

First Year ENGINEERING – CBCS PATTERN

SEMESTER - I																			
Sr. No	Course	TEACHING SCHEME									EXAMINATION SCHEME								
		THEORY			TUTORIAL			PRACTICAL			THEORY				PRACTICAL (Term wok)				
		Credits	No. of Lecture	Hours	Credits	No. of Lecture	Hours	Credits	No. of Lecture	Hours	Hours	Mode	Marks	Total Marks	%Min	Hours	Max	%Min	
1	BSC-P	3	3	3	-	-	-	1	2	2			CIE	30	100	40%	As per BOS Guidelines	25	40%
	BSC-C											ESE	70						
2	BSC-M-I	3	3	3	1	1	1	-	-	-		CIE	30	100	40%	25		40%	
											ESE	70							
3	ESC	3	3	3	-	-	-	1	2	2		CIE	30	100	40%	25		40%	
											ESE	70							
4	ESC	3	3	3	-	-	-	1	2	2		CIE	30	100	40%	25		40%	
											ESE	70							
5	ESC	3	3	3	-	-	-	1	2	2		CIE	30	100	40%	25		40%	
											ESE	70							
6	HM-I	1	1	1	-	-	-	1	2	2		-	-	-	-	25		40%	
7	ESC-W-I	1	1	1	-	-	-	1	2	2		-	-	-	-	50		40%	
	TOTAL	17	17	17	1	1	1	6	12	12		500			200				
SEMESTER –II																			
1	BSC-P	3	3	3	-	-	-	1	2	2			CIE	30	100	40%	As per BOS Guidelines	25	40%
	BSC-C											ESE	70						
2	BSC-M-II	3	3	3	1	1	1	-	-	-		CIE	30	100	40%	25		40%	
											ESE	70							
3	ESC	3	3	3	-	-	-	1	2	2		CIE	30	100	40%	25		40%	
											ESE	70							
4	ESC	3	3	3	-	-	-	1	2	2		CIE	30	100	40%	25		40%	
											ESE	70							
5	ESC	3	3	3	-	-	-	1	2	2		CIE	30	100	40%	25		40%	
											ESE	70							
6	HM-II	1	1	1	-	-	-	1	2	2		-	-	-	-	25		40%	
7	ESC-W-II	1	1	1	-	-	-	1	2	2		-	-	-	-	50		40%	
	TOTAL	17	17	17	1	1	1	6	12	12		500			200				
	TOTAL	34	34	34	2	2	2	12	24	24		1000			400				

CIE –Continuous Internal Evaluation

ESE – End Semester Examination

• Candidate contact hours per week : 30 Hours (Minimum)	• Total Marks for B.E. Sem I & II : 1400
• Theory and Practical Lectures : 60 Minutes Each	• Total Credits for B.E.-I (Semester I & II) : 48
• In theory examination there will be a passing based on separate head of passing for examination of CIE and ESE.	
• There shall be separate passing for theory and practical (term work) courses.	
• Sem I- SSC: Soft Skill Course : There shall be an additional compulsory course of 2 Credits (SELF Study) for a course of Democracy, Elections and Good Governance which will not included in total Credits	
• Sem II - SSC : Soft Skill Course : Any one from following (i) to (v) (2 Credits) (SELF Study) i) Business Communication & Presentation ii) Event management iii) Personality Development, iv) Yoga & Physical Management v) Resume, Report & proposal writing	

Note :

1. **BSC** : Basic Science Course are compulsory.
2. **HM** : Humanities and Management are compulsory.
3. **ESC** : Engineering Science Course : **ESC – P** courses (subjects) are mandatory for **Physics** group, while **ESC – C** courses (subjects) are mandatory for **Chemistry** group.
4. There will be two groups for Sem I & II Physics and Chemistry. The Candidate's those opting Physics group in Sem I shall appear for Chemistry group in Sem II and Vice-versa.
5. **ESC-W**: Engineering Science Course-Workshop are compulsory.

