University of Engineering & Management, Jaipur

Syllabus to be implemented from the Academic Year 2014-15

Electronics and Communication Engineering

First Year First Semester

Sl. No.	Course Code	Theory	L	T	P	Total	Credit Points
A. THEORY			Contact Hours/Week				
1	HU101	English Language & Technical Communication-I	2	0	0	2	2
2	PH101	Physics-I	3	1	0	4	3
3	M101	Mathematics-I	3	1	0	4	3
4	ES101	Basic Electrical & Electronic Engineering-I	3	0	0	3	4
5	ME101	Engineering Mechanics	3	0	0	3	3
6	CS101	Basic Computation & Principles of Computer Programming-I	3	0	0	3	3
		Total of Theory				19	18
B. PRACTICAL							
7	PH191	Physics-I Lab	0	0	3	3	2
8	ES191	Basic Electrical & Electronic Engineering-I Lab	0	0	3	3	2
9	ME191	Engineering Drawing & Computer Graphics Lab	1	0	3	4	3
10	CS191	Basic Computation & Principles of Computer Programming-I Lab	0	0	3	3	2
		Total of Practical				13	9
C. SESSIONAL							
11	HU181	Language Laboratory-I	0	0	2	2	2
12	XC181	Extra Curricular Activities(NSS/NCC/NSO etc)	0	0	2	2	1
		Total of Sessional				4	3
		Total of Semester				36	30

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Electronics and Communication Engineering
First Year Second Semester

Sl. No.	Course Code	Theory	L	T	P	Total	Credit Points
A. THEORY			Contact Hours/Week				
1	CS201	Principles of Computer Programming-(C++)	3	1	0	4	4
2	PH201	Physics-II	3	1	0	4	3
3	M201	Mathematics-II	3	1	0	4	3
4	ES201	Basic Electrical & Electronic Engineering-II	3	1	0	4	4
5	ME201	Engineering Thermodynamics & Fluid Mechanics	3	1	0	4	3
6	HU201	English Language & Technical Communication-II	2	0	0	2	2
		Total of Theory				22	19
B. PRACTICAL							
7	CS291	Principles of Computer Programming-II Lab	0	0	3	3	2
8	PH291	Physics-II Lab	0	0	3	3	2
9	ES291	Basic Electrical & Electronic Engineering-II Lab	0	0	3	3	2
10	ME291	Workshop Practice Lab	1	0	3	4	3
		Total of Practical				13	9
C. SESSIONAL							
11	HU281	Language Laboratory-II	0	0	2	2	2
		Total of Sessional				2	2
		Total of Semester				37	30

Sl.No.	Course Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
A. THEORY							
1	HU301	Values & Ethics in Profession	3	1	0	4	3
2	M301	Mathematics-III	3	1	0	4	4
3	M(CS)301	Numerical Methods	2	1	0	3	3
4	EC301	Circuit Theory & Networks	3	1	0	4	4
5	EC302	Solid State Devices	3	0	0	3	3
6	EC303	Analog Electronic Circuits	3	1	0	4	4
		Total of Theory				22	21
B. PRACTICAL							
7	EC391	Circuit Theory & Networks Lab	0	0	3	3	2
8	EC392	Solid State Devices Lab	0	0	3	3	2
9	EC393	Analog Electronic Circuits Lab	0	0	3	3	2
10	M(CS)391	Numerical Methods Lab	0	0	3	3	2
		Total of Practical				12	8
		Total of Semester				34	29

Second Year Fourth Semester

Sl.No.	Course Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
A. THEORY							
1	CS(EC)401	Data Structure & Algorithm	3	1	0	4	3
2	CH401	Basic Environmental Engineering	2	0	1	3	2
3	EC401	EM Theory & Transmission Lines	3	1	0	4	4
4	EC402	Digital Electronics & Integrated Circuits	3	1	0	4	4
5	EC403	Signals & Systems	3	0	0	3	3
		Total of Theory				18	16
B. PRACTICAL							
6	HU481	Technical Report Writing & Language Lab	0	0	3	3	2
7	CS(EC)491	Data Structure & Algorithm Lab	0	0	3	3	2
8	EC491	EM Theory & Transmission Lines Lab	0	0	3	3	2
9	EC492	Digital Electronics & Integrated Circuits Lab	0	0	3	3	2
10	EC493	Signals & Systems Lab	0	0	3	3	2
		Total of Practical				15	10
		Total of Semester				33	26

