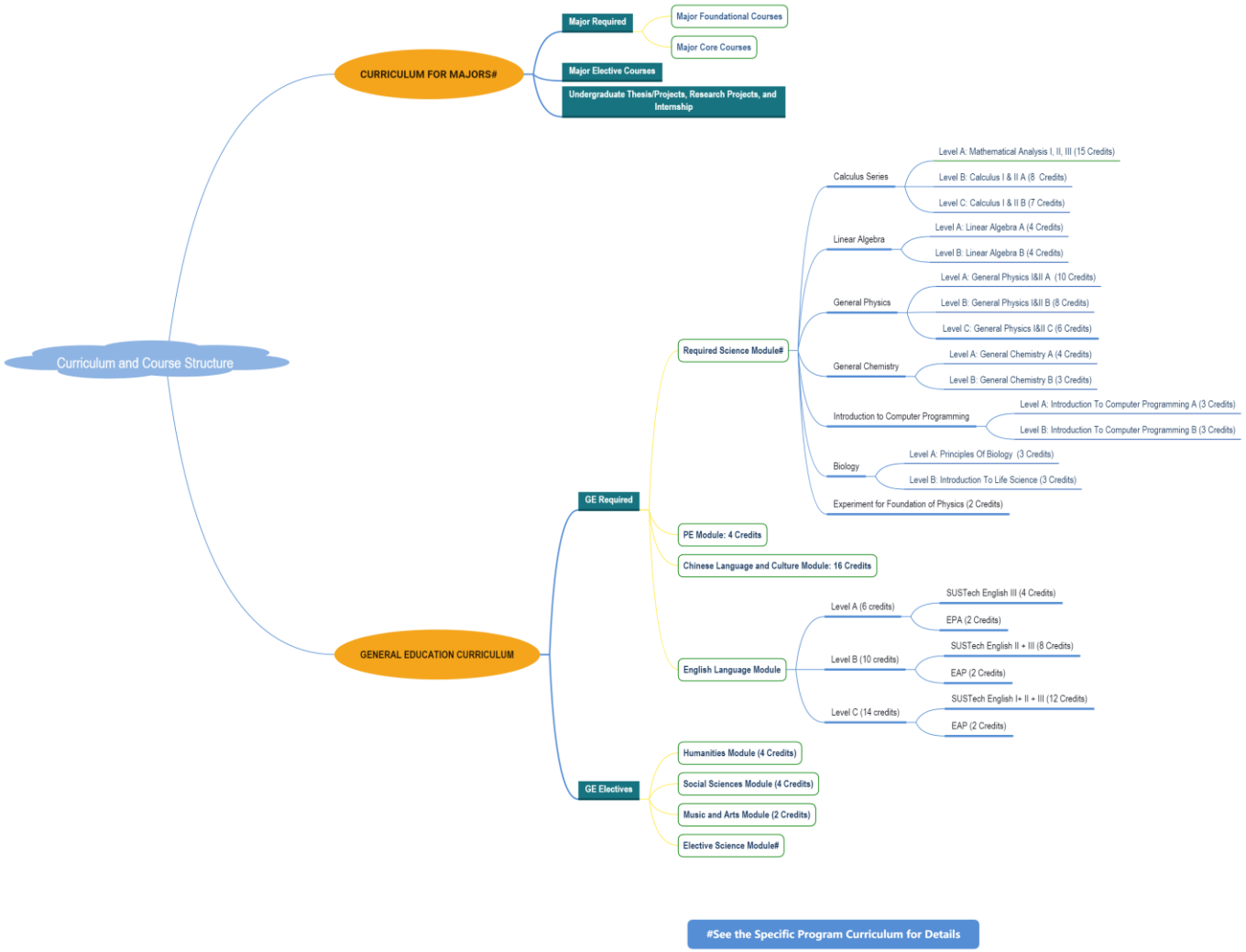
INTRODUCTION

Undergraduate education at Southern University of Science and Technology (SUSTech) aims to meet the most diverse intellectual interests of students, to develop their personal academic goals, and to help them reach their best. The integration of general education and education by subjects is the feature of SUSTech undergraduate education. Both general education and content education are vital part of an undergraduate degree. Students start their undergraduate study from general education with courses across the spectrum of sciences and literal arts that provide opportunities for students to explore their interests through courses and help students preparing themselves for the major declaration and their development of critical thinking, communication, and understanding of culture, values and science for the future. To fulfill the degree award requirements at SUSTech, students need to complete the following modules of study.

