The Hong Kong Polytechnic University

Department of Electrical Engineering

Higher Diploma in Electrical Engineering

Full-time

Programme Code: 41373

Definitive Programme Document

Cohort: 2012/2013

HIGHER DIPLOMA IN ELECTRICAL ENGINEERING 2012-13

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Important

This Definitive Programme Document is subject to review and changes which the Programme Host Faculty/Department can decide to make from time to time. Students will be informed of the changes as and when appropriate.

PART A : INTRODUCTION

A 1 Preamble

A 1.1 PROGRAMME AIMS

The programme aims to provide the students with a sound education in electrical engineering. The programme is designed to produce engineering technologists/technicians who will be able to practice electrical engineering with competence in Hong Kong, China and the neighboring regions. The programme emphasizes on foundation level knowledge and its applications, practical skills, problem-solving ability, and team-work spirit.

The new two year Higher Diploma (HD) Programme aligns its intake with the graduates coming from the New Senior Secondary Curriculum (NSS) and the Hong Kong Institute of Vocational Education (IVE). This new HD Programme also paves the way for graduates to further their study for a professional qualification. Graduates could obtain up to two years of exemption for the study of a four-year Honors degree programme of similar discipline.

A 2 General Information - Higher Diploma Programme

A 2.1 PROGRAMME CODE AND TITLE

41373 - Higher Diploma in Electrical Engineering

A 2.2 DURATION AND MODE OF ATTENDANCE

Normally 2 years Full-time. The maximum period of registration is 4 years.

A 2.3 FINAL AWARD

Higher Diploma in Electrical Engineering

A 2.4 IMPLEMENTATION DATE

September 2012 (i.e. for the 2012/2013 academic year)

A 2.5 MINIMUM ENTRANCE REQUIREMENTS

For those applying on the basis of **HKDSE**, the candidate should satisfy the University's General Entrance Requirements of 5 HKDSE subjects at Level 2 including English Language and Chinese Language. There is no compulsory subject requirement. Preferred elective subjects for the programme include:

- Mathematics;
- Extended modules of Mathematics;
- Information & Communication Technology;
- Physics, Biology, Chemistry, and Combined Science.

For those applying on the basis of **HKALE**, the subject requirements are:

- HKALE Grade E or above in 1 of the following subjects: Physics; Engineering Science; Pure Mathematics; Applied Mathematics; Chemistry and Computer Studies; OR
- HKALE (AS-Level) Grade E or above in 2 of the following subjects: Physics; Design & Technology; Mathematics & Statistics; Applied Mathematics; Chemistry; Computer Applications and Electronics;

AND

- HKCEE Grade D or above in Mathematics or Addi-tional Mathematics (only required for applicants without E in HKALE Applied Mathematics or Pure Mathematics; OR in HKALE (AS-Level) Applied Mathematics or Mathemat-ics & Statistics); AND
- HKCEE Grade E or above in Physics or Engineering Science (only required for applicants without E in HKALE Physics or Engineering Science; OR in HKALE (AS-Level) Physics or Design & Technology).

For those applying on the basis of other qualifications, the specified qualifications are:

- Diploma in Electrical Engineering or in Electronics & Communications Engineering; OR
- Higher Certificate in Electrical Engineering or in Electronic Engineering.

A 2.6 EXTERNAL RECOGNITION

This Higher Diploma programme will seek accreditation by the Engineering Council for exemption from its Part-1 Examinations for professional membership.

A 3 Curriculum

The time-tabled student hours for each subject and the type of activity (lecture [Lt], tutorial [Tu] and laboratory [Lab]) are given in the Table A3.1, A3.2 and A3.3. The abbreviations used in these tables are:

AMA	Applied Mathematics	AP	Applied Physics
CBS	Chinese & Bilingual Studies	EE	Electrical Engineering
ELC	English Language Centre	ENG	Engineering Faculty
GEC	General Education Centre	IC	Industrial Centre

Subjects are referenced by a Departmental prefix (e.g. EE corresponds to Electrical Engineering) followed by a reference number. Each subject is also categorised as non-deferrable (**Non-Def**) or deferrable (**Def**). In the reference numbers, the first digit (i.e. 1,2,3 or 4) indicates the level of the subject.

'*Non-def*' are those subjects which form the backbone of the vertical integration must be taken by every student in the prescribed semester, unless prevented from doing so due to non-compliance with prerequisities.

'*Def*' are those subjects which must be satisfactorily completed before the student becomes eligible for an award but the timing of the subject is determined by the student. Tables in Section A4 show the times (semester) in which these subjects are *recommended* to be taken if the programmes are to be completed in the minimum time.

Level 0 and 1		Curriculum					Assessment Method	
		Teaching Dept.	Contact Hours		Credits	GPA Weight (W_i)		
Subject Code	Subject Title		Lt/ Tu	Lab			Continuous	Exam
	Non Def Subjects							
AMA1100	Basic Mathematics - an introduction to Algebra and Differential Calculus	AMA	28	-	2	0.2	40%	60%
AMA1101	Calculus I	AMA	56	-	4	0.2	40%	60%
AMA1102	Calculus IA	AMA	56	-	4	0.2	40%	60%
AMA1103	Introductory Linear Algebra	AMA	28	-	2	0.2	40%	60%
AMA1104	Introductory Probability	AMA	28	-	2	0.2	40%	60%
AP00002	Foundation Physics I	AP	42	-	3	-	40%	60%
AP00003	Foundation Physics II	AP	42	-	3	-	40%	60%
AP10004	Physics Experiment	AP	-	36	1	0.2	100%	-
AP10008	University Physics I	AP	42	-	3	0.2	40%	60%
AP10009	University Physics II	AP	42	-	3	0.2	40%	60%
CBS0103P	Chinese Communication for Higher Diploma	CBS	42	-	3	-	100%	-
CBS1101P	Fundamentals of Chinese Communication	CBS	42	-	3	0.2	60%	40%
CBS1102P	Advanced Communication Skills in Chinese	CBS	42	-	3	0.2	70%	30%
ELC0011	English Communication Skills I	ELC	42	-	3	-	100%	-
ELC0012	English Communication Skills II	ELC	42	-	3	-	100%	-
ELC1011	Practical English for University Studies	ELC	42	-	3	0.2	100%	-
ELC1013	English for University Studies	ELC	42	-	3	0.2	100%	-
ELC1014	Advanced English for University Studies	ELC	42	-	3	0.2	100%	-
ELC2011	Advanced English Reading and Writing Skills	ELC	42	-	3	0.2	100%	-
ELC2012	Persuasive Communication	ELC	42	-	3	0.2	100%	-
ELC2013	English in Literature and Film	ELC	42	-	3	0.2	100%	-
ENG1003	Freshman Seminars for Engineering	ENG	43	-	3	0.2	100%	-
Depending on the subjects taken	Cluster Areas Requirement (CAR) subjects (subjects taken must conform to the University's Cluster Area Requirements specified in Section A 3.1)	Various Depts	42	-	3	0.2	depending on the subjects taken	depending on the subjects taken

