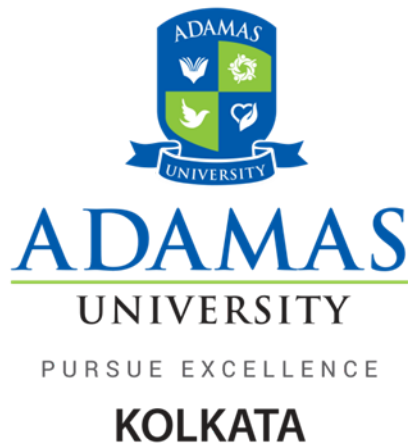




ADAMAS UNIVERSITY

SCHOOL OF ENGINEERING & TECHNOLOGY

**Department of Electronics and Communication
Engineering**

SoET 2.0

(Engineering +)

Course Structure

**B. Tech in Electronics and Communication
Engineering (ECE)**

(2020-21)

ADAMAS UNIVERSITY
SCHOOL OF ENGINEERING & TECHNOLOGY
DEPT. OF ECE
FIRST YEAR

SEMESTER I								
S. No	Type	Course Code	Course Title	L	T	P	Contact Hrs/wk	Credits
1	Theory	MTH11501	Engineering Mathematics-I	3	1	0	4	4
2	Theory	PHY11201	Applied Science	3	0	0	3	3
3	Theory	CSE11001 / GEE11001	Introduction to Programming / Electrical and Electronics Technology	3	0	0	3	3
4	Theory	ENG11053	HSSM –I (English Communication- I)	3	0	0	3	3
5	Theory	BIT11003	Life Sciences	3	0	0	3	3
6	Practical	PHY12202	Applied Science Lab	0	0	3	3	2
7	Practical	CSE12002 / GEE12002	Programming Lab / Electrical and Electronics Technology Lab	0	0	3	3	2
8	Practical	CEE12001/ MEE12001	Engineering Drawing and CAD/Engineering Workshop	0	0	3	3	2
9	Practical	ENG11043	Communication and Collaboration Skill -I	0	0	2	2	1
10	Project	GEE14003	Capstone Project-I	0	0	2	2	1
11	Theory	DGS11001	Design Thinking	2	0	0	2	2
Total				17	1	13	31	26

SEMESTER II									
S. No	Type	Course Code	Course Title	L	T	P	Contact Hrs/wk	Credits	
1.	Theory	MTH11502	Engineering Mathematics– II	3	1	0	4	4	
2.	Theory	GEE11001 / CSE11001	Electrical and Electronics Technology/ Introduction to Programming	3	0	0	3	3	
3.	Theory	MEE11002	Engineering Mechanics	3	1	0	4	4	
4.	Theory	EVS11107	Environmental Science	3	0	0	3	3	
5.	Practical	GEE12002/ CSE12002	Electrical and Electronics Technology Lab/ Programming Lab	0	0	3	3	2	
6.	Practical	MEE12001/ CEE12001	Engineering Workshop/Engineering Drawing and CAD	0	0	3	3	2	
7.	Practical	ENG12044	Communication and Collaboration Skill -II	0	0	2	2	1	
8.	Project	GEE14004	Capstone Project-II	0	0	2	2	1	
9.	Project	IDP14001	Interdisciplinary Project	0	0	5	5	3	
	Total			12	2	15	29	23	

Total Credits (First Year): 49

SECOND YEAR

Semester-III								
S. No	Type	Course Code	Subject Name	L	T	P	Contact Hrs/week	Credits
1.	Theory	MTH11526	Engineering Mathematics– III (Transform Calculus & Special functions)	3	0	0	3	3
2.	Theory	ECO11505	HSSM –IV (Economics for Engineers)	3	0	0	3	3
3.	Theory	ECE11001	Prof. Core- I (Electronic Devices)	3	0	0	3	3
4.	Theory	ECE11002	Prof. Core- II (Analog Electronic Circuits)	3	0	0	3	3
5.	Theory	ECE11003	Prof. Core- III (Signals and Networks)	3	0	0	3	3
6.	Theory	ECE11004	Choice of Dept. (Electromagnetic Fields)	3	0	0	3	3
7.	Practical	ECE12005	Prof. Core-II Lab (Analog Electronic Circuits Lab)	0	0	3	3	2
8.	Practical	ECE12006	Prof. Core-III Lab (Signals and Networks Lab)	0	0	3	3	2
9.	Project	GEE14005	Capstone Project-III	0	0	2	2	1
10.	Internship	SOC14100	Community Service [#]	--	-	-	--	1
11.	Theory	EIC11001	Venture Ideation	2	0	0	2	2
Total				20	0	0	28	26

CS Activity will be taken up during the summer break after 2nd semester, and will be evaluated in the 3rd semester.

