

SYLLABUS OF UNDERGRADUATE COURSES

SEMESTER-WISE SUMMARY OF COURSES TO BE OFFERED

1st Year 1st Semester

Sl.	Course Code	Course Title	Theory (T)		Sessional (S)		Total credits
			Contact hrs/week	Credits	Contact hrs/week	Credits	
1.	EEE 1101	Electrical Circuits I	3.0	3.00	--	--	3.00
2.	EEE 1102	Electrical Circuits I Sessional	--	--	3.0	1.50	1.50
3.	Math 1101	Mathematics I	3.0	3.00	--	--	3.00
4.	Chem 1101	Engineering Chemistry	3.0	3.00	--	--	3.00
5.	Chem 1102	Engineering Chemistry Sessional	--	--	3.0	1.50	1.50
6.	Phy 1101	Engineering Physics I	3.0	3.00	--	--	3.00
7.	Hum 1101	Developing English Language Skills	3.0	3.00	--	--	3.00
8.	CE 1102	Engineering Drawing Sessional	--	--	3.0	1.50	1.50
Total			15.0	15.00	9.0	4.50	19.50

Contact hours: 15.0 (T) + 9.0 (S) = 24.0 hrs./week
Total credits: 19.50

No. of theory courses : 5
No. of sessional courses: 3

N.B.: Any student of a 4-year diploma in engineering, willing to obtain exemption of the courses of 1st Year 1st Semester, will have to submit an application to the Head of the concerned department for approval.

1st Year 2nd Semester

Sl.	Course Code	Course Title	Theory (T)		Sessional (S)		Total credits
			Contact hrs/week	Credits	Contact hrs/week	Credits	
1.	EEE 1201	Electrical Circuits II (Preq: EEE 1101)	3.0	3.00	--	--	3.00
2.	EEE 1202	Electrical Circuits II Sessional	--	--	3.0	1.50	1.50
3.	Math 1201	Mathematics II	3.0	3.00	--	--	3.00
4.	CSE 1201	Computer Fundamentals and Web Technology	3.0	3.00	--	--	3.00
5.	CSE 1202	Computer Fundamentals and Web Technology Sessional	--	--	3.0	1.50	1.50
6.	Phy 1201	Engineering Physics II	3.0	3.00	--	--	3.00
7.	Phy 1202	Engineering Physics I & II Sessional	--	--	3.0	1.50	1.50
8.	Ban 1201	বাংলা ভাষা ও সাহিত্য (Bengali Language and Literature)	2.0	2.00	--	--	2.00
Total			14.0	14.00	9.0	4.50	18.50

Contact hours: 14.0 (T) + 9.0 (S) = 23.0 hrs./week
Total credits: 18.50, Preq = Pre-requisite

No. of theory courses : 5
No. of sessional courses: 3

2nd Year 1st Semester

Sl.	Course Code	Course Title	Theory (T)		Sessional (S)		Total credits
			Contact hrs/week	Credits	Contact hrs/week	Credits	
1.	EEE 2101	Electronics I	3.0	3.00	--	--	3.00
2.	EEE 2102	Electronics I Sessional	--	--	3.0	1.50	1.50
3.	EEE 2104	Electronic Circuit Simulation Sessional	--	--	3.0	1.50	1.50
4.	ME 2101	Mechanical Engineering Fundamentals	3.0	3.00	--	--	3.00
5.	Math 2101	Mathematics III	3.0	3.00	--	--	3.00
6.	CSE 2101	Computer Programming	3.0	3.00	--	--	3.00
7.	CSE 2102	Computer Programming Sessional	--	--	3.0	1.50	1.50
8.	Ban 2101	বাংলাদেশের অভ্যুদয়ের ইতিহাস (History of Bangladesh Independence)	3.0	3.00	--	--	3.00
Total			15.0	15.00	9.0	4.50	19.50