Table A3.1

Level 2		Curriculum					Assessment Method	
		Teaching Dept.	Contact Hours		Credits	GPA Weight (W_i)		
Subject Code	Subject Title		Lt/ Tu	Lab			Continuous	Exam
	Non Def Subjects							
AMA2111	Mathematics I	AMA	42	-	3	0.2	40%	60%
AMA2112	Mathematics II	AMA	42	-	3	0.2	40%	60%
EE2002C	Circuit Analysis	EE	42	9	3	0.2	40%	60%
EE2003C	Electronics	EE	42	12	3	0.2	40%	60%
EE2004C	Electrical Energy Systems Fundamentals	EE	36	12	3	0.2	40%	60%
EE2007C	Computer Systems Fundamentals	EE	36	12	3	0.2	40%	60%
EE2008C	Group Project	EE	-	-	4	0.2	100%	
	Def Subjects							
ENG2002	Computer Programming	ENG	64	-	3	0.2	100%	-
Depending on the subjects taken	Cluster Areas Requirement (CAR) subjects (subjects taken must conform to the University's Cluster Area Requirements specified in Section A 3.1)	Various Depts	42	-	3	0.2	depending on the subjects taken	depending on the subjects taken
	IC Training							
IC2105	Engineering Communication and Fundamentals	IC	120 hours throughout the year		4 Training Credits	-	100% Assessed and graded	-
IC2112	IC Training I (EE)	IC	120 hours in Summer		4 Training Credits	-	100% Assessed and graded	-

Table A3.2

Level 3		Curriculum					Assessment Method	
		Teaching Dept.	Contact Hours		Credits	GPA Weight (W_i)		
Subject Code	Subject Title		Lt/ Tu	Lab			Continuous	Exam
	Def Subjects							
EE3002C	Electromechanical Energy Conversion	EE	36	12	3	0.3	40%	60%
EE3003C	Power Electronics and Drives	EE	36	12	3	0.3	40%	60%
EE3009C	Electrical Services in Buildings	EE	42	-	3	0.3	40%	60%

Table A3.3

A 3.1 CLUSTER AREA REQUIREMENTS (CAR)

To expand students' intellectual capacity beyond their disciplinary domain and to enable them to tackle professional and global issues from a multidisciplinary perspective, students are required to successfully complete two 3-credit subjects within the following four Cluster Areas:

- Human Nature, Relations and Development (HRD)
- Community, Organisation and Globalisation (COG)
- History, Culture and World Views (HCW)
- Science, Technology and Environment (STE)

A list of CAR subjects under each of the four Cluster Areas is available at:

https://www2.polyu.edu.hk/as/Polyu/GUR/index.htm

In addition, students are required to successfully complete a 3 credit CAR subject, designated as "China-related". The purpose is to enable students to gain an increased understanding of China (e.g., its history, culture and society, as well as emerging issues or challenges). A list of approved CAR subjects for meeting the China Studies Requirement is available at:

https://www2.polyu.edu.hk/as/Polyu/GUR/index.htm

A 4 Specified Progression Pattern

Student is advised to follow the curriculum below:

Year 1 – Semester 1 (Total 13.5 credits plus 2 training credits)

Subject Code	Subject	Credits	Criteria for taking different subjects based on HKALE results	Criteria for taking different subjects based on HKDSE results
AMA1101	Calculus I	4	Pass in in A-Level Pure Mathematics/ AS-Level Mathematics & Statistics/Applied Maths	Attained Level 2 in EM I or EM II in HKDSE Mathematics
AMA1102	Calculus IA		Without a Pass in A-Level Pure Mathematics/ AS-Level Mathematics & Statistics/Applied Maths	Have not attained Level 2 in EM I or EM II in HKDSE Mathematics
AP10004	Physics Experiment (½ subject)	0.5		
AP10008	University Physics I	3		
CAR	Cluster Area Requirement Subject (see Section A3.1)	3		
ENG1003	Freshman Seminars for Engineering (½ subject)	1.5		
ENG2002	Computer Programming (½ subject)	1.5		
IC2105	Engineering Communication and Fundamentals (120 hours throughout the year)	2 training credits (total 4 training credits)		

Year 1 – Semester 2 (Total 15.5 credits plus 2 training credits)

Subject Code	Subject	Credits	Criteria for taking different subjects based on HKALE results	Criteria for taking different subjects based on HKDSE results
AP10004	Physics Experiment (½ subject)	0.5		
AP10009	University Physics II	3		
CBS0103P	Chinese Communication for Higher Diploma	3	HKALE Grade E or with any component below E or below Grade E	HKDSE Level 3 with any sub-score below Level 3 or Level 2
CBS1101P	Fundamentals of Chinese Communication		HKALE Grade D or Grade E with no component below E	HKDSE Level 3 with no sub-score below Level 3
CBS1102P	Advanced Communication Skills in Chinese		HKALE Grade A/B/C	HKDSE Level 4 /5 or above
EE2002C	Circuit Analysis	3		
EE2007C	Computer Systems Fundamentals	3		
ENG1003	Freshman Seminars for Engineering (½ subject)	1.5		
ENG2002	Computer Programming (½ subject)	1.5		
IC2105	Engineering Communication and Fundamentals (120 hours throughout the year)	2 training credits (total 4 training credits)		

Year 1 – Summer (Total 5~7 credits plus 4 training credits)

Subject Code	Subject	Credits	Criteria for taking different subjects based on HKALE results	Criteria for taking different subjects based on HKDSE results
AMA1103	Introductory Linear Algebra	2	i) Pass in AS-Level Mathematics & Statistics ii) Pass in A-Level Pure Maths + Applied Maths could choose either Introductory Linear Algebra or Introductory Probability	i) Attained Level 2 in HKDSE EM I in Mathematics ii) Have not attained Level 2 in any one of the HKDSE extended modules in Mathematics should take BOTH Introductory Linear Algebra or Introductory Probability
AMA1104	Introductory Probability	2	i) Pass in A-Level Pure Mathematics ii) Pass in A-Level Pure Maths + Applied Maths could choose either Introductory Linear Algebra or Introductory Probability	i) Attained Level 2 in HKDSE EM II in Mathematics ii) Have not attained Level 2 in any one of the HKDSE extended modules in Mathematics should take BOTH Introductory Linear Algebra or Introductory Probability
EE2003C	Electronics	3		
IC2112	IC Training I	4 training credits		

Year 2 – Semester 1 (Total 17 credits)

