Program of Optoelectronic Information Science and Engineering for International Students (2019)

I. Introduction

Optoelectronic Information Science and Engineering is a comprehensive technology, which is composed of optics, optoelectronics, microelectronics and other technologies. It is a new cross-subject with strong practical application, and is widely used in the national economy and defense. The professional training includes the theoretical knowledge of optoelectronics, flat panel display, lighting, solar energy, optical design and optical communication technology. At the same time, English and computer application training are important. Graduated students will be engaged in the field of optoelectronic information, optical communication, photoelectric detection, optoelectronic devices, new display and lighting technology, new energy, and new technology research and development. They are also suitable for the research and development of optoelectronic devices and related high-tech disciplines, scientific research institutions, universities and institutions engaged in scientific research, development, teaching and management.

II. Objectives and Learning Outcomes

Attributes Optoelectronic Information Science and 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 Optoelectronic Information Science and 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 electrical and electronic devices, software, and systems containing hardware and software components.

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

SO 10: knowledge and application of and appropriate laboratory experience in: geometrical optics, physical optics, optical materials, and optical and/or photonic devices and systems.

III. Study Length and Graduation Requirements

Study length: 4years

Degree conferred: Bachelor of Engineering

The minimum credit requirement for graduation: 135 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 (74 credits)	Major Foundational Courses	25
	Major Core Courses	18
	Major Elective Courses	19
	Research Projects, Internship and Undergraduate Thesis /Projects	12
Total (not including English courses)		135

IV. Discipline

Optoelectronics and Laser Technology

V. Main Courses

Major courses include Fundamentals of Electric Circuits, Analog Circuit, Analog Circuit Laboratory, Digital Circuit, Digital Circuit Laboratory, Solid-State Electronics, Signals and Systems, Engineering Electromagnetics, Fundamental of Optoelectronic Technology, Probability and Statistics, Introduction to Semiconductor Devices, Fundamentals of Optics, Frontier Seminars in Modern Electronic Science and Technology I/II/III, Introduction to Semiconductor Optics, Principles and Technologies of Lasers, Optical Design etc.

VI. Practice-Based Courses

Major practical training includes Optoelectronics Devices Fabrication Laboratory, Optoelectronic related Innovative Experiment, Industrial Practice, Advanced Electronic Science Experiment (Outstanding students after their junior year, can join research working by their 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	MA101B	Calculus I A	NA
	MA102B	Calculus II A	MA101B
	MA107A	Linear Algebra A	NA
	PHY103B	General Physics B (I)	NA
	PHY105B	General Physics B (II)	PHY103B
Notes: At the end of First Year, In addition to the above 5 courses, students must pass the interview.			
Declare major at the end of Second Year	EE104	Fundamentals of Electric Circuits	MA101B; MA107A
	MA102B	Calculus II A	MA101B
	EE203	Solid-State Electronics	PHY105B
	EE204	Introduction to Semiconductor Devices	EE203
	EE210	Fundamentals of Optics	PHY105B

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 I B	4		4	Spr/Fall	B/E	NA	PHY
PHY105B	General Physics II B	4		4	Spr/Fall	B/E	General Physics I B	PHY
BIO102B	Introduction to Life Science	3		3	Spr/Fall	B/E	NA	BIO
CS102B	Introduction to Programming B	3	1	4	Spr/Fall	B/E	NA	CSE
PHY104B	Experiment for Foundation of 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		4		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	
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				

(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	Spr/ Fall	B/E	NA	CHEM
ME102	CAD and Engineering Drawing	3	1.5	4.5	1/Spr/ Fall	B/E	NA	ME

PHY207-15	Electrodynamics I	3		3	2/Fall	B/E	PHY105B MA107A	PHY
PHY210	Atomic Physics	3		3	2/Spr	B/E	PHY105B	PHY
Total		12	1.5	13.5				

