## Scheme of Teaching and Examination 2017-2018 Choice Based Credit System (CBCS)

## B.E: ELECTRICAL AND ELECTRONICS ENGINEERING CHOICE BASED CREDIT SYSTEM (CBCS)

#### III SEMESTER

CI			Teaching	Teaching	Hours /Week		Exami	nation		Credits
Sl. No	Course Code	Title	Department	Theory	Practical/ Drawing	Duration in hours	SEE Marks	CIE Marks	Total Marks	
1	17MAT31	Engineering Mathematics-III (Core)	Mathematics	04		03	60	40	100	4
2	17EE32	Electric Circuit Analysis (Core)	EEE	04		03	60	40	100	4
3	17EE33	Transformers and Generators (Core)	EEE	04		03	60	40	100	4
4	17EE34	Analog Electronic Circuits (Core)	EEE	04	04		60	40	100	4
5	17EE35	Digital System Design (Core)	EEE	04		03	60	40	100	4
6	17EE36	Electrical and Electronic Measurements (Foundation course)	EEE	03		03	60	40	100	3
7	17EEL37	Electrical Machines Laboratory -1	EEE	01-Hour In 02-Hour Pr		03	60	40	100	2
8	17EEL38	Electronics Laboratory	EEE	01-Hour Ir 02-Hour P		03	60	40	100	2
9	17KL/CPH39/49	Kannada/Constitution of India, Professional Ethics and Human Rights	Humanities	01		01	30	20	50	01
	TOTAL				: 24hours al: 06 hours	25	510	340	850	28

**<sup>1.</sup> Kannada/Constitution of India, Professional Ethics and Human Rights:** 50 % of the programs of the Institution have to teach Kannada/Constitution of India, Professional Ethics and Human Rights in cycle based concept during III and IV semesters.

#### 2. Audit Course:

(i) \*All lateral entry students (except B.Sc candidates) have to register for Additional Mathematics – I, which is 03 contact hours per week.

1	17MATDIP31	Additional Mathematics –I	Maths	03	03	60	 60	

(ii) Language English (Audit Course) be compulsorily studied by all lateral entry students (except B.Sc candidates)

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#### IV SEMESTER

~			Teaching	Teaching Ho	ours /Week			Credits		
Sl. No	Course Code	Title	Department	Theory	Practical/ Drawing	Duration in hours	SEE Marks	CIE Marks	Total Marks	
1	17MAT41	Engineering Mathematics-IV (Core)	Mathematics	04		03	60	40	100	4
2	17EE42	Power Generation and Economics (Core)	EEE	04		03	60	40	100	4
3	17EE43	Transmission and Distribution (Core)	EEE	04		03	60	40	100	4
4	17EE44	Electric Motors (Core)	EEE	04		03	60	40	100	4
5	17EE45	Electromagnetic Field Theory (Core)	EEE	04		03	60	40	100	4
6	17EE46	Operational Amplifiers and Linear ICs (Foundation course)	EEE	03		03	60	40	100	3
7	17EEL47	Electrical Machines Laboratory -2	EEE	01-Hour Instru 02-Hour Pract		03	60	40	100	2
8	17EEL48	Op- amp and Linear ICs Laboratory	EEE	01-Hour Instruction 02-Hour Practical		03	60	40	100	2
9	17KL/CPH39/49	Kannada/Constitution of India, Professional Ethics and Human Rights	Humanities	01		01	30	20	50	01
		Theory: 24l Practical: 06	nours hours	25	510	340	850	28		

**<sup>1.</sup> Kannada/Constitution of India, Professional Ethics and Human Rights:** 50 % of the programs of the Institution have to teach Kannada/Constitution of India, Professional Ethics and Human Rights in cycle based concept during III and IV semesters.

#### 2.Audit Course:

(i) \*All lateral entry students (except B.Sc candidates) have to register for Additional Mathematics – II, which is 03 contact hours per week.

