areas)</i>	3 credit units
<u>College/School-specified courses</u> ^	6 credit units	6 credit units
<b>Total</b>	<b>21 credit units</b>	<b>12 credit units</b>

Note 1: For students with recognised Advanced Level Examination or equivalent qualifications.

Note 2: For Associate Degree/Higher Diploma graduates admitted to the senior year.

**^ College/School-specified courses for fulfilling the Gateway Education requirement**

<b>Advanced Standing I</b>				
<b>Major in Materials Engineering</b>				
CS1102/ CS1302	Introduction to Computer Studies/ Introduction to Computer Programming	B1	3	Students taking Major elective <i>AP3114 Computational Methods for Physicist and Materials Engineers</i> or <i>AP4172 Simulation and Modelling in Multidisciplinary Sciences</i> may apply for exemption. They are required to complete any course of 3 credits <b>(NOT within the major requirements including core courses and electives)</b> to replace the exempted credits.
MA1201/ MA1301	Calculus and Basic Linear Algebra II/ Enhanced Calculus and Linear Algebra II	B1	3	
<b>Advanced Standing II (Senior-year Entry)</b>				
Any courses not within the Major Requirements (including core courses and electives)		B1/2/3/4	6	

### 2.3. College/School Requirement, if any

*(The catalogue term of the College/School requirement that students will follow will be the same as their admission term.)*

Course Code	Course Title	Level	Credit Units	Remarks
<b>Normative 4-year Degree (6 credit units)</b>				
Science (6 Credit Units) Choose <b>two</b> from the following three subject areas				
<i>Physics</i>				
AP1201	General Physics I	B1	3	
<i>Chemistry</i>				
BCH1100	Chemistry	B1	3	
<i>Biology</i>				
BCH1200	Discovery in Biology	B1	3	
<b>Advanced Standing I (0 credit unit)</b>				
College Requirements waived				
<b>Advanced Standing II (Senior-year Entry) (0 credit unit)</b>				
College Requirement waived				

### 2.4. English Language Requirement

Normative 4-year degree students and Advanced Standing I students who passed the 6 credit units of specified GE English courses, and Advanced Standing II students who passed the 3 credit units of discipline-specific GE English course are recognized as fulfilling the University's English Language Requirement.

*Students scoring below Level 4 in HKDSE English Language or Grade D in HKALE AS-level Use of English or students who do not possess an equivalent qualification are required to complete a 6-credit unit course EL0200 English for Academic Purpose prior to taking the GE English courses. The 6 credit units of EL0200 will not be counted towards the minimum credit units required for graduation and will not be included in the calculation of the cumulative grade point average (CGPA). However, they will be counted towards the maximum credit units permitted.*

### 2.5. Chinese Language Requirement

Students scoring below Level 4 in HKDSE Chinese Language, or below Grade D in HKALE AS-level Chinese Language and Culture will be required to complete a 3-credit unit course CHIN1001 University Chinese I. The 3 credit units will not be counted towards the minimum credit units required for graduation and will not be included in the calculation of the cumulative grade point average (CGPA). However, they will be counted towards the maximum credit units permitted.



*In addition to the above requirement, Colleges/Schools also have the discretion to specify other Chinese language courses for their students, including students who do not possess the above qualifications (Senate/70/MM27-28 refers). Please indicate if there are such requirements.*

For course details, please refer to ARRO website

[http://www.cityu.edu.hk/ug/current/catalogue/catalogue\\_UC.htm?page=B/B\\_course\\_AP.htm](http://www.cityu.edu.hk/ug/current/catalogue/catalogue_UC.htm?page=B/B_course_AP.htm)).

Please always refer to this website for the most updated information.

## 2.6. Major Requirement

*(The catalogue term of the major requirement that students will follow will be the effective term of the declared/allocated major.*

*For normative 4-year degree students who will join the majors allocation exercise, the catalogue term of major requirement will be one year after admission.*

*For advanced standing students and 4-year degree students who already have a major at the time of admission, the catalogue term of major requirement will be the same as their admission term.)*

### Core Courses

- Normative 4-year degree (45 or 48 credit units);
- Advanced Standing I (45 or 48 credit units);
- Advanced Standing II (39 or 42 credit units)

Course Code	Course Title	Level	Credit Units	Remarks
AP1202	General Physics II	B1	3	Students with Grade D or above in HKAL Physics OR students with equivalent qualification may apply for exemption. They are required to complete any course of 3 credits to replace the exempted credits Advanced Standing II students are not required to take this course.
AP1203	General Physics III	B1	3	Advanced Standing II students are not required to take this course.
AP2102	Introduction to Materials Engineering	B2	3	
AP2104	Mechanics of Solids	B2	3	
AP2243	Workshop Practice	B2	3	
AP3109	Kinetic Processes in Engineering Materials	B3	3	
AP3169	Materials Testing Techniques	B3	3	
AP3171	Materials Characterization Techniques	B3	3	