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	Advised term to take the course	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 Circuit	3		3	Fall	2 /Fall	C	PHY105B EE104	EE
	EE201-17L	Analog Circuit Laboratory	1	1	2	Fall	2 /Fall	B	EE201-17	EE
	EE202-17	Digital Circuit	3		3	Spr /Fall	2 /Spr /Fall	B/E	PHY105B	EE
	EE202-17L	Digital Circuit Laboratory	1	1	2	Spr /Fall	2 /Spr /Fall	B/E	EE202-17	EE
	EE203	Solid-State Electronics	3		3	Fall	2 /Spr /Fall	B/E	PHY105B	EE
	EE205	Signals and Systems	3	1	4	Fall	2 /Fall	B	MA101B	EE
	EE208	Engineering Electromagnetics	3	1	4	Spr	2 /Spr	B	MA107A EE104	EE
	EE303	Fundamental of Optoelectronic Technology	3	1	4	Fall	3 /Fall	B	PHY105B	EE
	MA212	Probability and Statistics	3		3	Spr	2/Spr	B/E	MA102B or MA102a	MA
	Total		25	5	30					
Major Core Courses	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
	EE301	Frontier Seminars in Modern Electronic Science and Technology I	1		1	Fall	3/Fall	B	EE201-17o r 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
	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
	EE401	Frontier Seminars in Modern Electronic Science and Technology III	1		1	Fall	4 /Fall	B	EE201-17o r EE202-17	EE

	Total		18	2	20					
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**					

Notes:

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.

2.Students who have completed Comprehensive Design Ⅰ&Ⅱ (COE491 & COE492) are not required to take the Graduation Projects/Thesis(EE490).

Table 2: Major Elective Courses

Course Code	Course Name	Credit	Lab Credits	Hours/week	Term	Advised term to take the course	Instruction language	Prerequisite	Dept.
EE106	Introduction to Optoelectronic	2		2	Spr	1 /Spr	B	NA	EE
EE206	Communication Principles	3	1	4	Spr	2 /Spr	B	EE205	EE
EE304	Integrated Circuit Design	3	2	5	Spr	3 /Spr	E	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 EE104	EE
EE308	Fiber Communication Principles and Techniques	3	1	4	Spr	3 /Spr	B	MA102B	EE
EE313	Wireless Communications	3	1	4	Fall	3 /Fall	E	EE206	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	EE201-17or EE202-17	EE
EE318	Advanced Electronic Science Experiment II	1	1	2	Spr	3 /Spr	B	EE201-17or 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	Optoelectronic 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	E	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	B	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
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 IV	1		1	Spr	4 /Spr	B	EE201-17or 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	EE201-17or EE202-17	EE
EE411	Information Theory and Coding	2		2	Fall	4 /Fall	B	MA212	EE
EE415	Advances in Micro Energy and Micro Systems	2	1	3	Fall	4 /Fall	B	NA	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
EE431	Bio MEMS 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 Sense 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	MA107B 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;MA215 or MA212	EE
EES305	Electronic Materials	2		2	Smr	3 /Smr	E	NA	EE
MSE320	Introduction to photovoltaic thermal technology	3		3	Spr	3 /Spr	B	PHY105B EE201-17 EE204	MSE
CS301	Embedded system and microcomputer principle	3	1	4	Fall	3 /Fall	B	CS207	CS
BMEB221	Biomedical Instrumentation and Experiment	4	2	6	Spr	2 /Spr	C	NA	BMEB
MA201b	Ordinary Differential Equations B	4		4	Fall	2 /Fall	B	MA102B	MATH
Total		**143**	**45.5**	**231.5**					

Notes:
1. Students are required to complete 19 credits for the Major Elective Courses.

Table 3: Overview of Practice-Based Courses

Course Code	Course Name	Credit	Lab Credits	Hours/week	Term	Advised term to take the course	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	B	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	Spr	3 /Spr	E	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 EE104	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	E	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	EE201-17or EE202-17	EE
EE318	Advanced electronic science experiment II	1	1	2	Spr	3 /Spr	B	EE201-17or 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	E	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	B	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	EE201-17o r EE202-17	EE
EE415	Advances in Micro Energy and Micro Systems	2	1	3	Fall	4 /Fall	B	NA	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
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	0.5	0.5	4	Smr	2 /Smr	C	NA	EE