Subject Code	Subject	Credits	Criteria for taking Additional Underpinning subjects - HKALE student	Criteria for taking Additional Underpinning subjects - HKDSE student
AMA2111	Mathematics I	3		
CAR (China Related)	Cluster Area Requirement - China Related Subject (see section A3.1)	3		
ELC0011	English Communication Skills I	3	Grade E (with sub-score below E) or below in AL English should take ELC0011 & ELC0012	Level 3 (with sub-score at 2) or overall Level 2 in HKDSE English should take ELC0011 & ELC0012
ELC1011	Practical English for University Studies		Grade E in AL English should take ELC1011 & ELC1013	Level 3 in HKDSE English should take ELC1011 & ELC1013
ELC1013	English for University Studies		Grade D in AL English should take ELC1013 & ELC1014	Level 4 in HKDSE English should take ELC1013 & ELC1014
ELC1014	Advanced English for University Studies		Grade C or above in AL English should take ELC1014 & 1 ELC elective (ELC2011/12/13)	Level 5 or above in HKDSE English should take ELC1014 & 1 ELC elective (ELC2011/12/13)
EE2004C	Electrical Energy Systems Fundamentals	3		
EE2008C	Group Project (½ subject)	2		
EE3002C	Electromechanical Energy Conversion	3		

Year 2 – Semester 2 (Total 14 credits)

Subject Code	Subject	Credits	Criteria for taking Additional Underpinning subjects - HKALE student	Criteria for taking Additional Underpinning subjects - HKDSE student
AMA2112	Mathematics II	3		
ELC0012	English Communication Skills II	3	Grade E (with sub-score below E) or below in AL English should take ELC0011 & ELC0012	Level 3 (with sub-score at 2) or overall Level 2 in HKDSE English should take ELC0011 & ELC0012
ELC1013	English for University Studies		Grade E in AL English should take ELC1011 & ELC1013	Level 3 in HKDSE English should take ELC1011 & ELC1013
ELC1014	Advanced English for University Studies		Grade D in AL English should take ELC1013 & ELC1014	Level 4 in HKDSE English should take ELC1013 & ELC1014
ELC2011/12/13(either one of these subjects)	Advanced English Reading and Writing Skills/ Persuasive Communication/ English in Literature and Film		Grade C or above in AL English should take ELC1014 & 1 ELC elective (ELC2011/12/13)	Level 5 or above in HKDSE English should take ELC1014 & 1 ELC elective (ELC2011/12/13)
EE2008C	Group Project (½ subject)	2		
EE3003C	Power Electronics and Drives	3		
EE3009C	Electrical Services in Buildings	3		

Table A4.1

Additional Underpinning Subjects in Physics & Mathematics

Semester	Subject Code	Subject	Credits	Criteria for taking Additional Underpinning subjects - HKALE student	Criteria for taking Additional Underpinning subjects - HKDSE student
Year 1 **Semester 1**	AMA1100	Basic Mathematics - an introduction to Algebra and Differential Calculus	2	Without a Pass in A-Level Pure Mathematics/ AS-Level Mathematics & Statistics/Applied Maths	Have not attained Level 2 in EM I or EM II in HKDSE Mathematics.
	AP00002	Foundation Physics I	3	Without a Pass in HKALE Physics or Engineering Science, or HKALE(AS-Level) Physics; AND without a Pass in HKCEE Physics or Engineering Science	Have not attained Level 2 in HKDSE Physics or Combined Science (with a component in Physics)
	AP00003	Foundation Physics II	3		

Table A4.2

Total Credits required for Graduation

The total study credits is ranging from 65 – 75 (plus 8 training credits) depending on the students' HKALE or HKDSE results as students may be required to take extra subjects in Mathematics/Physics depending on their entry qualifications.

A 4.1 ADDITIONAL ENGLISH LANGUAGE STUDY REQUIREMENT

Students in Higher Diploma programmes are required to successfully complete two English language subjects with reference to their attainments in HKDSE English language or HKALE Use of English.

Students entering with the following HKDSE results, or those entering in 2012/13 with the following HKALE results, are required to take two 3-credit HDLCR English subjects:

- HKDSE Level 2
- HKDSE level 3 with any sub-score below level 3
- HKALE Grade E with any component below E
- below HKALE Grade E

These two subjects will help students with tertiary study in the English medium and prepare them for the workplace. Upon completion of these English language subjects, students should be brought up to a level at which they are eligible for taking the LCR English subjects at the bachelor's degree level. In addition, students will be given an option of taking two additional LCR English subjects at the bachelor's degree level (during their HD studies) to facilitate their future articulation to bachelor's degree programmes.

Students entering with the following HKDSE results, or those entering in 2012/13 with the following HKALE results, are required to take LCR English subjects at the bachelors' degree level according to their level of English language proficiency at entry:

- HKDSE Level 3 with no sub-score below Level 3
- above HKDSE Level 3
- HKALE Grade E with no component below E
- above HKALE Grade E

A 4.2 ADDITIONAL CHINESE LANGUAGE STUDY REQUIREMENT

Students in Higher Diploma programmes are required to successfully complete one Chinese language subject with reference to their attainments in HKDSE Chinese language or HKALE Chinese Language and Culture.

Students entering with the following HKDSE results, or those entering in 2012/13 with the following HKALE results, are required to take one 3-credit HDLCR Chinese subject:

- HKDSE Level 2
- HKDSE Level 3 with any sub-score below Level 3
- HKALE Grade E with any component below E
- below HKALE Grade E

This subject will help prepare students for the workplace as well as for the articulation to bachelor's degree programmes. Upon completion of the Chinese language subject, students should be brought up to a level at which they are eligible for taking the LCR Chinese subject at the bachelor's degree level. In addition, students will be given an option of taking one additional LCR Chinese subject at the bachelor's degree level (during their HD studies) to facilitate their future articulation to bachelor's degree programmes.

Students entering with the following HKDSE results, or those entering in 2012/13 with the following HKALE results, are required to take LCR Chinese subject at the bachelors' degree level according to their level of Chinese language proficiency at entry:

- HKDSE Level 3 with no sub-score below Level 3
- above HKDSE Level 3
- HKALE Grade E with no component below E
- above HKALE Grade E

Part B : PHILOSOPHY AND OBJECTIVES

B 1 Programme Philosophy

The Higher Diploma (HD) programme aims to provide the necessary balance of theoretical studies and practical training to prepare students for a career as a higher technician or technician engineer in the field of electrical engineering. Graduates from the programme are expected to be able to assume technical positions to apply current technologies, make technical judgements, transfer and develop new technologies, and communicate clearly both in writing and orally at supervisory positions.

To achieve these aims, the programme is designed to consist of a balance of lectures/tutorials, laboratory work, practical training in the Industrial Centre and a group project. The curriculum includes studies in the main streams of electrical theory and is supported by mathematics, computing, electronics, mechanical engineering, English, Chinese and general studies.

HD and the BEng programmes have a similar curriculum and syllabuses. This similarity of the HD programme and the Degree programme is specially adopted in the Department to facilitate teaching and student learning.