AP3172	Electronic Properties of Solids	B3	3	
AP3190	Thermodynamics of Materials	B3	3	
AP3244	Design Laboratory	B3	3	
AP4116 / FS4003 / FS4004	Dissertation CES Placement Project Overseas Research Internship Scheme	B4	6/ 6/ 9*	*Students who completed <i>FS4004</i> <i>Overseas Research</i> <i>Internship Scheme</i> can take 3 credit units elective less to fulfill the major requirement.
EE3013	Engineers in Society	B3	0	
MA2001 /  MA2158 /  MA2172 /  MA2177 /  MA2181	Multi-variable Calculus and Linear Algebra  Linear Algebra and Calculus  Applied Statistics for Sciences and Engineering  Engineering Mathematics and Statistics  Mathematical Methods for Engineering	B2	3	
MBE2016	Engineering Graphics	B2	3	

### Electives ( 24 or 27 credit units)

Course Code	Course Title	Level	Credit Units	Remarks
<b>Group A (Fundamental Electives): at least 12 credit units from this group of courses</b>				
AP2105	Engineering Mechanics: Dynamics	B2	3	
AP3110	Deformation and Fracture	B3	3	
AP3111	Ceramic Processing and Microstructure Development	B3	3	
AP3113	Polymer Engineering	B3	3	
AP3114	Computational Methods for Physicists and Materials Engineers	B3	3	
AP3130	Biomaterials	B3	3	
AP4170	Environmental Degradation	B4	3	
<b>Group B (Specialized Electives)</b>				
AP4114	Stress Analysis	B4	3	

AP4118	Composite Materials – with An Introduction to Nanocomposites	B4	3	
AP4121	Thin Film Technology and Nanocrystalline Coatings	B4	3	
AP4124	Failure Analysis and Case Studies	B4	3	
AP4126	Electroceramics	B4	3	
AP4127	Smart Sensors: From Engineering to Applications	B4	3	
AP4171	Electronic Packaging and Materials	B4	3	
AP4172	Simulation and Modelling in Multidisciplinary Sciences	B4	3	
AP4175	Advanced Technology in Biomedical Devices	B4	3	
AP4176	Energy Materials for the Current Century	B4	3	
AP4177	Smart and Functional Materials: Selection and Application	B4	3	
AP4178	Nanostructures & Nanotechnology	B4	3	
AP4253	Photonic Materials Physics	B4	3	
AP4280	Advanced Optics Laboratory	B4	3	
AP4307	Building Materials	B4	3	
AP4714	Special Topics in Materials Science and Engineering	B4	3	
FS4002	Industrial Attachment Scheme	B3	3	

For course details, please refer to ARRO website ([http://www.cityu.edu.hk/ug/current/catalogue/catalogue\\_UC.htm?page=B/B\\_course\\_AP.htm](http://www.cityu.edu.hk/ug/current/catalogue/catalogue_UC.htm?page=B/B_course_AP.htm)).

Please always refer to this website for the most updated information.

### 3. Accreditation by Professional / Statutory Bodies

The BEng degree in Materials Engineering has been accredited by the Hong Kong Institution of Engineers (HKIE) as an award satisfying the academic requirements for its Corporate Membership. \*

\* Imminent re-accreditation is expected.

### 4. Recommended Study Plan

1. A set of core courses (see tables below) is pre-registered for students according to their recommended study plan.
2. Students are advised to plan their study according to the suggested pattern to avoid possible time conflict between courses. They should also pay attention to the Degree Requirements (Section 2) when planning their studies.
3. For GE courses, Chinese course, Electives and Free Electives, students will need to register them on web during the add/drop period.
4. Students wishing to drop/change a pre-assigned course will need to do so on web or using the paper form during the add/ drop period. However, after dropping/changing the course, the places may be taken up by other students and you may not be able to enrol in the pre-assigned course again. Thus, it may affect your major allocation and delay your graduation.

#### For Normative 4-year Degree Students

##### *Year 2 (2015/16)*

<u>Semester A</u>	<u>Semester B</u>	<u>Summer</u>
AP1201 General Physics I *	AP2102 Introduction to Materials Engineering	AP2243 Workshop Practice
AP1202 General Physics	AP2104 Mechanics of Solids	
AP1203 General Physics III	AP3169 Materials Testing Techniques	
MA2158 Linear Algebra and Calculus / MA2001 Multi-variable Calculus and Linear Algebra / MA2172 Applied Statistics for Sciences and Engineering / MA2177 Engineering Mathematics and Statistics / MA2181 Mathematical Methods for Engineering	AP3172 Electronic Properties of Solids	
	BCH1100 Chemistry*	
Any Gateway Education Course (6 CU)	MBE2016 Engineering Graphics	
<b>Total: 15 CU</b>	<b>Total: 15 CU</b>	<b>Total: 3 CU</b>

\*Optional for students who would like to strengthen their background

*Year 3 (2016/17)*

<u>Semester A</u>	<u>Semester B</u>	<u>Summer</u>
AP3171 Materials Characterization Techniques	AP3109 Kinetic Processes in Engineering Materials	FS4002 (elective B5) Industrial Attachment Scheme #
AP3190 Thermodynamics of Materials	AP3244 Design Laboratory	
Elective A1	Elective A3	
Elective A2	Elective A4	
Free Elective (3 CU)	Free Elective 2 (3 CU)	
<b>Total: 15 CU</b>	<b>Total: 15 CU</b>	<b>Total: 0 or 3 CU</b>

# FS4002 can be considered as elective B5

*Year 4 (2017/18)*

<u>Semester A</u>	<u>Semester B</u>
AP4116 Dissertation	AP4116 Dissertation
EE3013 Engineers in Society	Elective B3
Elective B1	Elective B4
Elective B2	Elective B5
Free Elective 3 (3 CU)	Free Elective 4 (3 CU)
<b>Total: 12 CU</b>	<b>Total: 15 or 12 CU</b>

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.

