BRAC University

BSc ECE Program

Standard Sequence of Courses (For students admitted in Fall 2012 or later)

Semester	Courses			
1	ENG 101: English Fundamentals (3 credits)	PHY111: Principles of Physics I (3 credits)	MAT 110: Mathematics I (3 credits)	[CSE 161: Computer Programming (3 credits) + CSE 162: Computer Programming Laboratory (1 credit)] **OR** ECO 105: Fundamentals of Economics (3 credits)
2	ENG 102: English Composition (3 credits)	HUM 103: Ethics and Culture (3 credits)	DEV 101: Bangladesh Studies (3 credits)	
3	MAT 120: Mathematics II (3 credits)	PHY 112: Principles of Physics II (3 credits)	EEE 201: Electrical Circuits I (3 credits) EEE 202: Electrical Circuits I Laboratory (1.5 credits)	ECO 105: Fundamentals of Economics (3 credits) **OR** [CSE 161: Computer Programming (3 credits) + CSE 162: Computer Programming Laboratory (1 credit)]
4	CHE 110: Principles of Chemistry (3 credits)	MAT 215: Mathematics III (3 credits)	EEE 203: Electrical Circuits II (3 credits) EEE 204: Electrical Circuits II Laboratory (1.5 credits)	EEE 205: Electronic Devices and Circuits I (3 credits) EEE 206: Electronic Devices and Circuits I Laboratory (1.5 credits)
5	EEE 207: Electronic Devices and Circuits II (3 credits) EEE 208: Electronic Devices and Circuits II Laboratory (1.5 credits)	EEE 221: Energy Conversion I (3 credits)	MAT 216: Mathematics IV (3 credits)	ENV 103: Elements of Environmental Sciences (3 credits)
6	EEE 209: Semiconductor Devices and Materials (3 credits)	EEE 241: Electromagnetic Waves and Fields (3 credits)	EEE 223: Energy Conversion II (3 credits) EEE 224: Energy Conversion Laboratory (1.5 credits)	EEE 243: Signals and Systems (3 credits)
7	ACT 201: Financial Accounting (3 credits)	EEE 341: Introduction to Communication Engineering (3 credits) EEE 342: Introduction to Communication Engineering Laboratory (1.5 credits)	EEE 343: Digital Signal Processing (3 credits) EEE 344: Digital Signal Processing Laboratory (1.5 credits)	STA 201: Elements of Statistics and Probability (3 credits)
8	EEE 301: Digital Electronics (3 credits) EEE 302: Digital Electronics Laboratory (1.5 credits)	EEE 415: Analog Integrated Circuit Design (3 credits)	EEE 349: Microwave Engineering (3 credits) EEE 350: Microwave Engineering Laboratory (1.5 credits)	MGT 211: Principles of Management (3 credits)

9	ECE 402: Thesis/Project [1st semester, Pre-thesis semester]	EEE 365: Microprocessors (3 credits) EEE 366: Microprocessors Laboratory (1.5 credits)	EEE 411: VLSI Design (3 credits) EEE 412: VLSI Design Laboratory (1.5 credits)	EEE 441: Wireless and Mobile Communications (3 credits) EEE 442: Wireless and Mobile Communications Laboratory (1.5 credits)
10	ECE 402: Thesis/Project [2nd semester]	EEE 445: Digital Communications (3 credits) EEE 446: Digital Communications Laboratory (1.5 credits)	*COMA (3 credits)	
11	ECE 402: Thesis/Project (4.5 credits) [3rd semester, payment + final grade semester]	ELECTIVE I (3 credits)		
12	EEE 401: Internship (non-credit and optional)			

*COMA = **Course Outside Major Area** i.e. this course cannot be an EEE course