Second Year ELECTRONICS ENGINEERING- CBCS PATTERN

[illegible]

[illegible]

CIE- Continuous Internal Evaluation
ESE – End Semester Examination

• Candidate contact hours per week : 30 Hours (Minimum)	• Total Marks for S.E. Sem III & IV: 1600
• Theory and Practical Lectures : 60 Minutes	• Total Credits for S.E. Sem III & IV : 50
• In theory examination there will be a passing based on separate head of passing for examination of CIE and ESE.	
• There shall be separate passing for theory and external practical /oral courses.	

Note:

1. **BSC-EN:** Basic Science Course- Electronics Engineering are compulsory.
2. **PCC-EN:** Professional Core course –Electronics Engineering are compulsory.
3. **MC-EN:** Mandatory Course :Environmental Studies is compulsory for theory 70 marks and project work 30 marks.

Third Year ELECTRONICS ENGINEERING– CBCS PATTERN

SEMESTER – V																								
Sr. No	Course (Subject Title)	TEACHING SETCEME										EXAMINATION SETCEME												
		THEORY				TUTORIAL				PRACTICAL			THEORY					PRACTICAL			TERM WORK			
		Credits	No. of Lecture	Hours		Credits	No. of Lecture	Hours		Credits		No. of Lecture	Hours	Hours	Mode	Marks	Total Marks	Min	Hours	Max	Min	Hours	Max	Min
1	PCC-EN 501	4	4	4		1	1	1		-	-	-			CIE	30	100	12	As per BOS Guidelines	-	-	2	25	10
														ESE	70	28								
2	PCC-EN 502	3	3	3		1	1	1		-	-	-			CIE	30	100	12		-	-	2	25	10
														ESE	70	28								
3	PCC-EN 503	4	4	4						1	2	2			CIE	30	100	12		50	20	2	25	10
														ESE	70	28								
4	PCC-EN 504	4	4	4		-	-	-		1	2	2			CIE	30	100	12		50	20	2	25	10
														ESE	70	28								
6	OEC-EN 501	3	3	3		1	1	1		-	-	-			CIE	30	100	12		-	-	2	25	10
														ESE	70	28								
7	PCC-EN 505	1	1	1		-	-	-		1	2	2			-	-	-	-		50	20	2	25	10
	TOTAL	19	19	19		3	3	3		3	6	6					500			150		150		
SEMESTER –VI																								
1	PCC-EN 601	4	4	4		-	-	-		1	2	2			CIE	30	100	12	As per BOS Guidelines	-	-	2	25	10
														ESE	70	28								
2	PCC-EN 602	4	4	4		-	-	-		1	2	2			CIE	30	100	12		50	25	2	25	10
														ESE	70	28								
3	PCC-EN 603	4	4	4		-	-	-		1	2	2			CIE	30	100	12		50	25	2	25	10
														ESE	70	28								
4	PCC-EN 604	4	4	4		-	-	-		1	2	2			CIE	30	100	12		-	-	2	25	10
														ESE	70	28								
5	OEC-EN 601	3	3	3		1	1	1		-	-	-			CIE	30	100	12		-	-	2	25	10
														ESE	70	28								
6	PW-EN 601	-	-	-		-	-	-		1	2	2			-	-	-	-		50	25	2	25	10
														-	-									

	TOTAL	19	19	19		1	1	1		5	10	10			500		150		150	
	TOTAL	38	38	38		4	4	4		8	16	16			1000		300		300	

CIE- Continuous Internal Evaluation

ESE – End Semester Examination

• Candidate contact hours per week : 30 Hours (Minimum)	• Total Marks for T.E. Sem V& VI: 1600
• Theory and Practical Lectures : 60 Minutes	• Total Credits for T.E. Sem V & VI : 50
• In theory examination there will be a passing based on separate head of passing for examination of CIE and ESE.	
• There shall be separate passing for theory and practical /oral courses.	
• Sem V: SSC: Constitution of India and Local Self Government (2 Credits)(Self Study)	
• Sem VI:SSC: Any one from following (vi) to (x) (2 Credits) (Self Study)	
vi) Interview & Personal Presentation Skill, vii) Entrepreneurship Development Skill, viii)Travel & Tourism, ix)E-Banking & financial services, x) RTI& Human Right Education, IPR & Patents	