**For Advanced Standing I Students**

*Year 2 (2015/16)*

<u>Semester A</u>	<u>Semester B</u>	<u>Summer</u>
AP1201 General Physics I *	AP2102 Introduction to Materials Engineering	AP2243 Workshop Practice
AP1202 General Physics	AP2104 Mechanics of Solids	
AP1203 General Physics III	AP3169 Materials Testing Techniques	
BCH1100 Chemistry *	MA2158 Linear Algebra and Calculus / MA2001 Multi-variable Calculus and Linear Algebra / MA2172 Applied Statistics for Sciences and Engineering / MA2177 Engineering Mathematics and Statistics /	

	MA2181 Mathematical Methods for Engineering	
CS1102 Introduction to Computer Studies / CS1302 Introduction to Computer Programming	MBE2016 Engineering Graphics	
MA1201 Calculus and Basic Linear Algebra II / MA1301 Enhanced Calculus and Linear Algebra II		
<b>Total: 12 CU</b>	<b>Total: 15 CU</b>	<b>Total: 3 CU</b>

\*Optional for students who would like to strengthen their background

*Year 3 (2016/17)*

<u>Semester A</u>	<u>Semester B</u>	<u>Summer</u>
AP3171 Materials Characterization Techniques	AP3109 Kinetic Processes in Engineering Materials	FS4002 (elective B5) Industrial Attachment Scheme #
AP3190 Thermodynamics of Materials	AP3172 Electronic Properties of Solids	
Elective A1	AP3244 Design Laboratory	
Elective A2	Elective A3	
	Elective A4	
<b>Total: 12 CU</b>	<b>Total: 15 CU</b>	<b>Total: 0 or 3 CU</b>

# FS4002 can be considered as elective B5

*Year 4 (2017/18)*

<u>Semester A</u>	<u>Semester B</u>
AP4116 Dissertation	AP4116 Dissertation
EE3013 Engineers in Society	Elective B3
Elective B1	Elective B4
Elective B2	Elective B5
<b>Total: 9 CU</b>	<b>Total: 9 or 12 CU</b>

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.

**For Advanced Standing II Students**

*Year 3 (2015/16)*

<u>Semester A</u>	<u>Semester B</u>	<u>Summer</u>
AP3171 Materials Characterization Techniques	AP2102 Introduction to Materials Engineering	AP2243 Workshop Practice
AP3172 Electronic Properties of Solids	AP3109 Kinetic Processes in Engineering Materials	
AP3190 Thermodynamics of Materials	AP3169 Materials Testing Techniques	
AP1200 Foundation Physics *	MA2158 Linear Algebra and Calculus / MA2001 Multi-variable Calculus and Linear Algebra / MA2172 Applied Statistics for Sciences and Engineering / MA2177 Engineering Mathematics and Statistics / MA2181 Mathematical Methods for Engineering	
AP1201 General Physics I *	MBE2016 Engineering Graphics	
AP1202 General Physics II *	Elective A1	
AP1203 General Physics III (3)*	CS1102 Introduction to Computer Studies / CS1302 Introduction to Computer Programming *	
MA1201 Calculus and Basic Linear Algebra II *		
<b>Total: 9 CU</b>	<b>Total: 18 CU</b>	<b>Total: 3 CU</b>

\*Optional for students who would like to strengthen their background

*Year 4 (2016/17)*

<u>Semester A</u>	<u>Semester B</u>	<u>Summer</u>
AP2104 Mechanics of Solids	AP3244 Design Laboratory	FS4002 (elective B5) Industrial Attachment Scheme #
AP4116 Dissertation	AP4116 Dissertation	
EE3013 Engineers in Society	Elective A4	
Elective A2	Elective B2	
Elective A3	Elective B3	
Elective B1	Elective B4	
<b>Total: 15 CU</b>	Elective B5 (Optional)	
	<b>Total: 18 or 21 CU</b>	<b>Total: 0 or 3 CU</b>

\* 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.



## 5. Academic Regulations

Student should observe the University's Academic Regulation for 4-year Undergraduate Degrees at all times. For more details and most updated information, please always refer to the website of Academic Regulations and Records Office (ARRO)(<http://www6.cityu.edu.hk/arro/content.asp?cid=165>)

## 6. Academic Honesty

Students must pursue their studies with academic honesty. Academic honesty is central to the conduct of academic work. Students are expected to present their own work, give proper acknowledgement of other's work, and honestly report findings obtained. As part of the University's efforts to educate students about academic honesty, all students are expected to complete an online tutorial on academic honesty and make a declaration on their understanding of academic honesty.

**Plagiarism is a serious offence** involving “the use of somebody else's ideas, words, etc. as one's own”. Examples of such acts are copying other students' work in examinations, tests, or coursework assignments, repetition of part or whole sentences/paragraphs/any materials from hard-copy publications or online sites for one's own use **without acknowledgement of the source in one's work**.