Semester-IV								
S. No	Type	Course Code	Subject Name	L	T	P	Contact Hrs/week	Credits
1.	Theory	MTH11527	Engineering Mathematics– IV (Probability, Statistics and Numerical Methods)	3	0	0	3	3
2.	Theory	ECE11007	Prof. Core- IV (Digital Electronics)	3	0	0	3	3
3.	Theory	ECE11008	Prof. Core- V (Communication Systems-I)	3	0	0	3	3
4.	Theory	ECE11009	Prof. Core- VI (Digital Signal Processing)	3	0	0	3	3
5.	Theory	ECE11010	Prof. Core- VII (Microprocessors and Microcontrollers)	3	0	0	3	3
6.	Theory	PSG11021	Human Values and Professional Ethics	2	0	0	2	2
7.	Practical	ECE12011	Prof. Core- IV Lab (Digital Electronics Lab)	0	0	3	3	2
8.	Practical	ECE12012	Prof. Core- VI Lab (Digital Signal Processing Lab)	0	0	3	3	2
9.	Practical	ECE12013	Prof. Core- VII Lab (Microprocessors and microcontrollers Lab)	0	0	3	3	2

10.	Practical	GEE14006	Capstone Project -IV	0	0	2	2	1
Total				1	0	1	28	24
				7		1		

Total Credits (Second Year): 50

THIRD YEAR

Semester-V								
S. No	Type	Course Code	Subject Name	L	T	P	Contact Hrs/week	Credits
1.	Theory	ECE11014	Prof. Core- VIII (Communication Systems-II)	3	1	0	4	4
2.	Theory	ECE11015	Prof. Core- IX (VLSI Systems Design)	3	1	0	4	4
3.	Theory	ECE11024	Prof. Core- X (Embedded Systems Design)	3	0	0	3	3
4.	Theory	ECE11017/ ECE11018/ ECE11019	Prof. Elective- I (Data Communication and Computer Networks / Optical Fiber Communication/ Biomedical Electronics)	3	0	0	3	3
5.	Practical	ECE12020	Prof. Core- VIII Lab (Communication Systems Lab)	0	0	3	3	2
6.	Practical	ECE12021	Prof. Core- IX Lab (VLSI Systems Design Lab)	0	0	3	3	2
7.	Practical	ECE12029	Prof. Core- X Lab (Embedded System Design Lab)	0	0	3	3	2
8.	Project	GEE14007	Capstone Project -V	0	0	2	2	1
Total				12	2	1	25	21

CSR Activity will be taken up during the summer break after 2th semester and will be evaluated in the 3rd semester.

Semester-VI								
S. No	Type	Course Code	Subject Name	L	T	P	Contact Hrs/week	Credits
1.	Theory	ECE11023	Prof. Core- XI (Control Systems)	3	0	0	3	3
2.	Theory	ECE11024	Prof. Core- XII (Microwave Engineering)	3	0	0	3	3
3.	Theory	ECE11025/ ECE11026/ ECE11027	Prof. Elective- II (Antenna & Wave Propagation / Power Electronics / Adaptive Signal Processing)	3	0	0	3	3
4.	Theory		Open Elective- I	2	0	0	2	2
5.	Practical	ECE12028	Prof. Core- XI Lab (Control Systems Lab)	0	0	3	3	2
6.	Practical	ECE12029	Prof. Core- XII Lab (Microwave Engineering Lab)	0	0	3	3	2
7.	Practical	ECE12030/ ECE12031/ ECE12032	Prof. Elective- II Lab (Antenna & Wave Propagation Lab/ Power Electronics Lab/ Adaptive Signal Processing Lab)	0	0	3	3	2
8.	Seminar	ECE15033	Technical Seminar	0	0	2	2	1
Total				11	0	1	22	18

Total Credits (Third Year): 39

FOURTH YEAR

Semester-VII								
S. No	Type	Course Code	Subject Name	L	T	P	Contact Hrs/week	Credits
1.	Theory	MGT11402	HSSM –V (Industrial Management)	3	0	0	3	3
2.	Theory	ECE11034/ ECE11035/ ECE11036	Prof. Elective- III (Wireless Communication/ Image & Video Processing / Low Power VLSI Design)	3	0	0	3	3
3.	Theory		Open Elective- II	3	0	0	3	3
4.	Theory		Open Elective- III	3	0	0	3	3
5.	Practical	ECE12037/ ECE12038/ ECE12039	Prof. Elective- III Lab (Wireless Communication Lab/ Image & Video Processing Lab/ Low Power VLSI Design Lab)	0	0	3	3	2
6.	Internship /Training	ECE14040	#Summer Internship	--	--	--	--	2
7.	Project	ECE14041	Minor Project	0	0	6	6	3
Total				12	0	9	21	19

Summer Internship for 30 days will be taken at the end of 6th semester, and will be evaluated in the 7th semester.

Semester-VIII								
S. No	Type	Course Code	Subject Name	L	T	P	Contact Hrs/week	Credits
1.	Project	ECE14042/ ECE14043/ ECE14044	Industry Work Experience / SIRE* / Major Project	0	0	6	6	4
2.	Viva	ECE15045	Comprehensive Viva Voce	-----			-----	2
Total				0	0	6	6	6

*SIRE: Scientific Investigation & Research Experience

Total Credits (Fourth Year): 25

Total Credits (Over four years): 49+50+39+25 = 163