- Four modules for General Education Required: GE Science Module, Physical Education Module, Chinese Language and Culture Module, and English Language Module;
- Four modules for General Education Electives: Humanities Module, Social Sciences Module, and Music & Arts Module, Elective Science Module;
- Major Required Modules: Major Foundational Courses, Major Core Courses;
- Major Elective Module;
- Internship, Research Projects, and Graduation Design and Thesis.

Curriculum and Course Structure for International Students 2019



General Education Requirement: Required Courses

There are 4 required modules that students need to complete in the general education (GE) section, i.e. GE Science Module (The number of the required credits depends on the levels of each course stated in the specific program curriculum), Physical Education Module (4 credits), Chinese Language and Culture Module (16 credits), and English Language Module (The number of the required credits depends on the levels assigned based on the placement test).

Table 1 Required GE Module: Science Foundation Courses

Category	Level	Course Code	Course Name	Credit	Lab Credits	Hours/ week	Term	Instruction Language	Prerequisite	Dept
Calculus	A	MA101a	Mathematical Analysis I	5	1	6	Spr/Fal	B	NA	MATH
		MA102a	Mathematical Analysis II	5	1	6	Spr/Fal	B	Mathematical Analysis I	
		MA203a	Mathematical Analysis III	5	1	6	Spr/Fall	B	Mathematical Analysis II	
	B	MA101B	Calculus I A	4		4	Spr/Fall	B/E	NA	
		MA102B	Calculus II A	4		4	Spr/Fall	B/E	Calculus I A	
	C	MA101C	Calculus I B	3		3	Spr/Fall	B/E	NA	
		MA102C	Calculus II B	3		3	Spr/Fall	B/E	Calculus I B	
Linear Algebra	A	MA107A	Linear Algebra A	4		4	Spr/Fall	B/E	NA	
	B	MA107B	Linear Algebra B	4		4	Spr/Fall	B/E	NA	
General Physics	A	PHY103A	General Physics A (I)	5		5	Spr/Fall	B/E	NA	PHY

		PHY105A	General Physics A (II)	5		5	Spr/Fall	B/E	General Physics A (I)	
	B	PHY103B	General Physics B (I)	4		4	Spr/Fall	B/E	NA	
		PHY105B	General Physics B (II)	4		4	Spr/Fall	B/E	General Physics B (I)	
	C	PHY103C	General Physics C (I)	3		3	Spr/Fall	B/E	NA	
		PHY105C	General Physics C (II)	3		3	Spr/Fall	B/E	General Physics C (I)	
General Chemistry	A	CH101A	General Chemistry A	4		4	Spr/Fall	B/E	NA	CHEM
	B	CH101B	General Chemistry B	3		3	Spr/Fall	B/E	NA	
Introduction to Computer Programming	A	CS102A	Introduction to Computer Programming A	3	1	4	Spr/Fall	B/E	NA	CSE
	B	CS102B	Introduction to Computer Programming B	3	1	4	Spr/Fall	B/E	NA	
Biology	A	BIO103	Principles of Biology	3		3	Spr/Fall	B/E	NA	BIO
	B	BIO102B	Introduction to Life Science	3		3	Spr/Fall	B/E	NA	
Experiments of Fundamental Physics		PHY104B	Experiments of Fundamental Physics	2	2	4	Spr/Fall	B/E	NA	PHY