Students who commit an act of academic dishonesty which jeopardizes the integrity of the learning and assessment process may be charged with a Major Offence and be liable to disciplinary action.

For details, students should refer to the “Rules on Academic Honesty” ([http://www.cityu.edu.hk/provost/academic\\_honesty/rules\\_on\\_academic\\_honesty.htm](http://www.cityu.edu.hk/provost/academic_honesty/rules_on_academic_honesty.htm)) under the section of “Assessment” of the ARRO's website.

## 7. Assessment

Students are assessed through a variety of methods, creating ample opportunity to demonstrate their abilities. The means of assessment vary from course to course but typically include coursework as well as the more traditional written examinations. Coursework consists of written assignments, computer simulations, tutorials, project, laboratory reports and presentations. Examinations are held at the end of each course.

**For undergraduate course, students have to obtain at least 30% of the maximum marks in the final examination in order to pass a course (i.e., D or above) where there is an examination component in the assessment.**

## 7.1. Mitigation

A student who believes that his/her ability to attend an examination, or in-course assessment with a weighting of 20% or above, has been adversely affected by circumstances beyond his/her control may submit a mitigation request with the scanned relevant supporting documents (e.g. medical certificate) to the Department via AIMS **no later than 5 working days from the scheduled date for completing the affected examination or assessment**. It is the student's responsibility to hand in the original copies of all the required documents to the department by the aforesaid deadline as well.

Upon receipt of a mitigation request (including the original copies of the required documents), the Department will investigate the case, in consultation with the course-offering academic unit (if appropriate). Only compelling reasons such as illness, hospitalization, accident, family bereavement or other unforeseeable serious circumstances will be considered. If the case is substantiated, the Assessment Panel will then decide if a make-up examination or coursework or other alternative assessment will be offered to the student concerned. Only one make-up examination will be arranged per course per semester.

## 7.2. Award Classifications

The various classifications are based on the CGPAs\*. The general guidelines are as follows:

<u>Classification of Award</u>	<u>CGPA</u>
First Class Honours	3.50 or above
Upper Second Class Honours	3.00 – 3.49
Lower Second Class Honours	2.50 – 2.99
Third Class Honours	2.00 – 2.49
Pass	1.70 – 1.99

\*Please refer to the AP department website

(<http://www.ap.cityu.edu.hk/index.aspx?id=20061212175308&lang=e>) for the calculation of SGPA and CGPA.

## 7.3. Academic Regulations on Termination of Study

**The Examination Board may terminate the study of a student under the following circumstances:**

- 
- (i) The student's SGPA is below 1.00 for two consecutive semesters; or
  - (ii) The student's academic progress is unsatisfactory and is unable to meet the conditions stipulated by the home academic unit after being put on Academic Probation for two consecutive semesters.
- 

**Students' studies will be terminated if they fail to pass a required course, or its equivalent/substitute course, after three attempts.**

Further details can be obtained from <http://www6.cityu.edu.hk/arro/content.asp?cid=165#s13>.

## 8. Late drop policy

Students can add or drop a course during the add/drop period prescribed by the University. After the add/drop deadline, requests for late drop of courses will **NOT** be entertained unless under exceptional circumstances (e.g. medical grounds). Such late requests must be submitted no later than the end of the teaching period for the relevant semester/term for approval by the Head of the course-offering academic unit.

## 9. Laboratory safety

All laboratory users are bound by the Safety Regulations of the City University as well as the relevant enacted laws and ordinances. In addition, the following rules should be adhered to.

1. Undergraduate students are **NOT ALLOWED TO WORK** in a laboratory **WITHOUT SUPERVISION**.
2. Undergraduate students are **NOT ALLOWED TO KEEP ANY KEY** of the laboratories.
3. New research students/staff are **NOT ALLOWED TO WORK** in a laboratory before the completion of the safety training.
4. Students/staff **SHOULD NOT WORK ALONE** in a laboratory; when he/she needs to work with hazardous chemicals, e.g., strong acids and alkalis or on electricity connection, there **MUST** be at least one more person in the same room. All research personnel should seek the help of a companion when he/she must work in the laboratory outside normal office hours, otherwise he/she is required to utilize the Personal Alarm System in AP labs. Experiments should not be left unattended.
5. Prior approval from your supervisor is needed to stay in a laboratory beyond 11:00 p.m. Form can be downloaded from <https://www.ap.cityu.edu.hk/overnight.pdf>.
6. **SMOKING, EATING & DRINKING ARE STRICTLY FORBIDDEN**. Do not bring food or drinks into a laboratory.
7. **DO NOT RUN OR PLAY** in laboratories.
8. Loose clothing is potentially hazardous. Secure ties and tie up long hair. You are also advised to wear laboratory coat.
9. Familiarise yourselves with the **FIRE EXITS** and **ESCAPE ROUTES**. These are posted in every laboratory.
10. Familiarise yourself with **EMERGENCY PROCEDURES**. These are posted at the entrance of each laboratory.
11. **Wastes & solvents** must be disposed of properly. Consult your supervisor or the technicians in case of doubt.
12. All accidents must be reported to the technical officer/supervisor immediately.
13. Wearing **EYE PROTECTION** is mandatory when working with hazardous chemicals or operating UV instruments or **LASERS**, and in laboratories where such notices are posted. Consult your supervisor or the technicians for the appropriate type of eye-protection equipment. In other areas, you are encouraged to wear eye protection as a good safety practice. Users of laser classes 3B and 4 are reminded to undergo eye-

- sight tests arranged by the university. This should be carried out before the first use of laser and again before leaving the university.
14. Before commencement of a new experiment, you should complete a RISK ASSESSMENT and obtain approval from your supervisor . Risk Assessment Form can be downloaded from <https://www.ap.cityu.edu.hk/safety/risk-assessment.pdf>.
  15. There is a separate set of rules governing the use of Radiation Laboratories. These are posted at the entrance of the Radiation Laboratory. All users must observe these rules.