B 2 Programme Objectives

The programme objectives are as follows:

1. The program aims to provide HD students with a sound education in electrical engineering.
2. The program is designed to produce engineering technologist/technicians who will be able to practice electrical engineering and related disciplines.
3. The programme emphasizes on foundation level knowledge, application techniques, practical skills, problem solving ability, and team work spirit.
4. The programme also paves the way for graduates to further their study for a higher professional qualification.

B 3 Programme Outcomes

To achieve the aims of producing higher technicians, the programme is designed to consist of a balance of lectures/tutorials, practical laboratory work, practical workshop training in the Industrial Centre and project. The curriculum includes studies in the mainstreams of electrical engineering supported by mathematics, computing, electronics, English, Chinese and general studies.

The approach will highlight the importance of practical application of electrical theory, with more emphasis being placed on applications. The workshop training and the laboratory training work will be an important part of the curriculum and reference is regularly made whenever possible to supplement the theoretical teaching in classrooms.

The University aspires to develop all its students as all-round graduates with professional competence, and has identified a set of highly valued graduate attributes as the learning goals for students. While many of these graduate attributes can be developed through the curricular activities of this programme, some (including interest in local and international affairs, interpersonal skills, sense of social and national responsibility, cultural appreciation, biliteracy and trilingualism, and entrepreneurship) will be primarily addressed through co-curricular activities offered by faculties, departments, and various teaching and learning support units of the University. Students are encouraged to make full use of such opportunities to develop these attributes.

Following the University's aim of producing all-rounded graduates with professional competence, the Higher Diploma programme aims to develop students in the four main areas – to be a (i) competent professional, (ii) creative problem solver, (iii) effective communicator, and (iv) educated global citizen. Detail explanation of these areas is listed in the table below:

Competent Professionals - A1, A2, A3, & A4	
A1 Professional Competence	Have a solid technical education in Electrical Engineering based on the understanding of its fundamentals and its current applications. Possess broad engineering knowledge to enable the graduates to adapt, to change, and to satisfy likely career diversions
A2 Practical Skills	Be able to apply modern experimental techniques and to be practical minded. Aware of technical and non-technical constraints
A3 Teamwork and Leadership	Possess social abilities including inter-personal/public relations, team work, and social consciousness.
A4 Global Outlook and Lifelong Learning	Possess an inquiring and innovative attitude thus encouraging the individual to acknowledge the developments in Electrical Engineering. To keep abreast of the developments in Electrical Engineering and an appreciation and the desire for lifelong learning.
B Creative Problem Solvers	
Creative Thinking and Problem Solving	Apply the fundamental principles to solve problems in the area of Electrical Engineering and related disciplines. Possess intellectual abilities including creative and critical thinking.
C Effective Communicators	
Biliteracy, Trilingualism, & Communication Skills	Language proficiency in English and Chinese to communicate clearly via graphic, numeric, verbal and written media.
D Educated Global Citizens	
Social Responsibilities	Have awareness and understanding of the ethical and social responsibilities of a technician engineer.

Table B3.1

The Programme Outcomes are in line with the Programme Objectives, and the corresponding mapping is shown in table B3.2.

		Programme Objectives			
		1	2	3	4
Programme Outcomes	A1	√	√		√
	A2		√	√	
	A3			√	
	A4				√
	B	√			
	C	√	√		
	D		√		

Table B3.2

The Subject Learning Outcomes are designed to be in alignment with the Programme Outcomes. The Subject Learning Outcomes are given in each subject and they can be found in the Subject Descriptions Forms in Part E.

The programme and subject outcomes will be assessed in stages according to a Learning Outcomes Assessment Plan (LOAP) adopted by the Departmental Learning and Teaching Committee.

Relationship between Institutional Learning Outcomes and Intended Learning Outcomes (ILO) of the programme is shown in Table B3.3.

		Institutional Learning Outcomes					
		Professional competence	Critical thinker	Effective communicator	Innovative problem solver	Lifelong learner	Ethical leader
Programme Outcomes	A1	√	√		√		
	A2	√	√		√		
	A3	√		√			√
	A4	√				√	
	B		√		√		
	C			√			
	D						√

Table B3.3 Relationship between Institutional Learning Outcomes and Intended Learning Outcomes (ILO) of the programme

B 4 Subject support to Programme Outcomes

Subjects	Programme Outcomes						
	A1	A2	A3	A4	B	C	D
AMA1100					X	X	
AMA1101					X	X	
AMA1102					X	X	
AMA1103					X	X	
AMA1104					X	X	
AMA2111					X	X	
AMA2112					X	X	
AP00002	X				X	X	
AP00003	X				X	X	
AP10004		X			X	X	
AP10008	X				X	X	
AP10009	X				X	X	
CBS0103P						X	
CBS1101P						X	
CBS1102P						X	
EE2002C	X				X		
EE2003C	X						
EE2004C	X			X	X		X
EE2007C	X			X	X		
EE2008C	X	X	X	X	X	X	
EE3002C	X			X	X		
EE3003C	X						
EE3009C	X			X	X		X
ELC0011						X	
ELC0012						X	
ELC1011						X	
ELC1013						X	
ELC1014						X	
ELC2011						X	
ELC2012						X	
ELC2013						X	
ENG1003	X		X	X		X	X
ENG2002	X				X		
CAR				X		X	X

CAR (China related)				X		X	X
IC2105		X					
IC2112		X	X				

Table B4.1

Table B4.1 illustrates how the subjects support the Programme Outcomes through the teaching activities, practice on the part of students, and measurements.

Part C : Educational and Assessment Methodologies

C 1 Teaching and Learning

C 1.1 PHILOSOPHY

The philosophy has been to gradually introduce an approach in which the lecturers are encouraged to "teach" less and the students to learn more. The Department's teaching approach is being revised continuously so as to enhance the students' ability to find out and learn for themselves.

Teaching methods for replacing the out-dated ‘chalk and talk' approach, or the ‘monologue' lecturing style, with ‘interactive teaching’, are being further developed and promoted. It has indeed been our Department Policy to regard it as one of the top priorities, together with research. All of the classroom sessions are conducted as a combination of lecturing and tutoring, so that the active participation of the student is realized at all times. Other teaching aids such as interactive handouts, concept mapping, and computer aided learning software are also extensively utilized.

C 1.2 APPROACH USED

C 1.2.1 **Teaching and Learning**:

The approach is to wean students from rote-learning to self-study. The form of classroom teaching, however, is changing to become much more stimulating, with more student input expected. Tutorials are now integrated with the lectures, to give regular changes of activity within the lecture period, and thus keeping the students interested, alert, and participative.

