

IIIT RK Valley
Rajiv Gandhi University of Knowledge Technologies-AP
Electronics and Communication Engineering
Course Structure from 2015 Batch Onwards

EI Semester-I

Course Code	Name of the Course	L	T&PS	P	Credits
MA1101	Engineering Mathematics-I	2	2	0	4
EC1101	Electronic Devices and Circuits	2	2	0	4
CS6101	Programming and Data Structures	2	2	0	4
EE1101	Electrical Technology	2	2	0	4
EN502	Advanced English & Communication Skills Lab-I	0	0	2	2
EC1701	Electronic Devices and Circuits Lab	0	0	2	2
CS6701	Programming and Data Structures Lab	0	0	2	2
EE1701	Electrical Technology Lab	0	0	2	2
Total Credits					24

EI Semester-II

Course Code	Name of the Course	L	T&PS	P	Credits
EC1201	Analog Electronics-1	2	2	0	4
EC1202	Signals and Systems	2	2	0	4
EC1203	Digital Electronic Circuits	2	2	0	4
EC1204	Network Theory	2	2	0	4
MA2205	Engineering Mathematics-II	2	2	0	4
EN602	Advanced English & Communication Skills Lab-II	0	0	2	2
EC1803	Digital Electronic Circuits lab	0	0	2	2
EC1801	Analog Electronics-1 Lab	0	0	2	2
Total Credits					26

E1 Summer Semester

Course Code	Name of the Course	L	T&PS	P	Credits
EC1301	Probability and Stochastic Processes			0	4
EC1902	Network Theory Lab				2
EC1901	Matlab	0	0	4	2
Total Credits					8

E2 Summer Semester-I

Course Code	Name of the Course	L	T&PS	P	Credits
EC2101	Electromagnetic Engineering	2	2	0	4
EC2102	Analog Communications	2	2	0	4
EC2103	VLSI	2	2	0	4
EC2104	Analog Electronics-2	2	2	0	4
EN702	Advanced English & Communication Skills Lab-III	0	0	2	2
EC2702	Analog Communications Lab	0	0	2	2
EC2704	Analog Electronics-2 Lab	0	0	2	2
EC2703	VLSI Lab	0	0	2	2
Total Credits					24

E2 Summer Semester-II					
Course Code	Name of the Course	L	T&PS	P	Credits
EC2201	Digital Communications	2	2	0	4
EC2202	Micro Processors and Micro Controllers	2	2	0	4
EC2203	Linear Control Systems	2	2	0	4
EC2204	Digital Signal Processing	2	2	0	4
EN802	Advanced English & Communication Skills Lab-IV	0	0	2	2
EC2802	Micro Processors and Micro Controllers lab	0	0	2	2
EC2801	Digital Communications Lab	0	0	2	2
EC2804	Digital Signal Processing Lab	0	0	2	2
Total Credits					24
E2 Summer Sem					
Course Code	Name of the Course	L	T&PS	P	Credits
CS2101	Object Oriented programming	4	4	0	4
EC2301	RF and Microwave Engineering				4
EC2901	RF and Microwave Engineering Lab	0	0	4	2
Total Credits					10
E3 Semester-I					
Course Code	Name of the Course	L	T&PS	P	Credits
	Elective-I	2	2	0	4
	Elective-II	2	2	0	4
	Elective-III	2	2	0	4
	Free Elective-I	2	2	0	4
EC3700	Mini Project	2	2	0	4
Total Credits					20
E3 Semester-II					
Course Code	Name of the Course	L	T&PS	P	Credits
	Elective-IV	2	2	0	4
	Elective-V	2	2	0	4
	Elective-VI	2	2	0	4
BMXXXX	Free Elective-II	2	2	0	4
EC3800	Mini Project	2	2	0	4
Total Credits					20
E3 Summer Sem					
Course Code	Name of the Course	L	T&PS	P	Credits
EC3900	Summer Internship				4
Total Credits					4
E4 Semester-I					
Course Code	Name of the Course	L	T&PS	P	Credits
	Elective-VII	2	2	0	4
	Elective-VIII	2	2	0	4
	Free Elective-III	2	2	0	4
EC4700	Project				6
Total Credits					18

E4 Semester-II					
Course Code	Name of the Course	L	T&PS	P	Credits
HS3201	Environmental Science	2	2	0	4
	Elective-IX	2	2	0	4
	Free Elective-IV	2	2	0	4
EC4800	Project				6
EC4900	Community service				2
Total Credits					20
	Grand Total Credits				198
List of Electives in E3&E4					
Course Code	Name of the Course	L	T&PS	P	Credits
E3 SEM1					
ELECTIVE 1					
EC3501	Digital Image Processing	2	2	0	4
EC3502	TV Engineering	2	2	0	4
EC3503	Telecommunication Switching and Networks	2	2	0	4
ELECTIVE 2					
EC3504	An Introduction to Electronics Systems Packaging	2	2	0	4
EC3505	Micro Electronics and Mechanical Systems	2	2	0	4
EC3506	Electrical & Eletronic Measuring Instruments	2	2	0	4
ELECTIVE 3					
EC3507	Digital signal Processors and architectures	2	2	0	4
EC3508	Satellite communiction systems	2	2	0	4
EC3509	Biomedical Instrumentation	2	2	0	4
E3 SEM2					
ELECTIVE 1					
EC3601	Microwave and RF Integrated Circuits	2	2	0	4
EC3602	Radar Communion	2	2	0	4
EC3603	Mobile communications	2	2	0	4
ELECTIVE 2					
EC3604	VLSI Design Verification and testing	2	2	0	4
EC3605	VLSI Design for DSP	2	2	0	4
EC3606	Low power VLSI circuits and Systems	2	2	0	4
ELECTIVE 3					
EC3607	Pattern recognition and Machine intelligence	2	2	0	4
EC3608	Multimedia Technology	2	2	0	4
EC3609	Embedded systems	2	2	0	4
E4 SEM1					
ELECTIVE 1					
EC4501	Optical Communications	2	2	0	4
EC4502	Digital VLSI Design	2	2	0	4
EC4503	Digital IC Design	2	2	0	4

EC4504	Artificial Neural networks	2	2	0	4
ELECTIVE 2					
EC4505	Adaptive signal Processing	2	2	0	4
EC4506	Biomedical signal processing	2	2	0	4
EC4507	Speech Processing	2	2	0	4
E4 SEM2					
ELECTIVE 1					
EC4601	Antenna engineering	2	2	0	4
EC4602	Random Processes and Time series analysis	2	2	0	4
EC4603	Statistical signal processing	2	2	0	4
ELECTIVE 2					
EC4604	Spread Spectrum Communications	2	2	0	4
EC4605	Information Theory and Coding	2	2	0	4
EC4606	Computer Networks	2	2	0	4