For further details of safety guidelines, please refer to the AP department website (<http://www.ap.cityu.edu.hk/index.aspx?id=20061214155729&lang=e>).

## **10. Communication channels**

There are various channels of communication between students and the Department. On an informal basis, students having academic difficulties with a course are encouraged to approach their academic advisors, lecturer or tutor concerned.

A formal consultative process between students and staff exists in the Department in the form of a Joint Staff/Student Consultative Committee (JSSCC) and Programme Committee, to which 2-3 student representatives from each cohort of each mode (for MSc programme only) will be nominated. The Committees meets at least once a semester. During the meeting, discussions are confined to matters of a general academic nature and the welfare of students. Students can express their views on the content and organization of the programme and identify any areas of difficulty. The Programme Committee is charged with the responsibility of monitoring the operation and performance of the programme.

### **10.1 Major Leader and Deputy Major Leader**

#### **Major Leader**

**Dr C Y CHUNG**

Office: G6713, 6/F, Academic 1 (Green Zone)

Phone: 34427835

Email: [appchung@cityu.edu.hk](mailto:appchung@cityu.edu.hk)

#### **Deputy Major Leader**

**Dr Z K XU**

Office: G6760, 6/F, Academic 1 (Green Zone)

Phone: 34429143

Email: [apzqx@cityu.edu.hk](mailto:apzqx@cityu.edu.hk)

#### **Deputy Major Leader**

**Dr JOHNNY HO**

Office: G6754, 6/F, Academic 1 (Green Zone)

Phone: 34424897

Email: [johnnyho@cityu.edu.hk](mailto:johnnyho@cityu.edu.hk)

## 11. Useful information

### 11.1 Course registration for 2015-16

- For 2015-16, students will be pre-registered in some of the required courses including AP1202, AP1203, AP2212, AP3251, AP3290, AP4216/AP4217, MA1200, MA1201, MA2158, CS1102 and GE2401 in Semester A and AP2102, AP2191, AP3202, AP3204, AP3205, AP3272 and AP3244 in Semester B.
- The web registration period for Semester A will start **from 17 August and end on 7 September 2015** but **you need to check your time ticket from “AIMS”**.
- Please check your curriculum requirements, review your study plan and then make appropriate adjustments to your course registration **after consulting your academic advisors if necessary**.
- Add/Drop of courses can be made through AIMS for web-enabled courses during the web registration period.
- For non-web-enabled courses, students should seek endorsement from the **course-offering academic units** by using the Add/Drop Form before submitting the change request to ARRO.
- If a student drops a course after the add/drop period, an ‘X’ grade will be assigned for the course. The ‘X’ grade will be printed on the student’s transcript.

#### Important notes

##### *How to do the Add/ Drop on web*

- Go to [www.cityu.edu.hk](http://www.cityu.edu.hk) from any terminal on campus or off campus and click “Students”.
- Log onto “AIMS” and then click “Course Registration”.
- Choose “Add or Drop Classes”.

For details on course registration arrangements for 2015-2016, please refer to “Course Registration” under ARRO website

([http://www6.cityu.edu.hk/arro/content.asp?cid=155#cityu\\_new](http://www6.cityu.edu.hk/arro/content.asp?cid=155#cityu_new)).

### 11.2 How to access your personal class schedule

- Go to CityU home page ([www.cityu.edu.hk](http://www.cityu.edu.hk)) from any terminal on campus or off campus.
- Log onto “e-Portal” under “Quick Links” or “My CityU”. *If you have problems in logging in, please follow the instructions in “Having problems logging in?”.*
- Select “View Student Schedule” under the “Courses I am taking” box.
- Press the “View Detail Schedule” button at the bottom of your timetable to display details of your class schedule.

### 11.3 How to get instructors' handouts through Canvas

- Go to CityU home page ([www.cityu.edu.hk](http://www.cityu.edu.hk)) from any terminal on campus or off campus.
- Log onto "Canvas" under "Quick Links".
- Click "Courses".

Canvas User Guides are available at [OCIO's website](#).

### 11.4 How to check curriculum requirements and course syllabuses

- Go to CityU home page ([www.cityu.edu.hk](http://www.cityu.edu.hk))
- Click "Academic Programmes".

### 11.5 How to access your student email account

- Go to [www.cityu.edu.hk](http://www.cityu.edu.hk) from any terminal on campus or off.
- Click "Email" under "My CityU"
- Click "@my.cityu.edu.hk (office 365)"

*\*For email communication, please state your name, student number, contact telephone number, programme and entry cohort.*

*\*Always check and clear your email account, and make sure it does not exceed the quota (a maximum of 25GB).*

### 11.6 How to access DegreeWorks

**DegreeWorks** is a web-based academic advising and degree audit tool primarily introduced for undergraduate students under the 4-year degree curriculum. DegreeWorks matches a student's academic record against the curriculum requirements. It offers a user-friendly interface that helps students learn easily what courses they still need to take to fulfill the requirements of College/School, GE, major, minor, etc. It also facilitates communication between students and advisors.

