

Department of Electronics & Communication Engineering
R.V. College of Engineering, Bangalore-560 059
(An Autonomous Institution Affiliated to VTU, Belgaum)

WITH EFFECT FROM 2012-13 BATCH

PHYSICS CYCLE FIRST SEMESTER (COMMON TO ALL PROGRAMS OF ENGINEERING)								
Sl. No	Course Code	Course	BoS	CREDIT ALLOCATION				Total Credits
				Theory	Practical	Tutorial	Self study	
1	12MA11	Engineering Mathematics-I	Science	3	0	1	1	5
2	12PH12	Engineering Physics (Theory & Practice)	Science	3	1	0	1	5
3	12CV13	Basics of civil Engineering	CV	3	0	1	1	5
4	12ME14	Computer Aided Engineering Drawing	ME	0	2	1	0	3
5	12EE15	Basics of Electrical Engineering	EE	3	0	1	1	5
6	12HSK16*	Kannada*	HSS					
				12	03	04	04	23
		No. of Hrs.		12+2*	06	08	16	42

*Mandatory Audit course 2 hours per week

CHEMISTRY CYCLE FIRST SEMESTER (COMMON TO ALL PROGRAMS OF ENGINEERING)								
Sl.No	Course Code	Course	BoS	CREDIT ALLOCATION				Total Credits
				Theory	Practical	Tutorial	Self study	
1	12MA11	Engineering Mathematics-II	Science	3	0	1	1	5
2	12CH12	Engineering Chemistry (Theory & Practice)	Science	3	1	1	0	5
3	12CS13	Programming in C (Theory & Practice)	CS	3	1	0	1	5
4	12EC14	Basics of Electronics Engineering	ECE	3	0	1	1	5
5	12ME15	Basics of Mechanical Engineering (Theory & Practice)	ME	3	1	0	1	5
6	12HSE16*	English*	HSS					
				15	03	03	04	25
		No. of Hrs.		15+2*	06	06	16	43

*Mandatory Audit Course 2 hours per week

PHYSICS CYCLE		SECOND SEMESTER (COMMON TO ALL PROGRAMS OF ENGINEERING)						
Sl. No	Course Code	Course	BoS	CREDIT ALLOCATION				Total Credits
				Theory	Practical	Tutorial	Self study	
1	12MA21	Engineering Mathematics-I	Science	3	0	1	1	5
2	12PH22	Engineering Physics (Theory& Practice)	Science	3	1	0	1	5
3	12CV23	Elements of civil Engineering	CV	3	0	1	1	5
4	12ME24	Computer Aided Engineering Drawing	ME	0	2	1	0	3
5	12EE25	Elements of Electrical Engineering	EE	3	0	1	1	5
6	12HSK26*	Kannada*	HSS					
				12	03	04	04	23
		No. of Hrs.		12+2*	06	08	16	42

*Mandatory Audit Course 2 hours per week

CHEMISTRY CYCLE		SECOND SEMESTER (COMMON TO ALL PROGRAMS OF ENGINEERING)						
Sl.No	Course Code	Course	BoS	CREDIT ALLOCATION				Total Credits
				Theory	Practical	Tutorial	Self study	
1	12MA21	Engineering Mathematics-II	Science	3	0	1	1	5
2	12CH22	Engineering Chemistry (Theory & Practice)	Science	3	1	1	0	5
3	12CS23	Programming in C (Theory & Practice)	CS	3	1	0	1	5
4	12EC24	Elements of Electronic Engineering	ECE	3	0	1	1	5
5	12ME25	Basics of Mechanical Engineering (Theory & Practice)	ME	3	1	0	1	5
6	12HSE26*	English	HSS					
				15	03	03	04	25
		No. of Hrs.		15+2*	06	06	16	43

*Mandatory Audit Course 2 hours per week

1Hr. Theory= 1 credit

2Hrs. Practical=1credit

2Hrs. Tutorial=1 credit

4 Hrs. Self study = 1 credit (The teacher has to keep track; questions to be set from SS in SEE)

THIRD SEMESTER								
Sl. No.	Course Code	Course	BoS	Credit Allocation				Total Credits
				Theory	Practical	Tutorial	Self Study	
1.	12MA31	Applied Mathematics-III	Science	3	0	1	0	4
2.	12EB32	Environmental Science & Biology for Engineers	Science	3	0	0	1	4
3.	12EC33	Analog Microelectronic Circuits (Theory & Practice)	ECE	3	1	0	1	5
4.	12EC34	Analysis and Design of Digital Circuits (Theory & Practice)	ECE	3	1	0	1	5
5.	12EC/TE35	Network Analysis & Control Theory	ECE/TE	3	0	1	0	4
6.	12TE/EC/EE36	Signals and Systems	TE/ECE/EE	3	0	1	1	5
7.	12DMA37	Bridge Course Mathematics-I**						
								27
		No. of Hrs.		18	04	06	16	44

**Mandatory Audit Course for lateral entry (Diploma Students)

FOURTH SEMESTER								
Sl. No.	Course Code	Course	BoS	Credit Allocation				Total Credits
				Theory	Practical	Tutorial	Self Study	
1.	12MA41	Applied Mathematics IV	Science	3	0	1	0	4
2.	12EM42	Engineering Materials	ME	3	0	0	0	3
3.	12EC/EE/TE43	Microprocessors & Micro Controller (Theory & Practice)	ECE	3	1	0	1	5
4.	12EE/EC/TE44	Fields and Waves	EEE	3	0	1	1	5
5.	12TE/EC/EE45	Digital Signal Processing	TE	3	0	1	1	5
6.	12EC46	Digital System Design using HDL (Theory & Practice)	ECE	3	1	0	1	5
7.	12HSS47	Innovation and Social skills		0	1	0	0	1
8.	12DMA48	Bridge Course Mathematics-II**						

