

Program of Information Engineering for International Students (2019)

I. Introduction

Information Engineering is a new and promising discipline. It is developed as multiple areas involving signal and information processing technology, communication technology, and computer science rapidly penetrate into traditional information technology (IT) industries. In China, information technology industry is currently the most active and fast-growing profession. This area is deeply involved in international technology competition now, and has also globally become the most vital engine of social and economic productivity and development. Recently, with the increasing demand on the eco-friendly, integrated, and smart information system, professional talents in information engineering are deeply in need.

II. Objectives and Learning Outcomes

Attributes Information Engineering alumni should demonstrate 5 years after graduation:

Technical Skills: are technically competent to conduct research and development in the industry and universities in the broad fields of Electronics and Information Engineering in general and Information Engineering in particular.

Engineering Ethos: are able to think critically and creatively, use engineering principles to embrace challenging engineering and non-engineering problems encountered at work, apply an analytic mindset, make informed decisions and provide innovative solutions.

Attitude: are self-motivated with a desire for lifelong learning to adapt to the fast changing environment, able to operate with integrity and responsibility, have optimism and composure under tight schedule, and committed to make a positive impact in society locally and globally.

Leadership: are effective communicators, well-prepared to advance towards leadership positions, capitalize the individual strengths of team members, and nurture the team to achieve goals.

Student Outcomes (SOs) that prepare graduates to enter the professional practice of engineering:

SO 1: an ability to identify, formulate, and solve complex engineering problems¹ by applying principles of engineering, science, and mathematics.

SO 2: an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

SO 3: an ability to communicate effectively with a range of audiences.

SO 4: an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

SO 5: an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

SO 6: an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

SO 7: an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

SO 8: knowledge of probability and statistics including applications, differential and integral calculus, sciences, engineering sciences and computing science and application to analyze and design complex information engineering systems.

SO 9: knowledge and application of advanced mathematics, such as differential equations, linear algebra, and complex variable.

SO 10: knowledge and application of information processing methods.

III. Study Length and Graduation Requirements

Study length: 4 years

Degree conferred: Bachelor of Engineering

The minimum credit requirement for graduation: 136.5 credits (not including English courses);

Category	Module	Minimum Credit Requirement
General Education (GE) Required Courses (48 credits)	Science	28
	Physical Education	4
	Chinese Languages & Culture	16
General Education (GE) Elective Courses (13 credits)	Humanities	4
	Social Sciences	4
	Arts	2
	Science	3
Major Course (75.5 credits)	Major Foundational Courses	25
	Major Core Courses	22.5
	Major Elective Courses	16
	Research Projects, Internship and Undergraduate Thesis /Projects	12
Total (not including English courses)		136.5

IV. Discipline

Information Engineering

V. Main Courses

Core courses include Fundamentals of Electric Circuits, Analog Circuits, Analog Circuits Laboratory, Digital Circuits, Digital Circuits Laboratory, Signals and Systems, Communication Principles, Engineering

Electromagnetics, Probability and Statistics, Data Structures and Algorithm Analysis B, Frontier Seminars in Modern Electronic Science and Technology I/II/III, Wireless Communications, Computer Networks B , Digital Signal Processing, Digital Image Processing, Speech Signal Processing, DSP Design and Simulation, Digital System Design etc.

VI. Practice-Based Courses

Core practical training includes Industrial Practice, Advanced Electronic Science Experiment I (Outstanding student can participate in research project supervised by his/her academic professor), and all sorts of domestic and international academic competitions. See the table 3 of Major Course Arrangement.

VII. Pre-requisites for Major Declaration

Major Declaration Time	Course Code	Course Name	Prerequisite
Declare major at the end of First Year	MA107A	Linear Algebra A	无
	MA101B	Calculus I A	NA
	MA102B	Calculus II A	MA101B
	PHY103B	General Physics B (I)	NA
	PHY105B	General Physics B (II)	PHY103B
	CS102A	Introduction to Computer Programming A	NA
Declare major at the end of Second Year	MA107A	Linear Algebra A	NA
	MA102B	Calculus II A	MA101B
	PHY105B	General Physics B (II)	PHY103B
	CS102A	Introduction to Computer Programming A	NA
	EE205	Signals and Systems	MA101B