Students are encouraged to use the "Planner" function in DegreeWorks. "Planner" helps you create a long term study plan for your degree completion. Using this tool, you can easily discuss your academic goals and plan with your Advisor.

- Go to [www.cityu.edu.hk](http://www.cityu.edu.hk) from any terminal on campus or off campus.
- Log onto "AIMS".
- Go to the "Study Plan" tab in AIMS.
- Then you can view the Student advising worksheet and advising notes, and access other features available in DegreeWorks.

**Important notes**

Students are advised to go through the online tutorials and all materials available on ARRO's website to learn more about DegreeWorks.

- Go to [www.cityu.edu.hk/arro](http://www.cityu.edu.hk/arro)
- Click "Current Students".
- Choose "DegreeWorks".
- Read "Introduction", "Tutorials" and "Frequently Asked Questions".

## **12. Student Development Services (SDS)**

The SDS offers many student-centred services to students. It provides support and assistance for students in the following areas:

- Attainment of an all-round development
- Enrichment of campus life
- Development of career plans and choices
- Solving personal problems
- Enhancement of physical and mental well-being
- Provision of financial assistance
- Scholarship application
- Welfare provisions

If you need any advice on your personal issues other than academic concerns, you may approach SDS to schedule a counselling appointment:

Tel.: 3442 8478

E-mail: [sds@cityu.edu.hk](mailto:sds@cityu.edu.hk)

Address: Student Development Services, 6/F, Amenities Building

### **13. Administrative Support from General Office**

Address : G6702, 6/F, Academic 1 (Green Zone)  
Office Hours : Monday to Friday  
8:35 am - 12:30 pm  
2:00 pm - 5:35 pm  
Telephone : (852) 3442 7831  
Fax : (852) 3442 0538  
Email : [apoffice@cityu.edu.hk](mailto:apoffice@cityu.edu.hk)  
Website : [www.cityu.edu.hk/ap](http://www.cityu.edu.hk/ap)



## 14. Appendix: Academic Staff Profile

### STAFF

*Head of Department and  
Chair Professor of Physics*

**Prof. X L Wang**

BSc Peking University, China  
PhD Iowa State University, USA  
Fellow, American Physical Society

Email: ahead@cityu.edu.hk (for departmental  
matters)  
xlwang@cityu.edu.hk

*Personal Secretary*

Ms Sare W Y Lau  
Email: sare.lau@cityu.edu.hk

*Chair Professor of Materials Engineering*

**Prof Paul K Chu**

BSc The Ohio State University, USA  
MSc PhD Cornell University, USA  
Fellow, American Vacuum Society  
Fellow, Institute of Electrical and Electronics  
Engineers  
Fellow, American Physical Society  
Fellow, Materials Research Society  
Fellow, Hong Kong Institution of Engineers  
Fellow, Hong Kong Academy of Engineering Science  
(HKAES)

Email : paul.chu@cityu.edu.hk

*Chair Professors of Materials Science*

**Prof Joseph K L Lai**

BA MA Oxford University, UK  
PhD City University, UK  
Fellow, Institute of Materials, Minerals and Mining,  
UK  
Chartered Engineer, UK  
Fellow, Institute of Physics, UK  
Chartered Physicist, UK  
Fellow, Institution of Mechanical Engineers, UK  
Fellow, Hong Kong Institution of Engineers

E-mail: apjoelai@cityu.edu.hk

**Prof C S Lee**

BSc(Eng), PhD University of Hong Kong

### AREAS OF SPECIALISM

Neutron and synchrotron scattering  
Phase transformation, deformation,  
magnetism, residual stress determination,  
Metallic glasses, nanostructured materials,  
magnetic shape memory alloys

Plasma science, implantation,  
processing and engineering  
Semiconductor materials and processing  
Biomedical materials and nanobiology  
Advanced materials, functional thin films and  
nanomaterials

Properties of steels and aluminium  
Failure analysis of engineering components  
Temperature measurement  
Expert witness on accident investigations  
Litigations and arbitrations involving metals

