1.1.2 Percentage of programs where syllabus revision was carried out during the last five years (20)

Programme Code	Programme name	Name of the Department	Year of Introduction	If revision has been carried out in the syllabus during last 5 years	Year of revision	Percentage of Syllabus content added or replaced	Link of the relevant document
EE	B.Tech in Electrical & ELectronics Engineering	Electrical & Electronics Engineering	1994	Yes	2016	13.1	http://www.rvrjcce.ac.in/Electrical/r16eeesyllabus.pdf
PSE	M.Tech in Power Systems Engineering	Electrical & Electronics Engineering	2004	Yes	2017	25.75	http://www.rvrjcce.ac.in/Electrical/mtechpseee201718.pdf

Dr. K. CHANDRA SEKHAR
Professor & HOD, EEE Dept.
R.V.R & J.C. College of Engg.
Chowdavaram, GUNTUR-522 019.

18-04-2019

Following are the contents added/ modified in R16 curriculum revised in 2016.

Subject code in R16	Subject title	% of syllabus changed	Topics added
EE/EC/ME 101	Differential equations and statistics	20	Statistics topic is added as fifth unit
EE/CE/ChE/ CS/EC/ IT/ ME 102	Engineering Physics	10	Schrodinger equation and application
EE/CE/ME 104	English for communication	15	Lexis: (a) i. Synonyms & Antonyms ii. Words often confused. (b) i. One Word Substitutes ii. Analogies
EE 153	Workshop Practice Lab	3	Nano materials characterization techniques
EE/EC/CS/IT 108	Electronic and Electrical Engineering Materials	5	NDT
EE/EC/CS/IT /CE/ME 109	Chemistry of Engineering Materials	10	Refractories, Lubricants Liquid crystals, Explosives
EE 112	Introduction to Electrical Engineering	100	New subject
EE/EC 201	Transformation Techniques	20	Synchronous Sequential Networks: Structure and Operation of Clocked Synchronous Sequential Networks, Analysis of Synchronous Sequential Networks, Modelling Clocked Synchronous Sequential Network Behaviour. Algorithmic State Machines: The Algorithmic State Machine, ASM Charts, Examples of Synchronous Sequential Network, Design using ASM Charts, State Assignments, ASM tables.
EE/EC 202	Electronic Devices & Circuits	5	JFET and MOSFET: Non ideal effects, frequency limitations
EE/EC 203	Digital Logic Design	20	Unit V Synchronous sequential networks and Algorithmic state Machines is added.

Subject code in R16	Subject title	% of syllabus changed	Topics added
EE/EC 207	Complex and Numerical Analysis	20	Milne-Thomson method, Numerical Solutions of Partial Differential Equation : Classification of Partial differential equations of the second order - Laplace-s equation. Poisson's equation.
EE/EC 208	Electronic Circuit Analysis	20	IC biasing and active load
EE 211	Data Structures using C++	60	C++ first three units are added
EE 255	Data Structures Lab	100	complete experiments list is changed
EE/EC 301	Pulse and Digital Circuits	20	In Unit V, Digital Circuits : Fundamental concepts of digital circuits, cmos logic family, nmos logic family, TTL logic family, emitter coupled logic family
EE/EC 302	Microprocessors & Microcontrollers	5	Interface microprocessor to key boards
EE 305*	Generation of Electrical Power	40	6 new experiments are added
EE 352	Electronic Circuits Lab	40	6 new experiments are added in list.
EE 307	Linear ICs and Applications	5	APPLICATION ICs: IC Voltage Regulators- LM317, 723 Voltage Regulators, Isolation amplifiers, Opto coupler, Opto electronic ICs
EE 309	Power Electronics	8	**AC Voltage Controllers:** Single phase AC voltage controllers – two SCR's in anti parallel – With R and RL loads. Derivation of RMS load voltage, current and power factor.
EE 354	Electrical Measurements & Instrumentation Lab	12	Determination of transformer ration and phase angle error using current transformer or potential transformer; Measurement of R, L, C using digital LCR meter.
EE 355	Control systems Lab	6	Programmable Logic Controller
EE 356	Electrical Workshop practice Lab	5	New lab and few experiments are new from old curriculum.
EE 403	MOOCS	100	New subject
EE 451	Mini project / Term Paper	100	mini project is made mandatory

Subject code in R16	Subject title	% of syllabus changed	Topics added
EE 452	Power Electronics Lab	25	4 new experiments are added
EE 453	Power Systems Lab	5	1 new experiment is added
EE 408	Power System Operation & Control	20	Distribution automation
EE 409*	Elective-V	100	New Elective
EE 410*	Elective-VI	100	New Elective
311A	High voltage Engineering	20	Unit I
312B	ANN & Fuzzy systems	20	Unit V - Applications
312C	Renewable energy Resources	10	Unit I - Energy storage systems
EE311D	Power system deregulation		New elective
EE312D	Organizational Behaviour		New elective
EE406A	Industrial drives	10	Unit V - Conservation in electric drives
EE406B	Power plant instrumentation	20	Unit V - Turbine monitoring control
EE406D	Energy conservation & audit	100	Entire syllabus is revised
	Average % of Syllabus content added or replaced	13.1%	Total number of subjects including labs: 72