VIII. Requirements for GE Required Courses

(I) Science Module

Course Code	Course Name	Credit	Lab Credits	Hours/week	Term	Language Instruction	Prerequisite	Dept
MA101B	Calculus I A	4		4	Spr/Fall	B/E	NA	MATH
MA102B	Calculus II A	4		4	Spr/Fall	B/E	Calculus I A	MATH
MA107A	Linear Algebra A	4		4	Spr/Fall	B/E	NA	MATH
PHY103B	General Physics B (I)	4		4	Spr/Fall	B/E	NA	PHY
PHY105B	General Physics B (II)	4		4	Spr/Fall	B/E	General Physics I B	PHY
BIO102B	Introduction to Life Science	3		3	Spr/Fall	B/E	NA	BIO
CS102A	Introduction to Computer Programming A	3	1	4	Spr/Fall	B/E	NA	CSE
PHY104B	Experiments of Fundamental Physics	2	2	4	Spr/Fall	B/E	NA	PHY
Total		28	3	31				

(II) Physical Education

Course Code	Course Name	Credit	Lab Credits	Hours/week	Term	Language Instruction	Prerequisite	Dept
GE131	Physical Education I	1		2	1/Fall	C	NA	PE Center
GE132	Physical Education II	1		2	1/Spr	C	NA	
GE231	Physical Education III	1		2	2/Fall	C	NA	
GE232	Physical Education IV	1		2	2/Spr	C	NA	
Total		8		8				

(III) Chinese Languages & Culture

Course Code	Course Name	Credit	Hours/week	Term	Language Instruction	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	CLE/ HUM/ SSC
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	
CLE034	Chinese History	2	2	Spr/Fall	B/E	NA	
Total		16	28				

(IV) English Language

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.

SUSTech English III, English for Academic Purposes are required for Level A.

SUTech English II, SUSTech English III, English for Academic Purposes for Level B.

SUSTech English I, SUSTech English II, SUSTech English III, English for Academic for Level C.

Course Code	Course Name	Credit	Hours/week	Instruction Language	Prerequisite	Dept
CLE021	SUSTech English I	4	4	E	NA	CLE
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	

IX Requirements for GE Elective Courses

(I) 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. In particular, a course with contents of Ethics of Science and Technology or Engineering Ethics is compulsory, and the credits of the course are counted to the Social Sciences Module. (Information about the available courses and the instruction language will be announced before the course selection session).

(II).Students are required to complete 3 credits for Science Module

Course Code	Course Name	Credit	Lab Credits	Hours/week	Term	Language Instruction	Prerequisite	Dept
CH101B	General Chemistry B	3		3	1/Fall/Spr	B/E	NA	CHEM
CS201	Discrete Mathematics	3		3	2/Spr	B/E	MA102B MA107A	CSE
CS202	Computer Organization	3	1	4	2/Spr	B/E	CS207or EE202-17	CSE
CS205	C/C++ Program Design	3	1	4	2/Fall	B/E	NA	CSE
Total		12	2	14				

X. Major Course Arrangement

Table 1: Major Required Course (Foundational and Core Courses)