Organic electronics  
Nanoscaled materials

E-mail: apcslee@cityu.edu.hk

*Chair Professor of Nuclear Engineering*

**Prof C H Woo**

BSc (Special Honours) University of Hong Kong

MSc University of Calgary, Canada

PhD University of Waterloo, Canada

DSc University of Hong Kong

Fellow, Hong Kong Academy of Engineering Sciences

Fellow, Hong Kong Institution of Engineers

E-mail: chungwoo@cityu.edu.hk

*Chair Professor of Photonics Materials*

**Prof Andrey L Rogach**

Diploma Belarusian State University, Belarus

PhD Belarusian State University, Belarus

Dr habil Ludwig-Maximilians University, Munich, Germany

Fellow, Electromagnetics Academy 2014

E-mail: andrey.rogach@cityu.edu.hk

*Professor and Associate Dean (CSE)*

**Prof Robert K Y Li**

BA BAI MA PhD Dublin University, Ireland

E-mail: aprkyl@cityu.edu.hk

*Professor and Associate Head*

**Prof K S Chan**

BSc PhD University of Hong Kong

E-mail: apkschan@cityu.edu.hk

*Professor and Assistant Head*

**Prof C H Shek**

BSc(Eng) PhD University of Hong Kong

E-mail: apchshek@cityu.edu.hk

Solar cells and photodetectors

Nuclear materials

Reactor aging due to irradiation damage

Nanoscience and nanotechnology

Advanced functional materials

Optical spectroscopy

Polymer engineering

Composite materials

Semiconductor Physics

Photonics technology

Nanoscience and nanotechnology

Spintronics

Superconductivity

Phase transformation in metallic materials

Nanostructured materials

Bulk metallic glasses

*Professors*

**Prof S C Tjong**

BSc National Taiwan University, Taiwan  
MSc PhD University of Manchester, UK  
Chartered Engineer, UK  
Chartered Scientist, UK  
Fellow, Institute of Materials, Minerals and Mining,  
UK  
Fellow, Hong Kong Institution of Engineers

E-mail: aptjong@cityu.edu.hk

Surface Science  
Electron microscopy  
Polymer Composites  
Biomaterials  
Nanostructured materials

**Prof Lawrence C M Wu**

BSc(Eng) PhD University of Bristol, UK  
PgDMS University of West of England, UK  
Fellow, Hong Kong Institution of Engineers

E-mail: apcmlwu@cityu.edu.hk

Engineering failure analysis  
Nano-materials for solar cells and biosensor

**Prof K M Yu**

BSc PhD University of California, Berkeley, USA

E-mail: kinmanyu@cityu.edu.hk

Ion Beam Analysis and Modification of  
Materials  
Defects in Semiconductors  
Photovoltaic Materials  
Nitride and Oxide semiconductors  
Transparent Conductors

**Prof Peter K N Yu**

BSc PhD University of Hong Kong  
Chartered Scientist, UK  
Chartered Physicist, UK  
Fellow, Institute of Physics, UK  
Chartered Radiation Protection Professional  
Member, Society of Radiological Protection, UK  
Fellow, Hong Kong Institution of Engineers

E-mail: appetery@cityu.edu.hk

Radiation Biophysics  
Medical Physics  
Biointerfaces

**Prof R Q Zhang**

BSc MSc PhD Shandong University, China

E-mail: aprqz@cityu.edu.hk

Surface, Interface and Microstructures of  
functional materials  
Vapor-solid interactions  
Computational materials science  
Nanoscience

**Prof W J Zhang**

BSc MSc PhD Lanzhou University, China

E-mail: apwjzh@cityu.edu.hk

Surface and interface analysis  
Thin films  
Diamond and superhard materials  
Nanomaterials

*Associate Professors*

**Dr S T Chu**

BSc Wilfrid Laurier University, Canada  
MSc PhD University of Waterloo, Canada

E-mail: saitchu@cityu.edu.hk

Integrated photonics  
Sensors and sensing systems  
Numerical methods

**Dr Jonathan C Y Chung**

BSc(Eng) PhD University of Hong Kong  
Member, Hong Kong Institution of Engineers  
(Materials & Biomedical)

E-mail: appchung@cityu.edu.hk

Metallic materials  
Shape memory alloy  
Powder metallurgy  
Battery materials

**Dr Antonio Ruotolo**

MEng PhD University of Naples (IT) "Federico II",  
Italy

E-mail: aruotolo@cityu.edu.hk

Magnetism and Spintronics  
Superconductivity  
Semiconductor oxides  
Thin film Technology  
Nano-lithography

**Dr A L Roy Vellaisamy**

BSc St Xavier's College, India  
MSc Loyola College, India  
PhD Nagpur University, India

E-mail: val.roy@cityu.edu.hk

Molecular electronics  
Molecular self-assembly  
Photonics  
Nano-materials science  
Bio-electronics  
Renewable energy(Solar and Fuel Cells) and  
printed electronics

**Dr Z K Xu**

BSc Shanghai University of Science and  
Technology, China  
MSc California State Polytechnic University at  
Pomona, USA  
PhD University of Illinois at Urbana-Champaign,  
USA

E-mail: apzcx@cityu.edu.hk

Electron microscopy  
Materials characterization  
Processing of advanced materials  
Electroceramics

**Dr J Antonio Zapien**

BSc UNAM, Mexico  
PhD The Pennsylvania State University, USA

E-mail: apjzas@cityu.edu.hk

Nanomaterials and nanotechnology  
Nano-photonics and nano-optoelectronics  
Optical properties of materials  
Nucleation and growth of thin films

*Assistant Professors*

**Dr Jun Fan**

BEng Tsinghua University, Beijing, China  
MSc McMaster University, Hamilton, Canada  
PhD Princeton University, Princeton, USA

E-mail: junfan@cityu.edu.hk

Theoretical and Computational Materials  
Science and Biophysics  
Assembly Molecular Self-assembly  
Structure, Function and Dynamics of Cell  
Membranes and Proteins  
Molecular Dynamics Simulations  
Phase Field Modeling  
Free Energy Calculations