The accepted philosophy is that ‘if we perform the mental work for the learner, we reduce the learner’s investment in learning, thereby reducing performance’. The student is encouraged and aided to adopt a ‘deep’ approach to study, which means that he should try to understand the underlying meaning rather than try to remember the words and the formulas, and to develop a critical awareness of the concepts being discussed and the relationship of these to other concepts. Emphasis is placed on the student’s understanding of the basic principles and concepts. Students are not allowed to lose sight of the overall picture as a result of over-indulgence in mathematical details. Technical assumptions made in developing and applying basic theory are stressed. Emphasis is given to developing creativity and the ability to design. Students are not compelled to memorize large amounts of facts and formulas (except fundamental ones). The importance of problem solving in facilitating a full understanding of the topic is recognized. However, problem solving is not treated merely as a means of employing mathematical methods, but also for applying concepts. Problem solving is implemented extensively in all aspects of the Programme. The students are encouraged to think around the subject matter.

Handout notes are used extensively throughout the Programme, but it is generally intended that these, in themselves, are incomplete. Students will need to fill out the handouts before, during and after the lectures before the content can be regarded as complete. In this way, and by requiring students to submit regular written reports, the students develop their ability to write clearly and concisely.

From the outset, students are encouraged and provoked into taking an active role in the learning process. The quality of a student's answers to questions, and the quality of the questions asked by the student, is evaluated to provide feedback throughout the Programme in each subject. Towards the end of the 1st year, and throughout the remainder of the Programme, it is the norm for students to give presentations of topics within the syllabus in front of their peers. This not only encourages them to adopt a self-study pattern, it also increases their self-confidence, their ability to argue from fundamentals and stresses their need to study the subject matter in depth to be able to answer questions from their peers.

C 1.2.2 **Laboratory and Projects:**

In the Programme, the laboratory work is integrated into each subject, as is the assessment for the laboratory work. It is the subject-lecturer's responsibility to ensure that the laboratory work is being taken seriously by the students and to stimulate them by gradually moving into open-ended experiments/tests and mini-projects with design elements included.

Students are required to preview their laboratory assignments. As with lectures, the process of generating a self-learning attitude is gradual. In the early part of the Programme, laboratory sheets have fairly detailed instructions and students preview the experiments by means of a 'theory' section in the experiment instruction sheet. As students progress, less detailed information is presented and the student is expected to read around the experiment and contribute their own ideas as to how the experiment should be conducted.

Students are required to use log books for all experiments and to submit these and some formal laboratory reports for assessment.

Essentially each student is required to undertake a project. The projects are designed to be small group projects in which two or three students work on different aspects of a more ambitious project, while taking care that individual students are still assigned individual responsibility for their part of the work. This allows students to learn team work and it enables more advanced projects to be undertaken. As part of the supervision of the students' project and laboratory work, they are guided to gain skills such as the following:

1. Attention to detail and recognition that unless everything is done thoroughly, completely and correctly, their design, product or process may well be useless.

2. Ability to apply scientific methods to their work. This involves the discipline of keeping accurate and up-to-date records, to be constantly questioning both good and unexpected results, knowing how to go about experimental procedures, how to set up experiments and draw conclusions.

3. Recognition that they have to take personal responsibility for their work, to make sure that there are no mistakes, and not to assume that someone else will check their work.

4. Experience in working as part of a team, recognising that others can contribute necessary complementary skills and experience.

C 2 Industrial Centre (IC) Training

Students are required to undertake practical training at the Industrial Centre of the Polytechnic University, which is equivalent to 8 training credits. The training is scheduled partly during term time of Year One and partly in the summer at the end of Year One to give students an appreciation, with some practical involvement, of fitting, machining, electrical wiring, installation, and electronic/electrical equipment manufacturing. Students would gain theoretical knowledge which they can relate to practical applications. An appreciation of practical manufacturing processes is very important to enable the students to apply their theoretical knowledge to practical problems after they graduate from the Programme and start working in industry.

The following information with regard to IC training should be noted by all Higher Diploma Students:

- These training credits will not be counted towards meeting the credit requirement for FT status of students.
- These training credits are not to be counted towards the credit requirement for award, but students have to pass (i.e. obtaining Grade D or above) IC training in order to be considered for an award.
- IC training will be graded at any time when an assessment is made. Only **ONE** aggregate grade would be given for an academic year to sum up the performance of the student in IC training for that year.
- If assessment of an IC subject completed in a particular academic year cannot be done in time for the grade to be reported in that particular year, the grade has to be reported during Semester One of the following academic year.
- The results of IC training would not be counted towards the Weighted GPA which is used for considering award classification.
- The results of IC training would be counted towards GPA calculation, which is computed at the end of every semester on the basis of the students' performance on all subjects taken since the start of their studies.

C 3 Student Feedback Questionnaire (SFQ)

The Student Feedback Questionnaire (SFQ) is a system that PolyU uses to collect feedback from students on teaching and learning. The SFQ system is faculty-based, i.e., different faculties may have slightly different policies, procedures, and SFQ forms. However, the purposes, processing, and intended uses of the SFQ are essentially the same.

Under this system, students are asked to complete the SFQ in class to provide feedback on their experience of studying a subject. This SFQ exercise normally takes place in the last few weeks of the semester. However, for subjects that involve more than one teacher, it may take place earlier, when the teaching of the particular lecturer comes to an end. Some lecturers may also use the mid-semester SFQ to solicit feedback from students so as to modify or adjust their teaching to improve learning for the remaining weeks of the semester.

The PolyU values good teaching. We cherish the promotion of meaningful and relevant learning for our students, and believe that both teachers and students have a shared responsibility to enhance learning. Your feedback on teaching and learning will provide valuable information for us to assure the quality of our programmes, identify the strengths and weaknesses of the existing teaching and learning methodologies, and help us to improve the quality of teaching in the PolyU.

Part D: ADMISSION, REGISTRATION AND ASSESSMENT

D Admission, Registration and Assessment

The admission, registration and assessment arrangements described below, are in accordance with the University policies and regulations for credit-based programmes which lead to an award of the University, except where the Senate decides otherwise.

D 1 Admission/Registration

Students are normally admitted into the programme via the joint admission scheme (JUPAS) on a yearly basis. Non-JUPAS applicants are also considered on their academic merits, as well as non-academic achievements.

D 2 Concurrent enrolment

Students are not permitted to enroll concurrently on two full-time/sandwich programmes, whether or not one of the programmes is offered by another institution.

Except for programmes which do not lead to any formal award, students are not allowed to enrol concurrently on a full-time/sandwich programme and a part-time programme, or on more than one part-time programmes, including those offered by another institution, without permission from the Head(s) of Department concerned.

D 3 Subject registration and withdrawal

In addition to programme registration, students need to register for the subjects at specified periods prior to the commencement of the semester. An add/drop period will also be scheduled for each semester / term. Students may apply for withdrawal of their registration on a subject after the add / drop period, if they have a genuine need to do so. The application should be made to the relevant programme offering Department and will require the approval of both the subject lecturer and the host Department Programme Leader concerned. Applications must be submitted 1 month before the commencement of the examination period. For approved applications of subject withdrawal, the tuition fee paid for the subject will be forfeited and the withdrawal status of the subject will be shown in the examination result notification and transcript of studies, but will not be counted in the calculation of the GPA.