								28
		No. of Hrs.		18	04	06	16	44

**Mandatory Audit Course for lateral entry (Diploma Students)

FIFTH SEMESTER								
Sl. No.	Course Code	Course	BoS	Credit Allocation				Total Credits
				Theory	Practical	Tutorial	Self Study	
1	12HSM51	Management & Organizational Behaviour	HSS	3	0	0	0	3
2	12EC52	Embedded System Design	ECE	3	0	1	1	5
3	12EC53	Communication Systems –I (Theory & Practice)	ECE	3	1	0	1	5
4	12EC54	Very Large Scale Integration Design (Theory & Practice)	ECE	3	1	0	1	5
5	12EC5AX	Elective A	ECE	3	0	0	1	4
6	12EC5BX	Elective B	ECE	4	0	0	0	4
								26
		No. of Hrs.		19	04	02	16	41

SIXTH SEMESTER								
Sl. No.	Course Code	Course	BoS	Credit Allocation				Total Credits
				Theory	Practical	Tutorial	Self Study	
1	12HSI61	IPR & Entrepreneurship	HSS	3	0	0	0	3
2	12EC62	Analog Mixed Mode VLSI	ECE	3	0	1	0	4
3	12EC63	Communication Systems-II (Theory & Practice)	ECE	3	1	0	1	5
4	12EC64	Computer Communication Networks (Theory & Practice)	ECE	3	1	0	1	5
5	12EC65	Emerging Technologies	ECE	2	0	0	0	2
6	12EC6CX	Elective C	ECE	3	0	0	1	4

7	12EC6DX	Elective D	ECE	3	0	0	0	3
								26
		No. of Hrs.		20	04	02	12	38

SEVENTH SEMESTER								
Sl. No.	Course Code	Course	BoS	Credit Allocation				Total Credits
				Theory	Practical	Tutorial	Self Study	
1	12EC71	Microwave & Radiating Systems (Theory & Laboratory)	ECE	4	1	0	0	5
2	12EC72	Wireless Cellular Communication	ECE	4	0	1	0	5
3	12HSC73*	Legal Studies & Professional Ethics for Engineers*	HSS	2	0	0	0	2
4	12EC74	Mini Project	ECE	0	2	0	0	2
5	12EC7EX	Elective E	ECE	4	0	0	0	4
6	12GF7XX	Elective F(Other elective)	Respective BoS	4	0	0	0	4
7	12GG7XX	Elective G(Other elective)	Respective BoS	3	0	0	0	3
								25
		No. of Hrs.		21	06	02	0	29

***Mandatory Audit course for Lateral Entry students**

EIGHTH SEMESTER								
Sl. No.	Course Code	Course	BoS	Credit Allocation				Total Credits
				Theory	Practical	Tutorial	Self Study	
1	12XX81	Project Work		0	18	0	0	18

2	12XX82	Technical Seminar		0	1	0	0	01
3	12HSS83	Innovation and Social Skills		0	1	0	0	01
								20
		No. of Hrs.		-	38	-	-	38

Sl.No.	Category	Percentage (%)	Minimum No. of credits	Assigned No. of credits
1	Humanities	5-10	10	10
2	Basic Science	15-20	30	31 (32)
3	Engineering Science	15-20	30	31
4	Professional Core Courses(PC)	30-40	60	79(80)
5	Professional Elective Courses	10-15	20	19
6	Other Electives	5-10	10	11 (7)
7	Project Work	10-15	20	21

SEMESTER WISE CRED IT DISTRIBUTION(SELF STUDY CREDIT INCLUDED EXCEPT FOR VII SEM)								
I	II	III	IV	V	VI	VII	VIII	TOTAL
23 (P)/25(c)	25/23	27	28	26	26	25	20	200

PROFESSIONAL CORE COURSE (PC)	PROFESSIONAL ELECTIVE COURSES	OTHER ELECTIVES(OE)
Common syllabus to be set jointly for such core courses offered by two or more departments (Mandatory requirement)	Branch specific latest/Advanced courses.	Include courses which can be offered by various departments as group/global elective to other departments.

1Hr. Theory= 1 credit

2Hrs. Practical=1credit

2Hrs. Tutorial=1 credit

4 Hrs. Self study = 1 credit (The teacher has to keep track; questions to be set from Self Study in SEE)

Group –A V Sem	Group-B V Sem	Group –C VI Sem	Group –D VI Sem	Group-E VII Sem
Object Oriented Programming with C++	Image & Video Processing	Adaptive Signal Processing	Advanced Processors	ARM System Development
Cryptography & Network Security	Artificial Neural Networks	Optical Fiber Communication & Networks	ATM Networks	Broad Band Communication
Antenna & Wave Propagation	Data Structures using C++	CAD tools for VLSI	Low Power VLSI Design	VLSI Testing for ICs
Analog System Design	Real Time Operating Systems	Satellite Communication & GPS	Data Base Management System	Multirate Filter Banks & Wavelets
Multicore Processor	System Verilog	Automotive Electronics	Flexible Electronics	Radio Frequency Integrated Circuits Design
				MEMS and Smart Systems