**Dr Derek Ho**

M.A.Sc. B.A.Sc., University of British Columbia,  
Canada  
PhD University of Toronto, Canada  
Member, Institute of Electrical and Electronics  
Engineers (IEEE)

E-mail: derekho@cityu.edu.hk

Smart arrayed sensors for optical, chemical, and  
electrical biosensing  
Instruments for fluorescence spectroscopy,  
bioluminescence imaging, and lenseless  
microscopy  
Fully-integrated lab-on-a-chips and  
microsystems  
Electronics for implantable, wearable, and  
handheld medical diagnostics  
CMOS circuits and systems for signal  
processing, control, and computation  
Microelectronic, nanoelectronic, and  
optoelectronic devices

**Dr Johnny C Y Ho**

BSc MSc PhD University of California, Berkeley,  
USA

E-mail: johnnyho@cityu.edu.hk

Synthesis and characterization of nanostructured  
materials  
Assembly and heterogeneous integration of  
nano-materials  
Nano-scale devices and processing for  
technological applications (electronics, energy-  
harvesting, photonics, sensors)

**Dr Condon Lau**

BSE Princeton University, USA  
MSc PhD Massachusetts Institute of Technology,  
USA

E-mail: condon.lau@cityu.edu.hk

Optics  
Nuclear magnetic resonance  
Biophysics  
Spectroscopy  
Imaging

**Dr Y Y Li**

BSc Peking University, China  
MSc PhD University of California, San Diego, USA

E-mail: yangli@cityu.edu.hk

Electrochemical nanofabrication  
Functional porous nanomaterials  
Sensors  
Electrode materials  
Smart biomaterials

**Dr Suresh M. Chathoth**

MSc Andhra University, India  
MPhil., University of Madras, India  
MTech National Institute of Technology Karnataka,  
India  
PhD Technical University of Munich, Germany

E-mail: smavilac@cityu.edu.hk

Neutron Scattering  
Dynamics of liquid in confinements  
Energy storage  
Glass transition

**Dr Stephen Tsang**

MPhil, BEng The Chinese University of Hong Kong  
PhD University of Toronto, Canada

E-mail: saitsang@cityu.edu.hk

Advanced materials for photovoltaic application  
Solution processed electronic materials  
Semiconductor device physics  
Spectroscopy techniques

**Dr Feng Wang**

BEng PhD Zhejiang University, China

E-mail: wang.feng@cityu.edu.hk

Luminescent Nanomaterials  
Photon Upconversion  
Optical Spectroscopy

**Dr Xin Wang**

BSc Peking University, China  
MA, MPhil, PhD Columbia University, USA

E-mail: x.wang@cityu.edu.hk

Theoretical condensed matter physics  
Spin quantum computation  
Correlated electron system  
Computational methods

**Dr C Y Zhi**

BSc ShanDong University, China  
PhD IOP, CAS, China

E-mail: cy.zhi@cityu.edu.hk

BN/BCN nanomaterials  
Thermally conductive electrically insulating  
polymer composites for heat dissipation  
Energy related electrochemical &  
photoelectrochemical devices  
Nanomaterials for sewage treatment

*Emeritus Professor*

**Prof Czeslaw Z Rudowicz**

Institute of Physics,  
West Pomeranian University of Technology, Poland

Quantum mechanics  
Condensed matter physics  
Magnetism  
Electron magnetic resonance (EMR)  
Crystal (Ligand) Field Theory  
Computational physics  
Scientific databases

*Honorary Professors*

**Prof Nathan W T Cheung**

Professor Emeritus  
Department of Electrical Engineering and Computer  
Sciences,  
University of California, Berkeley, USA

Microelectronics technologies  
Surface science and nanoscience  
LED and photovoltaic

**Prof Thomas Kuech**

Milton J. and A. Maude Shoemaker and Beckwith-  
Bascom Professor  
Department of Chemical and Biological  
Engineering,  
University of Wisconsin-Madison

Solid-state materials synthesis and  
characterization  
Electronic and semiconductor materials  
Solar energy and photovoltaics  
Oxide materials  
Nanostructure formation

**Prof Y M Mai**

University Professor and Personal Chair in  
Mechanical Engineering  
Center for Advanced Materials Technology,

Advanced engineering materials including bio,  
nano and functionally graded materials  
Fracture and fatigue mechanics  
Fiber composites science and technology

School of Aerospace Mechanical and Mechatronic Engineering,  
University of Sydney, Australia

**Prof L J Wan**

President, University of Science and Technology of China  
Professor and Member, Chinese Academy of Science  
Fellow, TWAS, the Academy of Sciences for the Developing World  
Director, CAS Center for Molecular Science  
Director, CAS Key Laboratory of Molecular Nanostructure and Nanotechnology  
Director, Beijing National Laboratory for Molecular Sciences

*Adjunct Professor*

**Prof Yeshayahu Lifshitz**

Alfred and Marion Bar Chair of Engineering  
Department of Materials Science and Engineering,  
Technion-Israel Institute of Technology

Tribology and surface engineering  
Failure mechanics and analysis

Molecule nanoscience and nanotechnology  
Surface science  
Materials chemistry  
Electrochemistry  
Scanning probe microscopy

Diamond and related materials  
Nanomaterials  
Space environmental effects  
Ion beam deposition and modification of materials