The pre-requisite requirements of a subject must have been fulfilled before a student registers for that subject. However, the subject offering Department has the discretion to waive the pre-requisite requirements of a subject, if deemed appropriate. If the pre-requisite subject concerned forms part of the requirements for award, the subject has to be passed in order to satisfy the graduation requirements for the programme concerned, despite the waiving of the pre-requisite.

Students will be allowed to take additional subjects for broadening purpose, after they fulfill the graduation requirements and for the following semester. However, they will still be subject to the maximum study load of 21 credits per semester and the availability of places in the subjects concerned, and their enrolment will be as subject-based students only.

D 4 Study Load

For students following the progression pattern specified for their programme, they have to take the number of credits, as specified in this Definitive Programme Document, for each semester.

The average study load is 15 credits in a semester. The maximum study load to be taken by a student in a semester is 21 credits, unless exceptional approval is given by the Head of the programme offering Department. For such cases, students should be reminded that the study load approved should not be taken as grounds for academic appeal.

Students are not allowed to take zero subject in any semester, including the mandatory summer term as required. Unless they have obtained prior approval from the Department; otherwise they will be classified as having unofficially withdrawn from their programme. Students who have been approved for zero subject enrolment (i.e. taking zero subject in a semester) are allowed to retain their student status and continue using campus facilities and library facilities. Any semester in which the students are allowed to take zero subject will nevertheless be counted towards the maximum period of registration.

D 5 Subject exemption

Students may be exempted from taking any specified subjects, including mandatory General University Requirements (GUR) subjects, if they have successfully completed similar subjects previously in another programme or have demonstrated the level of proficiency/ability to the satisfaction of the subject offering Department. Subject exemption is normally decided by the subject offering Department.

D 6 Credit transfer

Students may be given credits for recognized previous studies (including mandatory General University Requirements (GUR) subjects), and the credits will be counted towards meeting the requirements for award. Credit transfer normally will be done without the grade being carried over. Subject credit transfer is normally decided by the subject offering Department.

Normally, not more than 50% of the credit requirement for award may be transferable from approved institutions outside the University. For transfer of credits from programmes offered by PolyU, normally not more than 67% of the credit requirement for award can be transferred. In cases where both types of credits are being transferred (i.e. from programmes offered by PolyU and from approved institutions outside the University), not more than 50% of the credit requirement for award may be transferred.

All credit transfers approved will take effect only in the semester for which they are approved. A student who applies for transfer of credits during the re-enrolment or the add/drop period of a particular semester will only be eligible for graduation at the end of that semester, even if the granting of credit transfer will immediately enable the student to satisfy the credit requirement for the award.

D 7 Deferment of study

Students may apply for deferment of study if they have a genuine need to do so such as illness. Approval from the Department offering the programme is required. The deferment period will not be counted towards the maximum period of registration.

Application for deferment of study will be entertained only in exceptional circumstances from students who have not yet completed the first year of the programme.

Where the period of deferment of study begins during a stage for which fees have been paid, no refund of such fees will be made.

Students who have been approved for deferment are not entitled to enjoy any campus facilities during the deferment period.

D 8 General Assessment Regulations

The University's General Assessment Regulations (GAR) applies to this Programme. The specific assessment regulations are set out here, having been developed within the framework of the GAR.

Students progress by credit accumulation, i.e. credits earned by passing individual subjects can be accumulated and counted towards the final award.

(a) Subject Level

A 'level' in a programme indicates the intellectual demand placed upon students and may characterize each subject with respect to its recommended sequencing within that programme. Upper level subjects should normally build on lower level subjects. Pre-requisite requirements, if any, must therefore be spelt out on a subject basis.

A 'subject' is defined as a discrete section of the programme which is assigned a separate assessment. A list of subjects, together with their level and weightings, shall be published in the definitive programme document.

(b) Language of assessment

The language of assessment for all programmes/subjects shall be English, unless approval is given for it to be otherwise.

D 9 Principles of assessment

Assessment of learning and assessment for learning are both important for assuring the quality of student learning. Assessment of learning is to evaluate whether students have achieved the intended learning outcomes of the subjects that they have taken and have attained the overall learning outcomes of the academic programme at the end of their study at a standard appropriate to the award. Appropriate methods of assessment that align with the intended learning outcomes should be designed for this purpose. The assessment methods will also enable the teacher to differentiate students' different levels of performance within the subject. Assessment for learning is to engage students in productive learning activities through purposefully designed assessment tasks.

Assessment will also serve as feedback to students. The assessment criteria and standards should be made explicit to students before the start of the assessment to facilitate student learning, and feedback provided should link to the criteria and standards. Timely feedback should be provided to students so that they are aware of their progress and attainment for the purpose of improvement.

The ultimate authority in the University for the confirmation of academic decisions is the Senate, but for practical reasons, the Senate has delegated to the Faculty/School Boards the authority to confirm the decisions of Boards of Examiners provided these are made within the framework of the General Assessment Regulations. Recommendations from Board of Examiners which fall outside these Regulations shall be ratified by the Academic Regulations Committee (ARC) and reported to the Senate.

D 10 Assessment methods

Students' performance in a subject can be assessed by continuous assessment and/or examinations, at the discretion of the individual subject offering Department. Where both continuous assessment and examinations are used, the weighting of each in the overall subject grade shall be clearly stated in the definitive programme document. The subject offering Department can decide whether students are required to pass both the continuous assessment and examination components, or either component only, in order to obtain a subject pass, but this requirement (to pass both, or either, components) shall be specified in the Definite Programme Document. Learning outcome should be assessed by continuous assessment and/or examination appropriately, in line with the outcome-based approach.

Continuous assessment may include tests, assignments, projects, laboratory work, field exercises, presentations and other forms of classroom participation. Continuous Assessment assignments which involve group work should nevertheless include some individual components therein. The contribution made by each student in continuous assessment involving a group effort shall be determined and assessed separately, and this can result in different grades being awarded to students in the same group.

Assessment methods and parameters of subjects shall be determined by the subject offering Department.

At the beginning of each semester, the subject teacher should inform students of the details of the methods of assessments to be used, within the assessment framework as specified in the definitive programme document.

D 11 Progression/Academic Probation/Deregistration

The Board of Examiners shall, at the end of each semester (except for Summer Term unless there are students who are eligible to graduate after completion of Summer Term subjects), determine whether each student is

(a) eligible for progression towards an award; or
(b) eligible for an award; or
(c) required to be deregistered from the programme.

When a student has a Grade Point Average (GPA) lower than 2.0, he will be put on academic probation in the following semester. If a student is able to pull his GPA up to 2.0 or above at the end of the semester, the status of "academic probation" will be lifted. The status of "academic probation" will be reflected in the examination result notification but not in the transcript of studies.