Note:

1. **PCC-EN:**Professional Core course –Electronics Engineering are compulsory.
2. **OEC-EN :** Open Elective Course – Electronics Engineering:
3. **Winter/Summer Internship/Industrial Training of minimum 15 days compulsory, and evaluation of the same will be carried out in Final year Project Phase-1 internal assessment by respective Guide**

Final Year ELECTRONICS ENGINEERING– CBCS PATTERN

SEMESTER –VII																								
Sr. No	Course (Subject Title)	TEAETCING SETCEME										EXAMINATION SETCEME												
		THEORY				TUTORIAL				PRACTICAL			THEORY					PRACTICAL			TERM WORK			
		Credits	No. of Lecture	Hours		Credits	No. of Lecture	Hours		Credits		No. of Lecture	Hours	Hours	Mode	Marks	Total Marks	Min	Hours	Max	Min	Hours	Max	Min
1	PCC-EN701	3	3	3		1	1	1		-	-	-			CIE	30	100	12	As per BOS Guidelines	-	-	2	25	10
2	PCC-EN 702	4	4	4		-	-	-		1	2	2			ESE	70		28						
3	PCC-EN 703	4	4	4		-	-	-		1	2	2			CIE	30	100	12		50	20	2	25	10
4	PCC-EN 704	4	4	4		-	-	-		1	2	2			ESE	70		28						
5	PCE-EN 701	4	4	4		1	1	1		-	-	-			CIE	30	100	12		50	20	2	25	10
6	PW-EN701	-	-	-		-	-	-		2	4	4			ESE	70		28						
7																								
	TOTAL	19	19	19		2	2	2		5	10	10					500			125			175	
SEMESTER –VIII																								
1	PCC-EN 801	4	4	4		-	-	-		1	2	2			CIE	30	100	12			50	20	2	25
2	PCC-EN 802	4	4	4		-	-	-		1	2	2			ESE	70		28						
3	PCC-EN 803	4	4	4		-	-	-		1	2	2			CIE	30	100	12	50		20	2	25	10
4	PCE-EN 801	4	4	4		1	1	1		-	-	-			ESE	70		28						
5	PW-EN 801	-	-	-		-	-	-		4	8	8			-	-	-	-	150		60	2	50	20
6																								
7																								
	TOTAL	16	16	16		1	1	1		7	14	14			TOTAL	400		250				150		
	TOTAL	35	35	35		3	3	3		12	24	24			900			375				325		

• Candidate contact hours per week : 30 Hours (Minimum)	• Total Marks for B.E. Sem VII & VIII : 1600
• Theory and Practical Lectures : 60 Minutes	• Total Credits for B.E. Sem VII & VIII : 50
• In theory examination there will be a passing based on separate head of passing for examination of CIE and ESE.	
• There shall be separate passing for theory and practical (term work) courses.	

Note :

1. **PCC-EN:** Professional Core course –Electronics Engineering are compulsory.
2. **PCE-EN:** Professional Core Elective –Electronics Engineering is compulsory.
3. **PW-EN:** Project work- Electronics Engineering is compulsory.
4. **PW-EN:** Project work- Electronics & Telecommunication Engineering is compulsory.
5. **MC-EN:** Mandatory Course- Electronics & Telecommunication Engineering is compulsory

Shivaji University, Kolhapur

Electronics Engineering

COURSE CODE AND DEFINITION

Course code	Definitions	Total Credit	Total Percentage
BSC	BASIC SCIENCE COURSES		
PCC	PROFESSIONAL CORE COURSES		
MC	MANDATORY COURSE		
ESC	ENGINEERING SCIENCE COURSES		
PCE	PROFESSIONAL CORE ELECTIVES		
SI	SUMMER INTERNSHIP		
PW	PROJECT Work		
OEC	OPEN ELECTIVE COURSES		
HM	Humanities and Management		
		200	100