Dr. K. Chandra Sekhar
Head, Department of Electrical & Electronics Engg.
CHAIRMAN – BOS in EEE

R.V.R. & J. C. COLLEGE OF ENGINEERING (Autonomous)

Chandramoulipuram, Chowdavaram, Guntur – 522019
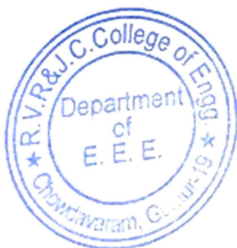### DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

18-04-2019

Following are the contents added/ modified in R18 curriculum revised in 2018.

Subject code in R18	Subject title	% of syllabus changed	Topics added
EE/EC/ME 112	Engineering Chemistry	20	Molecular structure, Intermolecular forces; Organic reactions
EE/CE/CH/ ME 113	English for communication skills	15	Vocabulary Building
EE/EC/ME 151	Chemistry Lab	50	Determination of surface tension, Determination of Viscosity, Determination of Saponification / acid value of oil, Preparation of p-bromo acetanilide. Preparation of Phenol Formaldehyde resin. Determination of partition co-efficient of I2 in water. Determination of Rf value using TLC. Verification of Freundlich isotherm using adsorption of acetic acid on activated charcoal
EE/CE/ME 153	Workshop Practice Lab	60	Manufacturing Methods, CNC machining and Additive manufacturing, Fitting operations and power tools , 4. Basic principles involved in electrical circuits and electronic PCB circuits, Plastic moulding, glass cutting, experiments in machine shop, Fitting Shop,
MC001	Constitution of India	100	New Mandatory course
MC002	Environmental Science	80	Course is modified as activity based course
MC003	Essence of Indian traditional knowledge	100	New Mandatory course

Subject code in R18	Subject title	% of syllabus changed	Topics added
EE/CE/CH/CS/ EC/IT/ME 123	Programming for Problem Solving	10	Idea of Algorithm
EE124	Electrical Circuits		
EE161	Physics Lab	30	To determine the energy band gap of a given semiconductor, 12) To study the laser beam characteristics like wavelength using diffraction grating aperture divergence. 13) To determine the NA of a given optical fiber and hence to find the acceptance angle. 14) To find the dispersive power and resolving power of a grating. 15) To determine the magnetic field in Helmoltz coil. 16) To determine the refractive index of the material of a prism. 17) To determine theFour probe method apparatus for measurements of resistivity and conductivity.
EE164	Electrical Circuits Lab	50	Familiarisation of Electrical Installations and Electrical Testing Equipment, Basic safety precautions, 10. Series resonance characteristics. Parallel resonance characteristics, Study of RL,RC, RLC series and RLC parallel circuits
EEV 01	English competency development program	100	New Value added course
EE215	Basic Civil & Mechanical Engineering	70	New subject title where Basic civil engineering and Refrigiration and airconditioning is added in mechanical engineering part
EE253	Basic Civil & Mechanical Engineering Lab	70	new lab title where civil engineering experiments are added. In mechanical part Study of refrigeration and air conditioning tutors; Study of boilers and mountings are added

Subject code in R18	Subject title	% of syllabus changed	Topics added
			as new experiments
EEV02	AI Tools, Techniques and Applications	100	New subect
MC004	Design thinking & product innovation	100	New subject
EE221	Mathematics – III	100	New subject exclusively for Probability & Statistics
EE222	Life sciences for Engineers	100	New subject offered according to AICTE and APSCHE prescribed curriculum
MC004	Design thinking & product innovation	100	New subject
EE316	Open Elective-2	100	New open elective
EE362	Electronics Design Laboratory	100	New lab
EEV04	Professional English	100	VA course to improve professional skills
EE415	HS Elective - 2	100	Additional HS course
EE416	Open Elective - 3	100	New open elective
EE421	Professional Elective – 5 (MOOCS)	100	Additional Professional elective
EE422	Open Elective – 4 (MOOCS)	100	New open elective
	Average % of Syllabus content added or replaced	75.57%	Total number of subjects including labs: 26

Dr. K. Chandra Sekhar
Head, Department of Electrical & Electronics Engg.
CHAIRMAN – BOS in EEE

Dr. K. CHANDRA SEKHAR
Professor & HOD, EEE Dept.
R.V.R & J.C. College of Engg.
Chowdavaram, GUNTUR-522 019.