A student will have 'progressing' status unless he falls within the following categories, either of which may be regarded as grounds for deregistration from the programme:

(a) the student has exceeded the maximum period of registration for that programme, as specified in the Definitive Programme Document; or

(b) the student's GPA is lower than 2.0 for two consecutive semesters and his Semester GPA in the second semester is also lower than 2.0; or

(c) the student's GPA is lower than 2.0 for three consecutive semesters.

The progression of students to the following academic year will not be affected by the GPA obtained in the Summer Term, unless Summer Term study is mandatory for all students of the programme and constitutes a requirement for graduation.

A student may be de-registered from the programme enrolled before the time frame specified at (ii) or (iii) above if his academic performance is poor to the extent that the Board of Examiners deems that his chance of attaining a GPA of 2.0 at the end of the programme is slim or impossible.

Where there are good reasons, the Board of Examiners has the discretion to recommend allowing students who fall into categories as stated at (ii) or (iii) above to stay on the programme, and these recommendations should be presented to the relevant Faculty/School Board for final decision.

Under the current procedures, a student can appeal against the decisions of Boards of Examiners to de-register him. If such an appeal was upheld by the Department/School concerned, the recommendation (to reverse the previous decision to de-register the student) should also be presented to the relevant Faculty/School Board for final decision.

D 12 Retaking of subjects

Students may retake any subject for the purpose of improving their grade without having to seek approval, but they must retake a compulsory subject which they have failed, i.e. obtained an F grade. Retaking of subjects is with the condition that the maximum study load of 21 credits per semester is not exceeded. Students wishing to retake passed subjects will be accorded a lower priority than those who are required to retake (due to failure in a compulsory subject) and can only do so if places are available.

The number of retakes of a subject is not restricted. Only the grade obtained in the final attempt of retaking (even if the retake grade is lower than the original grade for originally passed subject) will be included in the calculation of the Grade Point Average (GPA). If students have passed a subject but failed after retake, credits accumulated for passing the subject in a previous attempt will remain valid for satisfying the credit requirement for award. (The grades obtained in previous attempts will only be reflected in transcript of studies.)

In cases where a student takes another subject to replace a failed elective subject, the fail grade will be taken into account in the calculation of the GPA, despite the passing of the replacement subject.

D 13 Absence from an assessment component

If a student is unable to complete all the assessment components of a subject, due to illness or other circumstances which are beyond his control and considered by the subject offering Department as legitimate, the Department will determine whether the student will have to complete a late assessment and, if so, by what means. This late assessment shall take place at the earliest opportunity, and before the commencement of the following academic year (except that for Summer Term, which may take place within 3 weeks after the finalisation of Summer Term results). If the late assessment cannot be completed before the commencement of the following academic year, the Faculty/School Board Chairman shall decide on an appropriate time for completion of the late assessment.

The student concerned is required to submit his/her application for late assessment in writing to the Head of Department offering the subject, within 5 working days from the date of the examination, together with any supporting documents. Approval of applications for late assessment and the means for such late assessments shall be given by the Head of Department offering the subject or the Subject Lecturer concerned, in consultation with the Programme Leader.

D 14 Aegrotat award

If a student is unable to complete the requirements of the programme in question for the award due to very serious illness, or other very special circumstances which are beyond his control, and considered by the Board of Examiners as legitimate, the Faculty/School Board will determine whether the student will be granted an aegrotat award. Aegrotat award will be granted under very exceptional circumstances.

A student who has been offered an aegrotat award shall have the right to opt either to accept such an award, or request to be assessed on another occasion to be stipulated by the Board of Examiners; the student's exercise of this option shall be irrevocable.

The acceptance of an aegrotat award by a student shall disqualify him from any subsequent assessment for the same award.

An aegrotat award shall normally not be classified, and the award parchment shall not state that it is an aegrotat award. However, the Board of Examiners may determine whether the award should be classified, provided that they have adequate information on the students' academic performance.

D 15 Grading

Assessment grades shall be awarded on a criterion-referenced basis. A student's overall performance in a subject (including GUR subjects) shall be graded as follows:

Subject grade	***Short description***	***Elaboration on subject grading description***
A+	Exceptionally Outstanding	The student's work is exceptionally outstanding. It exceeds the intended subject learning outcomes in all regards.
A	Outstanding	The student's work is outstanding. It exceeds the intended subject learning outcomes in nearly all regards.
B+	Very Good	The student's work is very good. It exceeds the intended subject learning outcomes in most regards.
B	Good	The student's work is good. It exceeds the intended subject learning outcomes in some regards.
C+	Wholly Satisfactory	The student's work is wholly satisfactory. It fully meets the intended subject learning outcomes.
C	Satisfactory	The student's work is satisfactory. It largely meets the intended subject learning outcomes.
D+	Barely Satisfactory	The student's work is barely satisfactory. It marginally meets the intended subject learning outcomes.
D	Barely Adequate	The student's work is barely adequate. It meets the intended subject learning outcomes only in some regards.
F	Inadequate	The student's work is inadequate. It fails to meet many of the intended subject learning outcomes.

'F' is a subject failure grade, whilst all others ('D' to 'A+') are subject passing grades. No credit will be earned if a subject is failed.

Codes	***Interpretation***	**Remarks**
I #	Assessment to be completed	An incomplete grade must be converted to a regular grade normally in the following academic year at the latest.
N	Assessment is not required	—
P	Pass an ungraded subject	This code applies to an ungraded subject, such as industrial training.
U	Fail an ungraded subject	This code applies to an ungraded subject, such as industrial training.
M	Pass with Merit	This code applies to all General Education subjects for intake cohorts before 2010/11. The adoption or otherwise of this code to other subjects adopting a "Pass/Fail" grading system would be subject to the decision of individual Departments. The grade "Pass with Merit" can be awarded when the student's work exceeds the subject learning outcomes in the majority of regards.
L	Subject to be continued in the following semester	This code applies to subjects like "Project" which may consist of more than 1 part (denoted by the same subject code) and for which continuous assessment is deemed appropriate.
S	Absent from assessment	—
W	Withdrawn from subject	Dropping of subjects after the add/drop period is normally not allowed. Requests for withdrawal from subjects after the add/drop period and prior to examination will only be considered under exceptional circumstances. This code is given when a student has obtained exceptional approval from Department to withdraw from a subject after the "add/drop" period and prior to examination; otherwise, a failure grade (grade F) should be awarded.
Z	Exempted	—
T	Transfer of credit	—

* Entry of grades/codes for subject components is optional.

\# For cases where students fail marginally in one of the components within a subject, the BoE can defer making a final decision until the students concerned have completed the necessary remedial work to the satisfaction of the subject examiner(s). The students can be assigned an ' I ' code in this circumstance.

Note: Subjects with the assigned codes I, N, P, U, M, L, W, Z and T (if the subject is without grade transferred) will be omitted in the calculation of the GPA. A subject assigned code S will be taken as zero in the calculation.