Overview of Requirements for Courses in GE Science Module

Programs	Calculus	Linear Algebra	General Physics	Experiments of Fundamental Physics	General Chemistry	Biology	Introduction to Computer Programming
Physics	Level B	Level A	Level B	Required	Level B	Level B	Level B
Applied Physics	Level B	Level A	Level B	Required	Level B	Level B	Level B
Chemistry	Level B	Level B	Level B	Required	Level A	Level B	Level B
Biological Sciences	Level B	Elective	Level B	Required	Level A	Level A	Level B
Biotechnology	Level B	Elective	Level B	Required	Level A	Level A	Level B
Bioinformatics	Level B	Level B	Level B	Elective	Level A	Level A	Level A
Biomedical Engineering	Level B	Level A	Level B	Required	Level A	Level A	Level B
Communication Engineering	Level B	Level A	Level B	Required	Elective	Level B	Level A
Opto-electronic Information Science and Engineering	Level B	Level A	Level B	Required	Elective	Level B	Level B
Information Engineering	Level B	Level A	Level B	Required	Elective	Level B	Level A
Materials Science and Engineering	Level B	Level B	Level B	Required	Level A	Elective	Level B
Hydrology and Water Resources Engineering	Level B	Level A	Level B	Required	Level B	Level B	Level A
Environmental Science and Engineering	Level B	Level B	Level B	Required	Level A	Level B	Level B
Computer Science and Technology	Level B	Level A	Level B	Required	Elective	Level B	Level A
Intelligence Science and Technology	Level B	Level A	Level B	Required	Elective	Level B	Level A
Financial Mathematics	Level B	Level A	Level B	Required	Elective	Level B	Level B
Mathematics and Applied Mathematics	Level B	Level A	Level B	Required	Elective	Level B	Level B
Statistics	Level B	Level A	Level B	Required	Elective	Level B	Level B
Theoretical and Applied Mechanics	Level B	Level A	Level B	Required	Level B	Elective	Level B
Aerospace Engineering	Level B	Level A	Level B	Required	Level B	Elective	Level B
Mechanical Engineering	Level B	Level A	Level B	Required	Level B	Elective	Level B
Robotics Engineering	Level B	Level A	Level B	Required	Level B	Elective	Level B
Finance	Level B	Level A	Level C	Elective	Level B	Level B	Level A
Financial Engineering	Level B	Level A	Level C	Elective	Level B	Level B	Level A
Microelectronics Science and Engineering	Level B	Level A	Level B	Required	Level B	Level B	Level B

Notes: See page 5 for details of level A and level B.

Table 2 Required GE Module: Physical Education (4 Credits)

Course Code	Course Name	Credits	Hours /week	Terms	Instruction language	Prerequisite	Dept.
GE131	Physic Education I	1	2	Fall	C	NA	PE Center
GE132	Physic Education III	1	2	Spr	C	NA	
GE231	Physic Education III	1	2	Fall	C	NA	
GE232	Physic Education IV	1	2	Spr	C	NA	
Total		4	8				

Table 3 Required GE Module: Chinese Languages & Culture

Course Code	Course Name	Credit	Hours/week	Term	Instruction Language	Prerequisite	Dept.
CLE008	Elementary Chinese I	2	4	1/Fall	B	NA	CLE
CLE009	Elementary Chinese II	2	4	1/Spr	B	CLE008	
CLE027	Intermediate Chinese I	2	4	2/Fall	B	CLE009	
CLE028	Intermediate Chinese II	2	4	2/Spr	B	CLE027	
CLE031	Advanced Chinese I	2	4	3/Fall	B	CLE028	
CLE032	Advanced Chinese II	2	4	3/Spr	B	CLE031	
CLE033	Chinese Culture	2	2	Spr/Fall	B/E	NA	CLE/HUM/ SSC
CLE034	Chinese History	2	2	Spr/Fall	B/E	NA	
Total		16	28				

Table 4 Required GE Module: List of English Language Courses

Course Code	Course Name	Credit	Hours/week	Language of Instruction	Prerequisite	Notes
CLE021	SUSTech English I	4	4	E	NA	Required
CLE022	SUSTech English II	4	4	E	CLE021	
CLE023	SUSTech English III	4	4	E	CLE022	
CLE030	English for Academic Purposes	2	2	E	CLE023	

All students are required to undertake the English Placement Test before selecting courses, based on which students will be assigned to 3 levels to be ready for the courses with English as the instruction language.

Table 5 Requirement for English Language Courses

Level	Required English Courses					Total Credits for English Courses
	SUSTech English I	SUSTech English II	SUSTech English III	English for Academic Purposes	CLE Electives	
Level A			4 credits	2 credits	Not required	6
Level B		4 credits	4 credits	2 credits	Not required	10
Level C	4 credits	4 credits	4 credits	2 credits	Not required	14

General Education Requirement: Elective Courses

General Education Elective Courses include four modules: Humanities Module, Social Sciences Module, Arts Module, Elective Science Module. Students are required to complete 4 credits for the Humanities Module and Social Sciences Module respectively, and 2 credits for the Music and Art Module. The requirements for Elective Science Module are specified in the curriculum of each program. Please check the details in the specified curriculum.

