

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING (EEE)
SCHOOL OF SCIENCE AND ENGINEERING
CHITTAGONG INDEPENDENT UNIVERSITY (CIU)
Syllabus for the Degree of B.Sc. in EEE

1st Year Courses

SL. No.	Course ID	Course Title	Prerequisite	Credit
1	ENG 0231101	Functional English	N/A	3
2	EEE 0713111	Electrical Circuits I	N/A	3
3	EEE 0713111L	Electrical Circuits I Lab	N/A	1.5
4	PHY 0533111	Engineering Physics	N/A	3
5	PHY 0533111L	Engineering Physics Lab	N/A	1.5
6	MAT 0541111	Calculus	N/A	3
7	CSE 0613111	Structured Programming	N/A	3
8	CSE 0613111L	Structured Programming Lab	N/A	1.5
9	CSE 06131121	Object Oriented Programming	CSE 0613111	3
10	CSE 0613121L	Object Oriented Programming Lab	CSE 0613111	1.5
11	CME 0731113	Engineering Drawing	N/A	1.5
12	MAT 0541121	Differential Equations and Matrices	N/A	3
13	CHE 0531122	Engineering Chemistry	N/A	3
14	SOC 0314102	Introduction to Sociology	N/A	3
15	EEE 0713121	Electrical Circuits II	EEE 0713111	3
16	EEE 0713121L	Electrical Circuits II Lab	EEE 0713111	1.5
<u>Total</u>				39

2nd Year Courses

SL. No.	Course ID	Course Title	Prerequisite	Credit
1	BLL 0232201	Bangla Bhasha	N/A	3
2	ECN 0311201	Introduction to Economics	N/A	3
3	MAT 0542211	Engineering Statistics	MAT 0541121	3
4	EEE 0713211	Electrical Machines I	EEE 0713121	3
5	EEE 0713211L	Electrical Machines I Lab	EEE 0713121	1.5
6	EEE 0714213	Electronics I	EEE 0713121	3
7	EEE 0714213L	Electronics I Lab	EEE 0713121	1.5
8	BDS 0222201	History of Emergence of Independent Bangladesh	N/A	3
9	ACN 0411201	Principles of Accounting	N/A	3
10	MAT 0541221	Vector analysis and Complex Variables	MAT 0541111	3
11	ME 0715222	Fundamentals of Mechanical Engineering	N/A	3
12	EEE 0713221	Electrical Machines II	EEE 0713211	3
13	EEE 0713221L	Electrical Machines II Lab	EEE 0713211	1.5
14	EEE 0714224	Electronics II	EEE 0714213	3
15	EEE 0714224L	Electronics II Lab	EEE 0714213	1.5
16	MAT 0541222	Numerical Methods	MAT 0542211	3
<u>Total</u>				42

3rd Year Courses

SL. No.	Course ID	Course Title	Prerequisite	Credit
1	MGT 0413301	Industrial and Operational Management	N/A	3
2	EEE 0714311	Signals and Systems	EEE 0713121	3
3	EEE 0714313	Principles of Electromagnetics	EEE 0713121	3
4	EEE 0714317	Digital Electronics	EEE 0714213	3
5	EEE 0714317L	Digital Electronics Lab	EEE 0714213	1.5
6	EEE 0713315	Transmission and Distribution of Electrical Power	EEE 0713221	3
7	EEE 0713312	Electrical and Electronic Service Design	EEE 0714224	1.5
8	EEE 0714318	Measurement and Instrumentation	EEE 0714224	3
9	EEE 0714318L	Measurement and Instrumentation Lab	EEE 0714224	1.5
10	EEE 0714327	Analog Communication	EEE 0714224	3
11	EEE 0714327L	Analog Communication Lab	EEE 0714224	1.5
12	EEE 0713322	Power System Analysis	EEE 0713315	3
13	EEE 0713322L	Power System Analysis Lab	EEE 0713315	1.5
14	EEE 0714323	Linear Control Systems	EEE 0714311	3
15	EEE 0714323L	Linear Control Systems Lab	EEE 0714311	1.5
16	CSE 0714321	Microprocessor and Interfacing	EEE 0714317	3
17	CSE 0714321L	Microprocessor and Interfacing Lab	EEE 0714317	1.5
18	EEE 0714324	Microwave Engineering	EEE 0714313	3
Total				43.5