A numeral grade point is assigned to each subject grade, as follows:

Grade	***Grade Point***
A+	4.5
A	4
B+	3.5
B	3
C+	2.5
C	2
D+	1.5
D	1
F	0

At the end of each semester/term, a Grade Point Average (GPA) will be computed as follows, and based on the grade point of all the subjects:

$$GPA = \frac{\sum_{n} \text{Subject Grade Point} \times \text{Subject Credit Value}}{\sum_{n} \text{Subject Credit Value}}$$

where n = number of all subjects (inclusive of failed subjects) taken by the student up to and including the latest semester/term. For subjects which have been retaken, only the grade point obtained in the final attempt will be included in the GPA calculation

In addition, the following subjects will be excluded from the GPA calculation:

(a) Exempted subjects

(b) Ungraded subjects

(c) Incomplete subjects

(d) Subjects for which credit transfer has been approved, but without any grade assigned[1]

(e) Subjects from which a student has been allowed to withdraw (i.e. those with the code 'W')

[1] Subjects taken in PolyU or elsewhere and with grades assigned, and for which credit transfer has been approved, will be included in the GPA calculation.

Subject which has been given an "S" code, i.e. absent from assessment, will be included in the GPA calculation and will be counted as "zero" grade point. GPA is thus the unweighted cumulative average calculated for a student, for all relevant subjects taken from the start of the programme to a particular point of time. GPA is an indicator of overall performance, and is capped at 4.0.

All training credits[2] will be counted in the GPA calculation but not in the WGPA calculation.

D 16 Different types of GPA's

GPA's will be calculated for each Semester including the Summer Term. This Semester GPA will be used to determine students' eligibility to progress to the next Semester alongside with the 'cumulative GPA'. However, the Semester GPA calculated for the Summer Term will not be used for this purpose, unless the Summer Term study is mandatory for all students of the programme concerned and constitutes part of the graduation requirements.

The GPA calculated after the second Semester of the students' study is therefore a 'cumulative' GPA of all the subjects taken so far by students, and without applying any level weighting.

Along with the 'cumulative' GPA, a weighted GPA will also be calculated, to give an indication to the Board of Examiners on the award classification which a student will likely get if he makes steady progress on his academic studies. GUR subjects will be included in the calculation of weighted GPA for all programmes.

When a student has satisfied the requirements for award, an award GPA will be calculated to determine his award classification. GUR subjects will be included in the calculation of award GPA for all programmes.

[2] "Training credits" is used as a generic term only, and also includes clinical/field credits for programmes in different study disciplines. Laboratory experiments done as a subject/an integral part of a subject to satisfy the academic requirements is not considered to be practical training.

Types of GPA	Purpose	Rules for GPA calculation
GPA	Determine Progression/ Graduation	(1) All academic subjects taken by the student throughout his study, both inside and outside the programme curriculum, are included in the GPA calculation. (2) For training subjects, including WIE and Clinical/Field subjects, departments can decide whether to include them in the GPA calculation. (3) For retake subjects, only the last attempt will be taken in the GPA calculation. (4) Level weighting, if any, will be ignored.
Semester GPA	Determine Progression	Similar to the rules for GPA as described above, except that only subjects taken in that Semester, including retaken subjects, will be included in the calculation.
Weighted GPA*	To give an interim indication on the likely Award GPA	(1) Similar to the rules for GPA, except that only subjects inside the programme curriculum concerned will be included in the calculation. Subjects outside the programme curriculum will be excluded. (2) Departments can decide whether the training subjects are to be counted towards the Weighted GPA. (3) For retake subjects, only the last attempt will be taken in the Weighted GPA calculation. (4) The weighted GPA will be the same as the Award GPA unless a student has taken more subjects than required. ** Note: The rules will include how weighting are to be assigned according to the level of the subject. This is being reviewed and will be confirmed by Senate before the commencement of the 2012/13 academic year.*

Types of GPA	Purpose	Rules for GPA calculation
Award GPA	For determination of award classification	If the student has not taken more subjects than required, the Award GPA will be as follows: (1) For single Major: Award GPA = Weighted GPA (2) For Major/Minor programmes: Award GPA = Major GPA

D 17 Compulsory Graduation

A student is required to graduate as soon as he/she satisfies the graduation requirements. The student concerned is required to apply for graduation, in the semester in which he is able to fulfil all his graduation requirements, and after the add/drop period for that semester has ended.

D 18 Guidelines for award classification

The Weighted GPA will be used as a guide to help determine award classifications, and the level weighting to different subjects of all disciplines and programmes will need to be specified in the Definitive Programme Document.

Weighted GPA will be computed as follows:

$$\text{Weighted GPA} = \frac{\sum_{n} \text{Subject Grade Point} \times \text{Subject Credit Value} \times W_i}{\sum_{n} \text{Subject Credit Value} \times W_i}$$

where Wi = weighting to be assigned according to the level of the subject (See note below)

n = number of all subjects counted in GPA calculation

Same as for GPA, Weighted GPA is capped at 4.0.

Note: The rules for determining subject level weighting is being reviewed, and will be confirmed by Senate before the commencement of the 2012/13 academic year.

Any subjects passed after the graduation requirement has been met will not be taken into account of in the grade point calculation for award classification.

D 19 Classification of awards

The following is a set of indicators, for Boards of Examiners' reference, which can be used in helping to determine award classification:

Classification	GUIDELINES
Distinction	The student's performance/attainment is outstanding, and identifies him as exceptionally able in the field of Electrical Engineering.
Credit	The student has reached a standard of performance/ attainment which is more than satisfactory but less than outstanding.
Pass	The student has reached a standard of performance/ attainment judged to be satisfactory, and has passed the minimum required for graduation.

There is no requirement for Boards of Examiners to produce award lists which conform to the guidelines of the above table.

D 20 Examination result announcements, transcripts, testimonials and references

At the end of each semester, where appropriate, examination results are announced online for individual students' checking. It provides information on subjects taken and grades attained, the Grade Point Average (GPA) for all subjects, and the overall result for that semester. The announcement serves as an official notification of the student's academic performance.

A formal transcript of studies will be issued by the University, upon request, to any student registered on a programme offered by the University, and it will include the following information:

(a) name and student number;

(b) title of the programme(s) on which enrolled, or from which graduated;

(c) medium of instruction for the programme (applicable only to programmes which are delivered in Chinese and for which both Chinese and English versions are offered);

(d) a full academic record, giving subjects taken and grades attained, and the Grade Point Average (GPA) for all subjects;

(e) credit requirement of the student if different from the normal credit requirement of the programme;

(f) where relevant, the final award(s) granted, with classification and year of award.

Students may request for a testimonial which is a certification of their studies at the University, but without details on subjects and subject results.

Students may also request for references direct from academic staff/members concerned.

PART E: SUBJECT DESCRIPTION FORMS