Course Category	Course Code	Course Name	Credit	Lab Credits	Hours/week	Term	take the course Advised term to	Instruction language	Prerequisite	Dept.
Major Foundational Courses	EE104	Fundamentals of Electric Circuits	2		2	Spr/ Fall	1/Spr /Fall	B/E	MA101B MA107A	EE
	EE201-17	Analog Circuits	3		3	Fall	2/Fall	C	PHY105B EE104	EE
	EE201-17 L	Analog Circuits Laboratory	1	1	2	Fall	2/Fall	B	EE201-17	EE
	EE202-17	Digital Circuits	3		3	Spr/ Fall	2/Spr /Fall	B/E	PHY105B	EE
	EE202-17 L	Digital Circuits Laboratory	1	1	2	Spr/ Fall	2/Spr /Fall	B/E	EE202-17	EE
	EE205	Signals and Systems	3	1	4	Fall	2/Fall	B	MA101B	EE
	EE206	Communication Principles	3	1	4	Spr	2/Spr	E	EE205	EE
	EE208	Engineering Electromagnetics	3	1	4	Spr	2/Spr	B	MA107A EE104	EE
	MA212	Probability and Statistics	3		3	Spr	2/Spr	B/E	MA102B Or MA102a	MATH
	CS203B	Data Structures and Algorithm Analysis B	3	1	4	Fall	2/Fall	E	CS102A	CS
	Total			25	6	31				
Major Core Courses	EE301	Frontier Seminars in Modern Electronic Science and Technology I	1		1	Fall	3/Fall	B	EE201-17 or EE202-17	EE
	EE302	Frontier Seminars in Modern Electronic Science and Technology II	1		1	Spr	3/Spr	B	EE201-17 or EE202-17	EE
	EE313	Wireless Communications	3	1	4	Fall	3/Fall	B	EE206	EE
	CS305B	Computer Networks B	3	1	4	Fall	3/Fall	E	CS102A	CS
	EE323	Digital Signal Processing	3	1	4	Fall	3/Fall	E	EE205	EE
	EE326	Digital Image Processing	3	1	4	Spr	3/Spr	E	EE205	EE
	EE328	Speech Signal Processing	3	1	4	Spr	3/Spr	E	EE323	EE
	EE330	DSP Design and Simulation	1.5	1.5	3	Spr	3/Spr	B	EE323	EE
	EE332	Digital System Design	3	1	4	Spr	3/Spr	E	EE202-17	EE
	EE401	Frontier seminars in modern electronic science and technology III	1		1	Fall	4/Fall	B	EE201-17 or EE202-17	EE
	Total			22.5	7.5	30				

Practice	EE470	Internship	2	2	16	Smr	3/Smr	NA	NA	EE
	EE480	Research Projects*	2	2				NA	NA	EE
	EE490	Undergraduate Thesis/Projects**	8	8	8	Fall& Spr	4/Fall& Spr	NA	NA	EE
Total			12	12	24					
<p>Notes:</p> <p>1. Students can choose the term most appropriate for the course of Research Projects based on their study plan, The minimum study load for this course is 64 hours in total, see the Syllabus.</p> <p>2. Students who have completed Comprehensive Design I & II (COE491 & COE492) are not required to take the Graduation Projects/Thesis (EE490).</p>										

Table 2: Major Elective Courses

Course Code	Course Name	Credit	Lab Credits	Hours/week	Term	take the course Advised term to	Instruction language	Prerequisite	Dept.
EE106	Introduction to Optoelectronic	2		2	Spr	1/Spr	B	NA	EE
EE203	Solid-state Electronics	3		3	Fall	2/Fall	B	PHY105B	EE
EE204	Introduction to Semiconductor Devices	3	1	4	Spr	2/Spr	B	EE203	EE
EE210	Fundamentals of Optics	3		3	Spr	2/Spr	B	PHY105B	EE
EE303	Fundamentals of Optoelectronic Technology	3	1	4	Fall	3/Fall	B	PHY105B	EE
EE304	Integrated Circuit Design	3	2	5	Fall	3/Fall	B	EE202-17 EE204	EE
EE305	Introduction to VLSI technology	3	1	4	Fall	3/Fall	E	EE203	EE
EE306	Introduction to MEMS	3	1	4	Spr	3/Spr	E	PHY105B	EE
EE307	Antennas and Radio Propagation	3	1	4	Spr	3/Spr	E	EE208	EE
EE308	Fiber Communication Principles and Techniques	3	1	4	Spr	3/Spr	B	MA102B	EE
EE309	Introduction to Semiconductor Optics	3		3	Fall	3/Fall	B	MA102B EE203	EE
EE310	Principles and Technologies of Lasers	3		3	Spr	3/Spr	B	MA102B EE210	EE
EE311	Optical Design	3	1	4	Fall	3/Fall	B	EE210	EE
EE312	Design of Modern Communication Systems	3	1	4	Spr	3/Spr	B	EE206 EE313	EE
EE316	Microwave Engineering	3	1	4	Fall	3/Fall	E	EE201-17 EE208	EE
EE317	Advanced Electronic Science Experiment I	1	1	2	Fall	3/Fall	B	EE201-17 or EE202-17	EE
EE318	Advanced electronic science experiment II	1	1	2	Spr	3/Spr	B	EE201-17 or EE202-17	EE
EE320-15	Integrated Circuit Fabrication Laboratory	3	1.5	4.5	Spr /Fall	3/Spr /Fall	C	EE204	EE
EE321	Spectral Technology and Application	3		3	Spr	3/Spr	B	NA	EE
EE322	Optoelectronics Devices Fabrication Laboratory	2	1	3	Spr	3/Spr	B	EE204	EE
EE325	Nonlinear Optimization Techniques for Electrical Engineering	3	1	4	Fall	3/Fall	B	MA102B MA107A	EE
EE327	Fundamentals of Information Optics	3	1	4	Fall	3/Fall	B	EE205	EE
EE334	Advanced Integrated Circuit Design: Machine Learning on Chip	3	1	4	Spr	3/Spr	E	EE202-17	EE