4th Year Courses

SL. No.	Course ID	Course Title	Prerequisite	Credit
1	EEE 0713498/ EEE 0713499	Senior Project/ Internship	Senior Standard	1.5
2	LFE 0788411	Live-in-Field Experience	N/A	3
3	EEE 0714415	Power Electronics	EEE 0714224	3
4	EEE 0714415L	Power Electronics Lab	EEE 0714224	1.5
5	EEE 0713413	Power System Protection	EEE 0713315	3
7	EEE***	Elective I	Senior Standard	3/4.5
8	EEE***	Elective II	Senior Standard	4.5/3
9	EEE 0713498/ EEE 0713499	Senior Project/ Internship	Senior Standard	2.5
10	EEE 0714423	Digital Communication	EEE 0714327	3
11	EEE 0714423L	Digital Communication Lab	EEE 0714327	1.5
12	EEE 0714425	Digital Signal Processing	EEE 0714311	3
13	EEE 0714425L	Digital Signal Processing Lab	EEE 0714311	1.5
6	EEE***/CSE***	Elective III or Elective IV or Elective V	Senior Standard	4.5
<u>Total</u>				35.5

Technical Electives:

Type	Course ID	Course Title	Prerequisite	Remarks	Credit
Power System	EEE 0713431	Power Plant Engineering	Senior Standard	Elective I	3/4.5
	EEE 0713432	Renewable Energy Conversion			
	EEE 0713432L	Renewable Energy Conversion Lab			
	EEE 0713433	Electrical Engineering Materials			
	EEE 0713434	Electrical Drive Systems			
	EEE 0713435	Energy and Environment			
	EEE 0713436	Power System Optimization			
	EEE 0713438	Special Topics in EEE			
Electronics and Chip Design	EEE 0714441	Semiconductor Physics and Devices	Senior Standard	Elective II	3/4.5
	EEE 0714442	VLSI Technology			
	EEE 0714442L	VLSI Technology Lab			
	EEE 0714444	Optoelectronics and Photonics			
	EEE 0714445	Nanoelectronics			
Communication and Signal Processing	EEE 0714452	Wireless Communication	Senior Standard	Elective III	3/4.5
	EEE 0714452L	Wireless Communication Lab			
	EEE 0714453	Fiber Optics Communication			
	EEE 0714453L	Fiber Optics Communication Lab			
	EEE 0714455	Data Communication and Networking			
	EEE 0714455L	Data Communication and Networking Lab			

	EEE 0714456	Cellular Mobile and Satellite Communication			
	EEE 0714456L	Cellular Mobile and Satellite Communication Lab			
Computer Engineering	CSE 0613121	Object Oriented Programming	Senior Standard	Elective IV	3/4.5
	CSE 0613121L	Object Oriented Programming Lab			
	CSE 0714411	Artificial Intelligence and Machine Learning			
	CSE 0714411L	Artificial Intelligence and Machine Learning Lab			
	CSE 0714412	Robotics			
	CSE 0714412L	Robotics Lab			
	CSE 0714415	Multimedia Communication			
	CSE 0714415L	Multimedia Communication Lab			
	CSE 0613416	Mobile Application Development			
	CSE 0613416L	Mobile Application Development Lab			
	CSE 0611417	Image Processing			
	CSE 0611417L	Image Processing Lab			
	CSE 0611418	Internet of Things			
Biomedical Engineering	EEE 0714461	Biomedical Instrumentation		Elective V	3/4.5
	EEE 0714461L	Biomedical Instrumentation Lab			