1	17MATDIP41	Additional Mathematics –II	Maths	03		03	60		60		
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<sup>(</sup>ii) Language English (Audit Course) be compulsorily studied by all lateral entry students (except B.Sc candidates)

## **Scheme of Teaching and Examination 2017-2018**

### **Choice Based Credit System (CBCS)**

# B.E: ELECTRICAL AND ELECTRONICS ENGINEERING CHOICE BASED CREDIT SYSTEM (CBCS)

#### V SEMESTER

Sl.	A C C	Title	Teaching Department	Teaching	Hours /Week			Credits		
No	Course Code			Theory	Practical/ Drawing	Duration in hours	SEE Marks	CIE Marks	Total Marks	
1	17EE51	Management and Entrepreneurship	EEE	04		03	60	40	100	4
2	17EE52	Microcontroller(Core)	EEE	04		03	60	40	100	4
3	17EE53	Power Electronics(Core)	EEE	04		03	60	40	100	4
4	17EE54	Signals and Systems(Core)	EEE	04		03	60	40	100	4
5	17EE55X	Professional Elective – I	EEE	03		03	60	40	100	3
6	17EE56Y	Open Elective - I	EEE	03		03	60	40	100	3
7	17EEL57	Microcontroller Laboratory	EEE	01-Hour Instruction 02-Hour Practical		03	60	40	100	2
8	17EEL58	Power Electronics Laboratory	EEE	01- Hour I 02- Hour I	nstruction Practical	03	60	40	100	2
			-	22hours : 06 hours	24	480	320	800	26	

Professional Elective-1			Open Elective – 1*** (List offered by EEE Board only)					
17EE551	7EE551 Introduction to Nuclear Power		17EE561	Electronic Communication systems				
17EE552	Electrical Engineering Materials		17EE562	Programmable Logic controllers				
17EE553	17EE553 Estimating and Costing		17EE563	Renewable Energy Systems				
17EE554	Special Electrical Machines		17EE564	Business Communication				

<sup>\*\*\*</sup>Students can select any one of the open electives offered by any Department (Please refer to consolidated list of VTU for open electives). Selection of an open elective is not allowed, if:

- The candidate has no pre –requisiteknowledge.
- The candidate has studied similar content course during previous semesters.
- · The syllabus content of the selected open elective is similar to that of Departmental core course(s) or to be studied Professional elective(s). Registration to open electives shall be documented under the guidance of Programme Coordinator and Adviser.

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#### VI SEMESTER

Sl.	Course	Title	Teaching Department					Credits		
No	Code			Theory	Practical/ Drawing	Duration in hours	SEE Marks	CIE Marks	Total Marks	
1	17EE61	Control Systems(Core)	EEE	04		03	60	40	100	4
2	17EE62	Power System Analysis – 1(Core)	EEE	04		03	60	40	100	4
3	17EE63	Digital Signal Processing(Core)	EEE	04		03	60	40	100	4
4	17EE64	Electrical Machine Design(Core)	EEE	04		03	60	40	100	4
5	17EE65X	Professional Elective – II	EEE	03		03	60	40	100	3
6	17EE66Y	Open Elective - II	EEE	03		03	60	40	100	3
7	17EEL67	Control System Laboratory	EEE	01- Hour Instruction 02- Hour Practical		03	60	40	100	2
8	17EEL68	Digital Signal Processing Laboratory	EEE	01- Hour Instruction 02- Hour Practical		03	60	40	100	2
			TOTAL	Theory:22hours Practical: 06 hours		Core Course	480	320	800	26

Professional Elective-2			Open Elective –	2*** (List offered by EEE Board only)
17EE651	EE651 Computer Aided Electrical Drawing			Artificial Neural Networks and Fuzzy logic
17EE652	Advanced Power Electronics		17EE662	Sensors and Transducers
17EE653	Energy Audit and Demand side Management		17EE663	Batteries and Fuel Cells for Commercial, Military and Space Applications
17EE654	Solar and Wind Energy		17EE664	Industrial Servo Control Systems

<sup>\*\*\*</sup>Students can select any one of the open electives offered by any Department (Please refer to consolidated list of VTU for open electives). Selection of an open elective is not allowed, if:

- $\cdot$  The candidate has no pre –requisite knowledge.
- · The candidate has studied similar content course during previous semesters.
- · The syllabus content of the selected open elective is similar to that of Departmental core course(s) or to be studied as Professional elective(s).
- . A similar course, under any category, is prescribed in the higher semesters.

Registration to open electives shall be documented under the guidance of Programme Coordinator and Adviser.