EE335	Liquid Crystal Optoelectronics	3	1	4	Fall	3/Fall	C	EE210	EE
EE336	Fundamentals of Photovoltaics	3	1	4	Fall	3/Fall	E	EE204	EE
EE337	Analog Integrated Circuit Design	3	1	4	Fall	3/Fall	B	EE201-17 EE204	EE
EE338	Application Specific IC (ASIC) Designs Methodology and Practice	3	1	4	Spr	3/Spr	B	EE201-17 EE202-17 EE204	EE
EE339	Analog IC Layout Design	1	1	2	Fall	3/Fall	B	EE304	EE
EE340	Statistical Learning for Data Science	3	1	4	Spr	3/Spr	B	MA107A	EE
EE341	Advanced Integrated Circuit Design: Microprocessor	3	1	4	Fall	3/Fall	B	EE202-17	EE
EE342	Sensors and Applications	3		3	Spr	3/Spr	B	PHY103B	EE
EE343	Optoelectronic Instrumentation	3	1	4	Fall	3/Fall	B	EE106 or EE204	EE
EE345	Introduction of Wide Bandgap Semiconductors	3		3	Fall	3/Fall	B	EE203 or EE204	EE
EE347	Power Semiconductor Devices and Application	3		3	Fall	3/Fall	B	EE203 or EE204	EE
EE349	Power Semiconductor Devices and Application Laboratory	1	1	2	Fall	3/Fall	B	EE347	EE
EE402	Frontier Seminars in Modern Electronic Science and Technology IV	1		1	Spr	4/Spr	B	EE201-17 or EE202-17	EE
EE403	Introduction to Display and Lighting Technologies	2		2	Fall	4/Fall	B	EE204	EE
EE405	Advanced Electronic Science Experiment III	1	1	2	Fall	4/Fall	B	EE201-17 or EE202-17	EE
EE411	Information theory and coding	2		2	Fall	4/Fall	B	MA212	EE
EE417	Communications System Design II	2	2	4	Fall	4/Fall	E	EE316 EE206 EE307	EE
EE423-14	Pattern Recognition	3	1	4	Fall	4/Fall	B	EE323 EE326	EE
EE427	Principles of Remote Sensing	2		2	Fall	4/Fall	B	EE323 EE326	EE
EE429	Image and Video Processing	3	1	4	Fall	4/Fall	E	EE205 MA107A MA212	EE
EE431	BioMEMS and Lab-on-a-Chip	3		3	Fall	4/Fall	E	PHY105B	EE
EE433	Modern Electric Vehicle Technologies	2		2	Fall	4/Fall	B	EE208	EE
EES101	Brief Introduction of "Creative Electronic Design I"	1	0.5	6	Smr	1/Smr	C	PHY105B	EE
EES102	DIY Project: Assembling an iPhone6	2	2	8	Smr	1/Smr	C	EE104	EE
EES201	Brief Introduction of "Creative Electronic Design II"	0.5	0.5	4	Smr	2/Smr	C	NA	EE