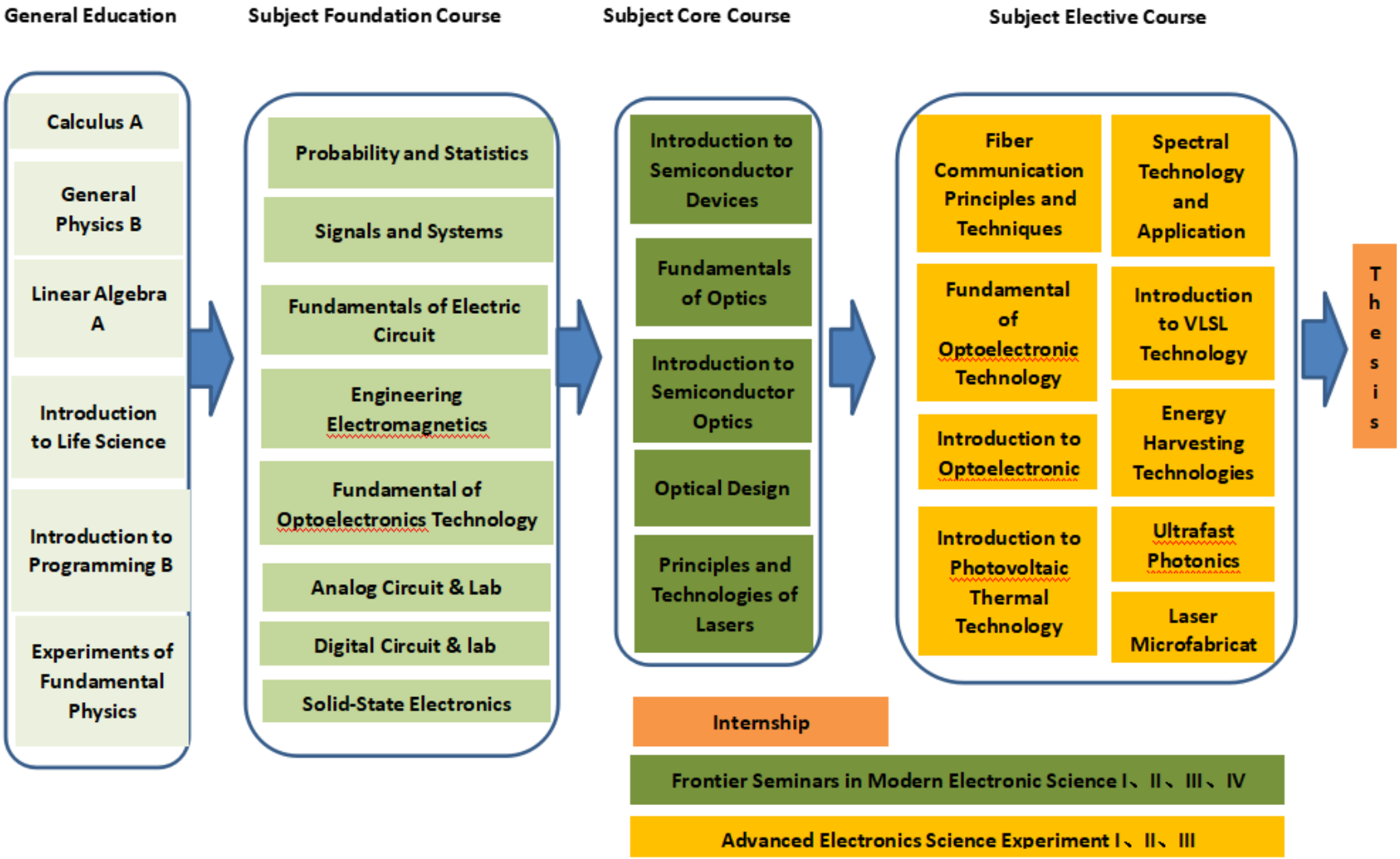
	Design II"								
EES202	Design based on LabVIEW Programming	1	1	8	Smr	2 /Smr	C	NA	EE
EES203	Innovation and Entrepreneurship	0.5	0.5	4	Smr	2 /Smr	C	NA	EE
EES204	Fiber Sensor Design	1	1	8	Smr	2 /Smr	C	NA	EE
ME102	CAD and Engineering Drawing	3	1.5	4.5	Spr /Fall	1 /Spr /Fall	B/E	NA	ME
BMEB221	Biomedical 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
Total		132.5	66	225					

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	35.6
General Education (GE) Elective Courses			13	9.6
Major Foundational Courses	480	25	25	18.5
Major Core Courses	320	18	18	13.3
Major Elective Courses	3704	143	19	14.1
Research Projects, Internship and Undergraduate Thesis/Projects	380	12	12	8.9
Total (not including English courses)	5684	246	135	100

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

Curriculum Structure of Optoelectronic Information Science and Engineering



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