Contact hours: 15.0 (T) + 9.0 (S) = 24.0 hrs./week
Total credits: 19.50

No. of theory courses : 5
No. of sessional courses: 3

2nd Year 2nd Semester

Sl.	Course Code	Course Title	Theory (T)		Sessional (S)		Total credits
			Contact hrs/week	Credits	Contact hrs/week	Credits	
1.	EEE 2201	Electronics II (Preq: EEE 2101)	3.0	3.00	--	--	3.00
2.	EEE 2202	Electronics II Sessional	--	--	3.0	1.50	1.50
3.	EEE 2203	Energy Conversion I	3.0	3.00	--	--	3.00
4.	EEE 2204	Energy Conversion I Sessional	--	--	3.0	1.50	1.50
5.	EEE 2206	Numerical Methods Sessional	--	--	3.0	1.50	1.50
6.	EEE 2207	Continuous Signals and Linear Systems	3.0	3.00	--	--	3.00
7.	Math 2201	Mathematics IV	3.0	3.00	--	--	3.00
8.	Hum 2201	Financial and Managerial Accounting	3.0	3.00	--	--	3.00
Total			15.0	15.00	9.0	4.50	19.50

Contact hours: 15.0 (T) + 9.0 (S) = 24.0 hrs./week
Total credits: 19.50, Preq = Pre-requisite

No. of theory courses : 5
No. of sessional courses: 3

3rd Year 1st Semester

Sl.	Course Code	Course Title	Theory (T)		Sessional (S)		Total credits
			Contact hrs/week	Credits	Contact hrs/week	Credits	
1.	EEE 3101	Energy Conversion II (Preq: EEE 2203)	3.0	3.00	--	--	3.00
2.	EEE 3102	Energy Conversion II Sessional	--	--	3.0	1.50	1.50
3.	EEE 3103	Digital Electronics (Preq: EEE 2201)	3.0	3.00	--	--	3.00
4.	EEE 3104	Digital Electronics Sessional	--	--	3.0	1.50	1.50
5.	EEE 3105	Engineering Electromagnetics	3.0	3.00	--	--	3.00
6.	EEE 3106	Electrical Services Design Sessional	--	--	3.0	1.50	1.50
7.	EEE 3107	Measurement and Instrumentation	3.0	3.00	--	--	3.00
8.	EEE 3108	Measurement and Instrumentation Sessional	--	--	3.0	1.50	1.50
9.	Math 3101	Mathematics V	3.0	3.00	--	--	3.00
Total			15.0	15.00	12.0	6.00	21.00

Contact hours: 15.0 (T) + 12.0 (S) = 27.0 hrs./week
 Total credits: 21.00, Preq = Pre-requisite

No. of theory courses : 5
 No. of sessional courses: 4

3rd Year 2nd Semester

Sl.	Course Code	Course Title	Theory (T)		Sessional (S)		Total credits
			Contact hrs/week	Credits	Contact hrs/week	Credits	
1.	EEE 3201	Electronic Properties of Materials	3.0	3.00	--	--	3.00
2.	EEE 3203	Power System I	3.0	3.00	--	--	3.00
3.	EEE 3204	Power System I Sessional	--	--	3.0	1.50	1.50
4.	EEE 3205	Communication Theory (Preq: EEE 2207)	3.0	3.00	--	--	3.00
5.	EEE 3206	Communication Sessional	--	--	3.0	1.50	1.50
6.	EEE 3207	Digital Signal Processing I (Preq: EEE 2207)	3.0	3.00	--	--	3.00
7.	EEE 3208	Digital Signal Processing I Sessional	--	--	3.0	1.50	1.50
8.	Hum 3201	Introduction to Economics	3.0	3.00	--	--	3.00
Total			15.0	15.00	9.0	4.50	19.50

Contact hours: 15.0 (T) + 9.0 (S) = 24.0 hrs./week
 Total credits: 19.50, Preq = Pre-requisite

No. of theory courses : 5
 No. of sessional courses: 3

4th Year 1st Semester

Sl.	Course Code	Course Title	Theory (T)		Sessional (S)		Total credits
			Contact hrs/week	Credits	Contact hrs/week	Credits	
1.	EEE 4000	Project & Thesis	--	--	6.0	3.00	*3.00
2.	EEE 4101	Control System I	3.0	3.00	--	--	3.00
3.	EEE 4102	Control System I Sessional	--	--	3.0	1.50	1.50
4.	EEE 4103	Industrial and Power Electronics (Preq: EEE 2201)	3.0	3.00	--	--	3.00
5.	EEE 4104	Industrial and Power Electronics Sessional	--	--	3.0	1.50	1.50
6.	EEE 4105	Microprocessor and Interfacing (Preq: EEE 3103)	3.0	3.00	--	--	3.00
7.	EEE 4106	Microprocessor and Interfacing Sessional	--	--	3.0	1.50	1.50
8.	EEE 4107	Solid State Devices	3.0	3.00	--	--	3.00
9.	Hum 4101	Ethics and Environmental Protection	3.0	3.00	--	--	3.00
Total			15.0	15.00	15.0	7.50	22.50