EES202	Design based on LabVIEW Programming	1	1	8	Smr	2/Smr	C	NA	EE
EES203	Innovation and Entrepreneurship	0.5	0.5	4	Smr	2/Smr	C	NA	EE
EES204	Fiber Sensor Design	1	1	8	Smr	2/Smr	C	NA	EE
EES205	Advanced Technology Forecasting	1.5		6	Smr	2/Smr	E	NA	EE
EES301	Statistical Machine Learning	2		8	Smr	3/Smr	E	MA107A MA212	EE
EES302	2D Materials: Properties and Devices	2		8	Smr	3/Smr	E	NA	EE
EES303	Convex Optimization	2		2	Smr	3/Smr	E	MA107A;M A215 or MA212	EE
EES305	Electronic Materials	2		2	Smr	3/Smr	E	NA	EE
BMEB131	Introduction to Biomedical Engineering	2		2	Spr	1/Spr	C	NA	BMEB
BMEB221	Biomedical Instrumentation	4	2	6	Spr	2/Spr	C	NA	BMEB
CS301	Embedded System and Microcomputer Principle	3	1	4	Fall	3/Fall	B	CS207	CS
CS303B	Artificial Intelligence B	3	1	4	Fall	3/Fall	B	CS203B CS102A MA212	CS
CS307	Principles of Database Systems	3	1	4	Spr	3/Spr	B	NA	CS
CS403	Cryptography and Network Security	2		2	Fall	4/Fall	B	CS201 CS305 CS302	CS
CS405	Machine Learning	3	1	4	Fall	4 /Fall	B	MA212 MA107A	CS
MA109	Advanced Linear Algebra	4		4	Fall	1/Spr	B	MA107A	MATH
MA201b	Ordinary Differential Equations B	4		4	Fall	2/Fall	B	MA102B	MATH
MA208	Applied Stochastic Processes	3		3	Spr	2/Spr	E	MA212 or MA204	MATH
Total		1625	44	249.5					
Notes:									
1. Students are required to complete 16 credits for the Major Elective Courses.									

Table 3: Overview of Practice-Based Courses

Course Code	Course Name	Credit	Lab Credits	Hours/week	Term	take the course Advised term to	Instruction language	Prerequisite	Dept.
EE201-17L	Analog Circuits Laboratory	1	1	2	Fall	2/Fall	B	EE201-17	EE
EE202-17L	Digital Circuits Laboratory	1	1	2	Spr/ Fall	2/Spr/Fall	B/E	EE202-17	EE
EE204	Introduction to Semiconductor Devices	3	1	4	Spr	2/Spr	B	EE203	EE
EE205	Signals and Systems	3	1	4	Fall	2/Fall	B	MA101B	EE
EE206	Communication Principles	3	1	4	Spr	2/Spr	E	EE205	EE
EE208	Engineering Electromagnetics	3	1	4	Spr	2/Spr	B	MA107A EE104	EE
EE303	Fundamentals of Optoelectronic Technology	3	1	4	Fall	3/Fall	B	PHY105B	EE
EE304	Integrated Circuit Design	3	2	5	Fall	3/Fall	B	EE202-17 EE204	EE
EE305	Introduction to VLSI technology	3	1	4	Fall	3/Fall	E	EE203	EE
EE306	Introduction to MEMS	3	1	4	Spr	3/Spr	E	PHY105B	EE
EE307	Antennas and Radio Propagation	3	1	4	Spr	3/Spr	E	EE208	EE
EE308	Fiber Communication Principles and Techniques	3	1	4	Spr	3/Spr	B	MA102B	EE
EE311	Optical Design	3	1	4	Fall	3/Fall	B	EE210	EE
EE312	Design of Modern Communication Systems	3	1	4	Spr	3/Spr	B	EE206 EE313	EE
EE313	Wireless Communications	3	1	4	Fall	3/Fall	B	EE206	EE
EE316	Microwave Engineering	3	1	4	Fall	3/Fall	E	EE201-17 EE208	EE
EE317	Advanced Electronic Science Experiment I	1	1	2	Fall	3/Fall	B	EE201-17 or EE202-17	EE
EE318	Advanced electronic science experiment II	1	1	2	Spr	3/Spr	B	EE201-17 or EE202-17	EE
EE320-15	Integrated Circuit Fabrication Laboratory	3	1.5	4.5	Spr/ Fall	3/Spr/Fall	C	EE204	EE
EE322	Optoelectronics Devices Fabrication Laboratory	2	1	3	Spr	3/Spr	B	EE204	EE
EE323	Digital Signal Processing	3	1	4	Fall	3/Fall	E	EE205	EE
EE325	Nonlinear Optimization Techniques for Electrical Engineering	3	1	4	Fall	3/Fall	B	MA102B MA107A	EE
EE326	Digital Image Processing	3	1	4	Spr	3/Spr	E	EE205	EE
EE327	Fundamentals of Information Optics	3	1	4	Fall	3/Fall	B	EE205	EE
EE328	Speech Signal Processing	3	1	4	Spr	3/Spr	E	EE323	EE