I. Humanities Module

Humanities Learning Objectives and Outcomes: 1) Students will appreciate a wide range of Chinese and Western classic literary works and be able to interpret and analyze the genre, theme, historical background critically from a modern perspective. 2) Students will gain solid knowledge in Chinese academic writing and develop comprehension in language maneuverability. Students will improve their communication skills, as global citizens and leaders. 3) Students will be exposed to a wide range of humanities disciplines in their historical contexts and establish cultural foundation. Students are expected to take advantage of this knowledge to think and solve problems creatively.

Table 6 GE Electives: Humanities Module

Course Code	Course Name	Credits	Practicum Credits	Hours /Week	Prerequisite	Dept.
HUM002	Modern Chinese philosophy	2	0	2	NA	HUM
HUM003	Art & Design: from Theories to Practice	2	0	2	NA	HUM
HUM005	Science Fiction Film: A Creative Introduction	2	0	2	NA	HUM
HUM006	New Media and Youth Subculture Studies: Theories and Cases	2	0	2	NA	HUM
HUM007	Design Drawings	2	0	2	NA	HUM
HUM008	Elementary Form-making	2	0	2	NA	HUM
HUM009	Special Lectures on Famous Humanities Scholars	2	0	2	NA	HUM
HUM010	Art History in Space	2	0	2	NA	HUM
HUM011	Introduction to the Classics of Foreign Literature	2	0	2	NA	HUM
HUM012	Languages & Linguistics	2	0	2	NA	HUM

HUM013	The Art of War and Chinese Strategic Culture	2	0	2	NA	HUM
HUM014	Science fiction: fiction and film	2	0	2	NA	HUM
HUM016	Writing for Practical Purposes	2	0	2	NA	HUM
HUM017	Metrical Patterns of Poetry And How to Write Ancient Poetry	2	0	2	NA	HUM
HUM019	The Methodology of the Future	2	0	2	NA	HUM
HUM020	Design Media Arts in Media Space	2	0	2	NA	HUM
HUM021	Pre-Qin Ideology and Culture	2	0	2	NA	HUM
HUM024	One Thousand and One Nights: An Introduction	2	0	2	NA	HUM
HUM027	Ling-nan Dialects and Ling-nan Culture	2	0	2	NA	HUM
HUM028	Imagination: An Introduction	2	0	2	NA	HUM
HUM029	An Introduction on the History of Science and Civilization	2	0	2	NA	HUM
HUM031	The Foundation of New Media Art Space Design	2	0	2	NA	HUM
HUM033	Experimental Phonetics	2	0	2	NA	HUM
HUM035	Documentation and Communication of Contemporary Architecture	2	0	2	NA	HUM
HUM036	Generative New Media Design	2	0	2	NA	HUM
HUM037	Appreciation of Science Fiction Literature	2	0	2	NA	HUM
HUM038	Appreciation of the Recitation	2	0	2	NA	HUM
HUM039	Anatomy and Physiology of Speech Mechanism and Communication Disorder	2	0	2	NA	HUM
HUM040	Introduction to Chinese Information Processing	2	0	2	NA	HUM
HUM041	Primary Cantonese	2	0	2	NA	HUM
HUM042	Photography and Video Art Theory	2	0	2	NA	HUM
HUM043	Introduction to Innovative Space Design	2	0	2	NA	HUM

Notes:

1. The minimum requirement for this module is 4 credits.
2. This course list will extend with new courses developed.
3. The instruction languages of these courses are bilingual or English. Information about the available courses and the instruction language will be announced before the course selection session.

II. Social Sciences Module

Courses in the Social Sciences Module aim to forester students with the following abilities: 1) critical thinking in observing and analyzing social phenomena; 2) grasp of methods and skills in doing social research; 3) understanding of social and cultural diversity, and theories in social sciences. Students are required to complete the learning of at least 4 credits in this module.