Semester I

Sl. No	Code No.	Subject	Semester	Credits
1.	BSC-P101	Engineering Physics	1	3
2.	BSC-C101	Engineering chemistry	1	3
3.	BSC-M101	Engineering Mathematics-I	1	3
4.	ESC-P101	Basic Electrical Engineering	1	3
5.	ESC-P102	Basic Civil Engineering	1	3
6.	ESC-P103	Engineering Graphics	1	3
7.	ESC-C101	Fundamentals of Electronics and Computer Programming	1	3
8.	ESC-C102	Applied Mechanics	1	3
9.	ESC-C103	Basic Mechanical Engineering	1	3
10.	ESC-W101	Workshop Practice-I	1	2
11.	HM-01	Professional Communication-I	1	2

Semester II

Sl. No	Code No.	Subject	Semester	Credits
1.	BSC-P101	Engineering Physics	2	3
2.	BSC-C102	Engineering Chemistry	2	3
3.	BSC-M102	Engineering Mathematics-II	2	3
4.	ESC-C104	Basic Electrical Engineering	2	3
5.	ESC-C105	Basic Civil Engineering	2	3
6.	ESC-C106	Engineering Graphics	2	3
7.	ESC-P104	Fundamentals of Electronics and Computer	2	3
8.	ESC-P105	Applied Mechanics	2	3
9.	ESC-P106	Basic Mechanical Engineering	2	3
10.	ESC-W102	Workshop Practice-II	2	2
11.	HM-102	Professional Communication-II	2	2

Semester-III

Sr. No	Code No.	Subject	Semester	Credits
1.	BSC-EN301	Engineering Mathematics-III	3	4
2.	PCC-EN-301	Electronic CircuitDesign-I	3	5
3.	PCC-EN302	Linear Circuits	3	4
4.	PCC-EN303	Electronic Measurement & Instrumentation	3	4
5.	PCC-EN304	Analog Communication	3	4
6.	PCC-EN305	Programming Lab-I	3	3
7.	MC-EN-301	Environmental studies	3	3
		Total		27

Semester IV

Sr. No	Code No.	Subject	Semester	Credits
1	PCC-EN401	Electronic Circuit Design-II	4	5
2	PCC-EN402	Linear integrated Circuits	4	5
3	PCC-EN403	Control System Engineering	4	3
4	PCC-EN404	Digital Communication	4	4
5	PCC-EN405	Data Structures	4	3
6	PCC-EN406	Programming Lab-II	4	3
		Total		23

Semester V

Sr. No	Code No.	Subject	Semester	Credits
1.	PCC-EN501	Signal and Systems	5	5
2.	PCC-EN502	Electromagnetic Engineering	5	4
3.	PCC-EN503	VLSI Design	5	5
4.	PCC-EN504	Video Engineering	5	5
5.	OEC-EN501	Open Elective – I	5	4
6.	PCC-EN505	Simulation and Modelling	5	2
		Total		25

Semester VI

Sr. No	Code No.	Subject	Semester	Credits
1.	PCC-EN601	Digital Signal Processing	6	5
2.	PCC-EN602	Microprocessor and Microcontrollers	6	5
3.	PCC-EN603	Power Electronics	6	5
4.	PCC-EN604	Electronic System Design	6	5
5.	OEC-EN601	Open Elective – II	6	4
6.	PCC-EN605	Mini Project	6	1
		Total		25

Semester -VII

Sr. No	Code No.	Subject	Semester	Credits
1.	PCC-EN701	Information Theory and Coding Technique	7	4
2.	PCC-EN702	Embedded Systems	7	5
3.	PCC-EN703	Computer Networks	7	5
4.	PCC-EN704	Image Processing	7	5
5.	PCE-EN701	Elective-I	7	5
6.	PW-EN701	Project Phase-I	7	2
7.				
		Total		26

Semester -VIII

Sr. No	Code No.	Subject	Semester	Credits
1.	PCC-EN801	Microwave Engineering	8	5
2.	PCC-EN802	Wireless Communication	8	5
3.	PCC-EN803	Power Electronics and Drives	8	5
4.	PCE-EN801	Elective-II	8	5
5.	PW-EN801	Project Phase – II	8	4
		Total		24