EE330	DSP Design and Simulation	1.5	1.5	3	Spr	3/Spr	B	EE323	EE
EE332	Digital System Design	3	1	4	Spr	3/Spr	E	EE202-17	EE
EE334	Advanced Integrated Circuit Design: Machine Learning on Chip	3	1	4	Spr	3/Spr	E	EE202-17	EE
EE335	Liquid Crystal Optoelectronics	3	1	4	Fall	3/Fall	C	EE210	EE
EE336	Fundamentals of Photovoltaics	3	1	4	Fall	3/Fall	E	EE204	EE
EE337	Analog Integrated Circuit Design	3	1	4	Fall	3/Fall	B	EE201-17 EE204	EE
EE338	Application Specific IC (ASIC) Designs Methodology and Practice	3	1	4	Spr	3/Spr	B	EE201-17 EE202-17 EE204	EE
EE339	Analog IC Layout Design	1	1	2	Fall	3/Fall	B	EE304	EE
EE340	Statistical Learning for Data Science	3	1	4	Spr	3/Spr	B	MA107A	EE
EE341	Advanced Integrated Circuit Design: Microprocessor	3	1	4	Fall	3/Fall	B	EE202-17	EE
EE343	Optoelectronic Instrumentation	3	1	4	Fall	3/Fall	B	EE106 or EE204	EE
EE349	Power Semiconductor Devices and Application Laboratory	1	1	2	Fall	3/Fall	B	EE347	EE
EE405	Advanced Electronic Science Experiment III	1	1	2	Fall	4/Fall	B	EE201-17 or EE202-17	EE
EE417	Communications System Design II	2	2	4	Fall	4/Fall	E	EE316 EE206 EE307	EE
EE423-1 4	Pattern Recognition	3	1	4	Fall	4/Fall	B	EE323 EE326	EE
EE429	Image and Video Processing	3	1	4	Fall	4/Fall	E	EE205 MA107A MA212	EE
EE470	Internship	2	2	16	Smr	3/Smr	NA	NA	EE
EE480	Research Projects	2	2				NA	NA	EE
EE490	Undergraduate Thesis/Projects	8	8	8	Fall/ Spr	4/Fall/Spr	NA	NA	EE
EES101	Brief Introduction of "Creative Electronic Design I"	1	0.5	6	Smr	1/Smr	C	PHY105B	EE
EES102	DIY Project: Assembling an iPhone6	2	2	8	Smr	1/Smr	C	EE104	EE
EES201	Brief Introduction of "Creative Electronic Design II"	0.5	0.5	4	Smr	2/Smr	C	NA	EE
EES202	Design based on LabVIEW Programming	1	1	8	Smr	2/Smr	C	NA	EE
EES203	Innovation and Entrepreneurship	0.5	0.5	4	Smr	2/Smr	C	NA	EE
EES204	Fiber Sensor Design	1	1	8	Smr	2/Smr	C	NA	EE
BMEB22 1	Biomedical Instrumentation	4	2	6	Spr	2/Spr	C	NA	BMEB
CS203B	Data Structures and Algorithm Analysis B	3	1	4	Fall	2/Fall	E	CS102A	CS
CS301	Embedded System and Microcomputer Principle	3	1	4	Fall	3/Fall	B	CS207	CS