Table 7 GE Electives: Social Sciences Module

Course Code	Course Name	Credits	Practicum Credits	Hours /Week	Prerequisite	Dept.
SS002	Great Archaeological Discoveries	2	0	2	NA	SSC
SS004	Cultural Studies	2	0	2	NA	SSC
SS005	Western Social and Political Theories	2	0	2	NA	SSC
SS006	Film and China Today	2	0	2	NA	SSC
SS007	Understanding Death	3	0	3	NA	SSC
SS009	Culture and Industry of Leisure	2	0	2	NA	SSC
SS010	Chinese Aesthetics Philosophy	2	0	2	NA	SSC
SS011	The Rise and Fall of Ancient Civilization	2	0	2	NA	SSC
SS0012	Morality, Culture and Human Cooperation	2	0	2	NA	SSC
SS014	Popular Culture of Contemporary Japan	2	0	2	NA	SSC
SS015	Science, Technologyand Globalization	2	0	2	NA	SSC
SS016	Memory Study of Sino-Foreign Culture	2	0	2	NA	SSC
SS017	Culture and Archaeology	2	0	2	NA	SSC
SS018	Appreciation of Arts	2	0	2	NA	SSC
SS019	City Studies	2	0	2	NA	SSC
SS020	China's Industrialization and Social Changes	2	0	2	NA	SSC
SS021	Understanding and Making Documentary	2	0	2	NA	SSC
SS022	Introduction to Culture Heritage	2	0	2	NA	SSC
SS024	Basic Skills of Video Shooting and Editing	2	0	2	NA	SSC
SS025	Consumption Culture and Contemporary Society	2	0	2	NA	SSC
SS027	Understanding Antiques and Cultural Artifacts	2	0	2	NA	SSC
SS028	History of Technology Innovation	2	0	2	NA	SSC
SS029	Politics: an Introduction	2	0	2	NA	SSC
SS030	An Introduction to Chinese Classic Texts	2	0	2	NA	SSC
SS032	An Introduction to Political Philosophy	2	0	2	NA	SSC
SS033	A Chinese History in Archaeological Records	2	0	2	NA	SSC
SS034	Invitation to Sociology	2	0	2	NA	SSC

SS035	Architecture, Space and Culture	2	0	2	NA	SSC
SS036	Social Psychology	2	0	2	NA	SSC
SS037	Introduction to Cultural Anthropology	2	0	2	NA	SSC
SS039	Ethnographic Films and Cultural Diversity	2	0	2	NA	SSC
SS040	The Lectures on Anthropology	2	0	2	NA	SSC
SS041	Gender in Chinese and Foreign Theatres	2	0	2	NA	SSC
SS042	World Architecture	2	0	2	NA	SSC
SS043	Media and Society	2	0	2	NA	SSC
SS044	Timber Architecture	2	0	2	NA	SSC
SS045	Ancient Materials and Material Culture	2	0	2	NA	SSC
SS046	Self and Society	2	0	2	NA	SSC
SS047	Introduction to Globalization	2	0	2	NA	SSC
SS048	Western Literary and Critical Writings	2	0	2	NA	SSC
SS049	Medicine and Society	2	0	2	NA	SSC
SS050	Rural Anthropology	2	0	2	NA	SSC
SS051	Urban Problems in Contemporary China	2	0	2	NA	SSC
SS052	Communication and Technology	2	0	2	NA	SSC
SS053	Body and Affection	2	0	2	NA	SSC
SS054	Modern Japanese Cultural History	2	0	2	NA	SSC
SS055	Art Aesthetics	2	0	2	NA	SSC
SS056	Architectural Aesthetics	2	0	2	NA	SSC
SS057	Religion and Culture	2	0	2	NA	SSC
SS058	Hebrew Literature and Culture	2	0	2	NA	SSC
SS060	Fantasy Films and Western Architectural Civilization	2	0	2	NA	SSC
SS061	Introduction to New Media	2	0	2	NA	SSC
SS062	Xiqu History and Culture	2	0	2	NA	SSC
SS063	Modern Architecture and Cities	2	0	2	NA	SSC
SS064	Introduction to Environmental Humanities	2	0	2	NA	SSC
SS065	Sociology of Marriage and the Family	2	0	2	NA	SSC
SS066	The City in History	2	0	2	NA	SSC
SS067	World Regional Geography	2	0	2	NA	SSC
SS068	Radio, Society and Culture	2	0	2	NA	SSC
SS069	Culture and Mental Health	2	0	2	NA	SSC
HEC003	Research Methods: An Introduction	2	0	2	NA	HEC
HEC004	Literature Review and Content Analysis	2	0	2	NA	HEC
HEC005	Intercultural Communication	2	0	2	NA	HEC
HEC008	Stories of Shenzhen	2	0	2	NA	HEC
HEC009	A Glimpse of Africa	2	0	2	NA	HEC

