

Bachelor of Engineering Program in Electrical Communication and Electronic Engineering B.Eng. (Electrical Communication and Electronic Engineering)

Philosophy of the program

This program produces international standard bachelor degree graduates who gain knowledge and skills necessary for working in the electrical communication and electronic profession. It also provides them with ample knowledge for furthering their study. Its graduates are efficient in conducting research in electrical communication and electronic field. Moreover, they are equipped with ethics and leadership in addition to cooperative skills enabling them to work with others internationally in the globalized era.

Credits 3

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Professions after graduation:

- 1. Electrical communication and electronic engineers
- 2. Electronic system analysts and designers for telecommunication application
- 3. Researchers in electrical communication and electronics
- 4. Lecturers in science and technology institutions

Curriculum

Total Program Credits	148 credits			
Curriculum Components				
General Education Courses	31 credits			
Area-specific requirements	111 credits			
Science and Mathematics	21 credits			
Engineering Foundations	12 credits			
Degree-Based Core Subje	cts 56 credits			
Degree-Based Electives	22 credits			
Free Electives 6 credits				
COURSE STRUCTURE				
First Year				
First Semester				
LNG 105 Academic English for International Students				
Or				
LNG 106 Academic Listening and Speaking				
CHM 103 Fundamental Chemistry				
CHM 160 Chemistry Laboratory				
EIE 105 Computer Programming for Electrical				
Communication	and Electronic Engineering			

PHY 103 General Physics for Engineering Student I

PHY 191 General Physics Laboratory I

GEN 111 Man and Ethics of Living

MTH 101 Mathematics I

Total



Faculty of Engineering Bachelor of Engineering Program in Electrical Communication and Electronic

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Second Semester	Credits
LNG 106 Academic Listening and Speaking	3
or	
LNG 107 Academic Reading and Writing	3
EIE 104 Electric Circuit Theory	3
MEE 111 Engineering Drawing	3
MEN 111 Engineering Materials	3
MTH 102 Mathematics II	3
PHY 104 General Physics for Engineering Student II	3
PHY 192 General Physics Laboratory II	1
GEN 101 Physical Education	1
Total	20
Second Year	
First Semester	Credits
LNG 107 Academic Reading and Writing	3
or	
LNG xxx Any course in Linguistics	3
EIE 205 Electronics Engineering Practice	1
EIE 210 Electronic Devices and Circuit Design I	3
EIE xxx Elective I	3
EIE xxx Elective II	3
MTH 201 Mathematics III	3
GEN 121 Learning and Problem Solving Skills	3
Total	19
Second Semester	Credits
EIE 207 Basic Electrical and Electronic Laboratory	1
MEE 214 Engineering Mechanics	3
EIE 221 Principles of Communication Systems	3
EIE 240 Electrical and Electronic Measurement	3
EIE 341 Linear Control Systems	3
EIE xxx Elective III	3
EIE xxx Elective IV	3
GEN 231 Miracle of Thinking	3

Total

Summer Session (Co-Operative Education Track)

XXX xxx Free Elective I	3
XXX xxx Free Elective II	3
Total	6



Third Year

First Semester		Credits
EIE 312	Electronic Engineering Laboratory	1
EIE 325	Electromagnetic Fields and Waves	3
EIE 326	Electronic Communication	3
EIE 334	Microprocessor	3
EIE 370	Seminar	1
EIE xxx	Elective V	3
GEN 241	Beauty of Life	3
	Total	17

Second Semester

Credits

EIE 314 Advanced Electronics Laboratory			
or			
EIE 324 Communication and Telecommunication Laboratory	1		
EIE 335 Digital Circuit and Microprocessor Laboratory	1		
EIE 422 Data Communications	3		
EIE 423 Optical Communications	3		
EIE 428 Microwave Engineering	3		
EIE 467 Digital Communications	3		
GEN 351 Modern Management and Leadership	3		
EIE 372 Electrical Communication and Electronic Engineering Pro	oject Study 1		
or			
EIE 373 Co-operative Preparation (Co-Operative Education Track) 1			
Total	18		

Summer Session

EIE 371	Industrial ⁻	Training		2 (S/U)

Forth Year

First Semester		
EIE 477 Electrical Communication and	1	
Electronic Engineering Project I		
PRE 380 Engineering Economics	3	
EIE xxx Elective VI	3	
EIE xxx Elective VII	3	
GEN xxx General Education Elective I	3	
XXX xxx Free Elective I	3	
Total	16	



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Second Semester		
EIE 478 Electrical Communication and	2	
Electronic Engineering Project II		
EIE 429 Antenna Theory	3	
EIE 450 Applied Communication Systems and Transmission Lines	3	
GEN xxx General Education Elective II	3	
XXX xxx Free Elective II	3	
Total	14	

Forth Year (Co-Operative Education Track)

Total

First Semester	Credits
EIE 479 Co-operative Study	6
Total	6

Credits Second Semester EIE 429 Antenna Theory EIE 450 Applied Communication Systems and Transmission Lines 3 EIE xxx Elective VI EIE xxx Elective VII GEN xxx General Education Elective I GEN xxx General Education Elective II PRE 380 Engineering Economics