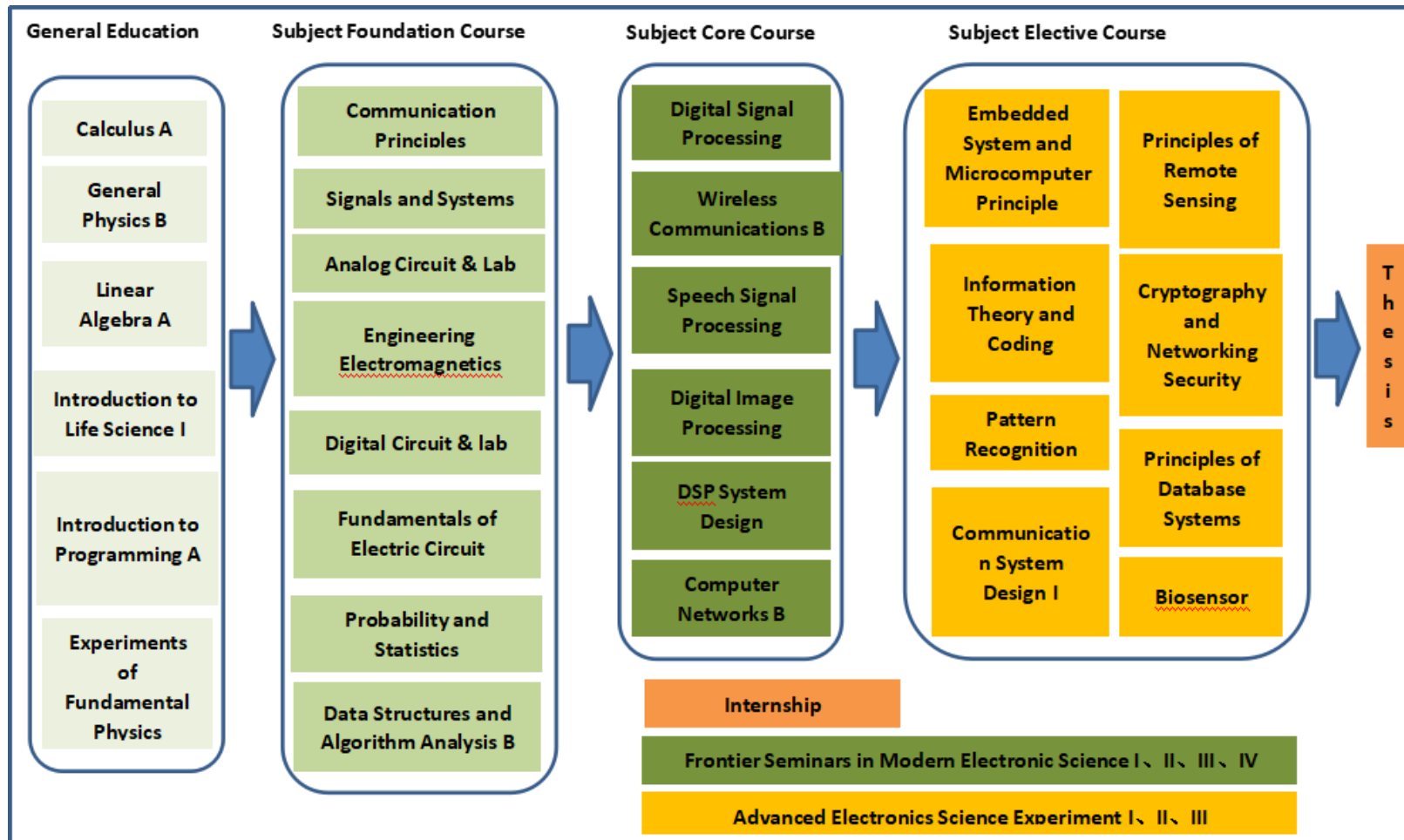
CS303B	Artificial Intelligence B	3	1	4	Fall	3/Fall	B	CS203B CS102A MA212	CS
CS305B	Computer Networks B	3	1	4	Fall	3/Fall	E	CS102A	CS
CS307	Principles of Database Systems	3	1	4	Fall	3/Fall	B	NA	CS
CS405	Machine Learning	3	1	4	Fall	4 /Fall	B	MA212 MA107A	CS
Total		1455	695	2415					

Table 4: Overview of Course Hours and Credits

Course Category	Total Course Hours	Total Credits	Credit Requirements	Percentage of the Total*
General Education (GE) Required Courses (not including English courses)	800	48	48	35.2
General Education (GE) Elective Courses			13	9.5
Major Foundational Courses	496	25	25	18.3
Major Core Courses	480	22.5	22.5	16.5
Major Elective Courses	3992	162.5	16	11.7
Research Projects, Internship and Undergraduate Thesis/Projects	380	12	12	8.8
Total (not including English courses)	6148	270	136.5	100

* Percentage of the total= Credit requirements of each line / Total credit requirements

Curriculum Structure of Information Engineering



Note: The Subject Elective course lists include only part of the courses, see more in Program.