HEC010	One Belt and One Road, One Thousand and One Nights	2	0	2	NA	HEC

Notes:
1. The minimum requirement for this module is 4 credits.
2. This course list will extend with new courses developed.
3. The instruction languages of these courses are bilingual or English. Information about the available courses and the instruction language will be announced before the course selection session.

III. Music and Arts Module

Courses in the Music and Arts Module aim to forester students with the following abilities: 1) knowledge and skills in music, drama, dance, and fine arts; 2) knowledge and skills in interpreting the arts embodying culture tradition and modern classics; 3) appreciation of arts and its expression. Students are required to complete the learning of at least 2 credits in this module.

Table 8 GE Electives: Music and Arts Module

Course Code	Course Name	Credits	Practicum Credits	Hours/Week	Prerequisite	Dept.
GEM008	Music Theory and Solfeggio	2	0	2	NA	AC
GEM022	Art of Elocution	2	0	2	NA	AC
GEM026	Appreciation of art	2	0	2	NA	AC
GEM029	Forum of Art and Science	2	0	2	NA	AC
GEM030	Artistic Practice I	2	0	2	NA	AC
GEM032	Vocal Texture and Application	2	0	2	NA	AC
GEM033	Chinese Regional Folk Songs	2	0	2	NA	AC
GEM034	Aesthetics of Chinese Opera	2	0	2	NA	AC
GEM038	Courtyard gongbi bird-and-flower painting in Song Dynasty	2	2	2	NA	AC
GEM039	Yongle Palace Murals and Traditional Painting Colorl	2	2	2	NA	AC
GEM040	The traditional Chinese line drawing	2	0	2	NA	AC

Notes:
1. The minimum requirement for this module is 2 credits.
2. This course list will extend with new courses developed.
3. The instruction languages of these courses are bilingual or English. Information about the available courses and the instruction language will be announced before the course selection session.

SUSTech Undergraduate Programs

Dept.	Program	Degree	Program Code
Department of Physics	Physics	Bsc	070201
	Applied Physics	Bsc	070202
Department of Chemistry	Chemistry	Bsc	070301
Department of Biology	Biological Sciences	Bsc	071001
	Biotechnology	Bsc	071002
	Bioinformatics	Bsc	071003
Department of Biomedical Engineering	Biomedical Engineering	BEng	082601
Department of Electrical and Electronic Engineering	Communication Engineering	BEng	080703
	Opto-electronic Information Science and Engineering	BEng	080705
	Information Engineering	BEng	080706
Department of Materials Science and Engineering	Materials Science and Engineering	BEng	080401
School of Environmental Science and Engineering	Environmental Science and Engineering	BEng	082501
	Hydrology and Water Resources Engineering	BEng	081102
Department of Computer Science and Engineering	Computer Science and Technology	BEng	080901
	Intelligence Science and Technology	BEng	080907T
Department of Mathematics	Financial Mathematics	BEc	020305T
	Mathematics and Applied Mathematics	Bsc	070101
	Statistics	Bsc	071201
Department of Finance	Finance	BEc	020301K
	Financial Engineering	BEc	020302
Department of Mechanics and Aerospace Engineering	Theoretical and Applied Mechanics	Bsc	080101
	Aerospace Engineering	BEng	082001
Department of Mechanical and Energy Engineering	Mechanical Engineering	BEng	080201
	Robotics Engineering	BEng	080803T
Department of Ocean Science and Engineering	Oceanography*	Bsc	070701
Department of Earth and Space Sciences	Geophysics*	Bsc	070801
School of Medicine	Biomedical Science*	Bsc	100103T
	Clinical Medicine*	Bachelor of Medicine	100210K
School of Microelectronics	Microelectronics Science and Engineering	BEng	080704

(Note: * for domestic students only)