Sl.No	Course Code	Theory	L	T	P	Total	Credit Points
A. THEORY							
1	HU501	Economics for Engineers	3	0	0	3	3
2	EC501	Analog Communication	3	1	0	4	4
3	EC502	Microprocessors & Microcontrollers	3	1	0	4	4
4	EC503	Control System	3	0	0	3	3
5	F. E.-EC504A EC504B	Computer Architecture Advanced OOPs Using C++	3	1	0	4	4
		Total of Theory				18	18
B. PRACTICAL							
6	EC591	Analog Communication Lab	0	0	3	3	2
7	EC592	Microprocessors & Microcontrollers Lab	0	0	3	3	2
8	EC593	Control System Lab	0	0	3	3	2
9	F.E. EC594A EC594B	Computer Architecture Lab Advanced OOPs Using C++ Lab	0	0	3	3	2
		Total of Practical				12	8
		Total of Semester				30	26

Laboratories should have both physical experiments and simulation. Only virtual laboratory is not accepted.

Sl.No.	Course Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
A. THEORY							
1	HU601	Principles of Management	2	0	0	2	2
2	EC601	Digital Communications	3	0	0	3	3
3	EC602	Digital Signal Processing	3	0	0	3	3
4	EC603	Telecommunication System	3	0	0	3	3
5	P.E EC604A EC604B EC604C EC604D	A. Antenna Theory & Propagation B. Optical Communication & Network C. Computer Networks D. FPGA & Reconfigurable Computing	3	0	0	3	3
6	F.E EC605A EC605B EC605C	OOPs Using Java Programming Language Electronic Measurement & Instrumentation	3	0	0	3	3
		Total of Theory				17	17
B. PRACTICAL							
7	EC691	Digital Communications Lab	0	0	3	3	2
8	EC692	Digital Signal Processing Lab	0	0	3	3	2
9	F.E. EC695A EC695B EC695C	OOPs Using Java Lab Programming Language Lab Electronic Measurement & Instrumentation Lab	0	0	3	3	2
10	P.E EC694A EC694B EC694C EC694D	A. Antenna Theory & Propagation Lab B. Optical Communication & Network Lab C. Computer Networks Lab D. FPGA & Reconfigurable Lab	0	0	3	3	2
		Total of Practical				12	8
		Total of Semester				29	25

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Electronics and Communication Engineering
Fourth Year Seventh Semester

Sl. No.	Course Code	Theory	L	T	P	Total	Credit Points
A. THEORY							
1	EC701	Wireless Communication & N/Ws	3	0	0	3	3
2	EC702	Microelectronics & VLSI Design	3	0	0	3	3
3	P.E EC703	A. RF & Microwave Engineering B. Information Theory & Coding	3	0	0	3	3
4	P.E EC704	A. Radar Engineering B. Embedded Systems C. Biomedical Instrumentation	3	0	0	3	3
5	F. E. EC705	A. Artificial Intelligence B. Robotics C. Data Base Management System D. Power Electronics	3	0	0	3	3
		Total of Theory				15	15
B. PRACTICAL							
6	EC792	VLSI Design Lab	0	0	3	3	2
7	F.E EC795	A. Artificial Intelligence Lab B. Robotics Lab C. Data Base Management System Lab D. Power Electronics Lab	0	0	3	3	2
8	EC781	Seminar on Industrial Training	4 weeks duration during 6th-7th Semester break				2
9	HU781	Group Discussion					2
10	EC781	Project Part -I			6	6	4
		Total of Practical				12	12
		Total of Semester				27	27

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Electronics and Communication Engineering
Fourth Year Eighth Semester

Sl. No.	Course Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
A.		**THEORY**					
1	HU801	Organizational Behavior/Project Management	3	0	0	3	2
2	P.E EC801	A. Smart Antenna B. Material Science & Engineering C. Satellite Communication & Remote Sensing	3	0	0	3	3
3	F.E EC802	A. Neural Networks & Applications B. Digital Image Processing C. Renewable Energy	3	0	0	3	3
		Total of Theory				9	8
B.		**PRACTICAL**					
4	EC892	Free Elective Lab	0	0	3	3	3
5	EC881	Grand Viva	0	0	0	3	4
6	EC882	Project Part-2			12	12	6
		Total of Practical				18	13
		Total of Semester				26	21

P.E: Professional Elective, F.E: Free Elective