Contact hours: 15.0 (T) + 15.0 (S) = 30.0 hrs./week
 Total credits: 22.50, Preq = Pre-requisite

No. of theory courses : 5
 No. of sessional courses: 4

* This credit in addition to 3 credits of 4th year 2nd semester for Project & Thesis, will be assessed at the end of 4th Year 2nd Semester.

4th Year 2nd Semester

Option	Course Code	Course Title	Theory (T)		Sessional (S)		Total credits
			Contact hrs/week	Credits	Contact hrs/week	Credits	
C	EEE 4000	Project & Thesis	--	--	6.0	3.00	3.00
I	EEE 42XX	Select any three theory courses from option I	3.0	3.00	--	--	3.00
	EEE 42XX		3.0	3.00	--	--	3.00
	EEE 42XX		3.0	3.00	--	--	3.00
	EEE 42XX	Select any one sessional course from option I	--	--	3.0	1.50	1.50
II	EEE 42XX	Select any one theory course from option II	3.0	3.00	--	--	3.00
	EEE 42XX	Select any one sessional course from option II	--	--	3.0	1.50	1.50
III	EEE 42XX	Select any one theory course From option III	3.0	3.00	--	--	3.00
Total			15.0	15.0	12.0	6.0	21.00

Contact hours: 15.0 (T) + 12.0 (S) = 27.0 hrs./week
 Total credits: 21.00 C = Compulsory

No. of theory courses : 5
 No. of sessional courses: 3

OPTIONAL COURSES

Option I (Electric Power Group)

Sl.	Course Code	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1.	EEE 4211	Electrical Power Transmission & Distribution	3.0	--	3.00
2.	EEE 4213	Power System Protection	3.0	--	3.00
3.	EEE 4215	Power System II	3.0	--	3.00
4.	EEE 4217	Energy Conversion III	3.0	--	3.00
5.	EEE 4219	Power Plant Engineering	3.0	--	3.00
6.	EEE 4221	High Voltage Engineering	3.0	--	3.00
7.	EEE 4223	Renewable Energy	3.0	--	3.00
8.	EEE 4225	Power System Operation and Control	3.0	--	3.00
9.	EEE 4214	Power System Protection Sessional	--	3.0	1.50
10.	EEE 4222	High Voltage Engineering Sessional	--	3.0	3.00

Option II (Electronics & Computer Group)

Sl.	Course Code	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1.	EEE 4231	Optoelectronics	3.0	--	3.00
2.	EEE 4233	Analog Integrated Circuits	3.0	--	3.00
3.	EEE 4235	Processing and Fabrication Technology	3.0	--	3.00
4.	EEE 4237	VLSI Design	3.0	--	3.00
5.	EEE 4239	Semiconductor Device Theory	3.0	--	3.00
6.	EEE 4241	Computer Networks	3.0	--	3.00
7.	EEE 4243	Multimedia Communications	3.0	--	3.00
8.	EEE 4245	Microprocessor System Design	3.0	--	3.00
9.	EEE 4247	Real Time Computer System	3.0	--	3.00
10.	EEE 4238	VLSI Design Sessional	--	3.0	1.50
11.	EEE 4242	Computer Networks Sessional	--	3.0	1.50

Option III (Communication & Signal Processing Group)

Sl.	Course Code	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1.	EEE 4251	Optical Fiber Communication	3.0	--	3.00
2.	EEE 4253	Mobile Cellular Communication	3.0	--	3.00
3.	EEE 4255	Telecommunication Engineering	3.0	--	3.00
4.	EEE 4257	Digital Communication	3.0	--	3.00
5.	EEE 4259	Microwave Engineering	3.0	--	3.00
6.	EEE 4258	Digital Communication Sessional	--	3.0	1.50