

FIRST YEAR – 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-P101	3	3	3	-	-	-	1	2	2		CIE	30	100	40%	As per BOS Guidelines	25	40%
	BSC-C101											ESE	70					
2	BSC-M101	3	3	3	1	1	1	-	-	-		CIE	30	100	40%		25	40%
												ESE	70					
3	ESC-P101	3	3	3	-	-	-	1	2	2		CIE	30	100	40%		25	40%
	ESC-C101											ESE	70					
4	ESC-P102	3	3	3	-	-	-	1	2	2		CIE	30	100	40%		25	40%
	ESC-C102											ESE	70					
5	ESC-P103	3	3	3	-	-	-	1	2	2		CIE	30	100	40%		25	40%
	ESC-C103											ESE	70					
6	HM-01	1	1	1	-	-	-	1	2	2		-	-	-	-	25	40%	
7	ESC-W101	1	1	1	-	-	-	1	2	2		-	-	-	-	50	40%	
	TOTAL	17	17	17	1	1	1	6	12	12		500			200			
SEMESTER –II																		
1	BSC-P101	3	3	3	-	-	-	1	2	2		CIE	30	100	40%	As per BOS Guidelines	25	40%
	BSC-C102											ESE	70					
2	BSC-M102	3	3	3	1	1	1	-	-	-		CIE	30	100	40%		25	40%
												ESE	70					
3	ESC-C104	3	3	3	-	-	-	1	2	2		CIE	30	100	40%		25	40%
	ESC-P104											ESE	70					
4	ESC-C105	3	3	3	-	-	-	1	2	2		CIE	30	100	40%		25	40%
	ESC-P105											ESE	70					
5	ESC-C106	3	3	3	-	-	-	1	2	2		CIE	30	100	40%		25	40%
	ESC-P106											ESE	70					
6	HM-102	1	1	1	-	-	-	1	2	2		-	-	-	-	25	40%	
7	ESC-W102	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 : 700 + 700 = 1400
• Theory and Practical Lectures : 60 Minutes Each	• Total Credits for B.E.-I (Semester I & II) : 48 (SEM-I: 24 + SEM – II: 24)
• 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.	
A) Non-Credit Self Study Course : Compulsory Civic Courses (CCC) For Sem I: CCC – I : Democracy, Elections and Good Governance (B) Non-Credit Self Study Course : Skill Development Courses (SDC) For Sem II: SDC – I : Any one from following (i) to (v) i) Business Communication & Presentation ii) Event management iii) Personality Development, iv) Yoga & Physical Management v) Resume, Report & proposal writing	
Note: <ol style="list-style-type: none"> BSC: Basic Science Course are compulsory. HM: Humanities and Management are compulsory. ESC : Engineering Science Course : ESC – P courses (subjects) are mandatory for Physics group, while ESC – C courses (subjects) are mandatory for Chemistry group. 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. ESC-W: Engineering Science Course-Workshop are compulsory. 	

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

SECOND YEAR INFORMATION TECHNOLOGY – CBCS PATTERN

SEMESTER - III																										
Sr. No	Course (Subject Title)	TEACHING SCHEME									EXAMINATION SCHEME															
		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	BSC-IT301	3	3	3		1	1	1		-	-	-			CIE	30	100	40	As per BOS Guidelines	-	-	As per BOS Guidelines	25	10		
2	PCC- IT302	4	4	4		-	-	-		1	2	2			ESE	70										
3	PCC- IT303	3	3	3		-	-	-		-	-	-			CIE	30	100	40		50	20		-	-	25	10
4	PCC- IT 304	3	3	3		-	-	-		-	-	-			ESE	70										
5	PCC - IT 305	3	3	3		1	1	1		-	-	-			CIE	30	100	40		-	-		-	-	25	10
6	PCC- IT 306	3	3	3		-	-	-		2	4	4			ESE	70										
7	PW- IT 307	-	-	-		-	-	-		1	2	2			CIE	30	100	40		50	20			25	10	
	TOTAL	19	19	19		2	2	2		4	8	8			-	-										-
SEMESTER –IV																										
1	PCC- IT 401	3	3	3						1	2	2			CIE	30	100	40	As per BOS Guidelines	50	20	As per BOS Guidelines	25	10		
2	PCC- IT402	3	3	3						-	-	-			ESE	70										
3	PCC- IT403	3	3	3		-	-	-							CIE	30	100	40								
4	PCC-IT404	3	3	3		1	1	1							ESE	70										
5	PCC- IT405	3	3	3		-	-	-							CIE	30	100	40								
6	PCC- IT406	2	2	2		-	-	-		2	4	4			ESE	70										
7	PW- IT407									1	2	2			-	-	-	-		50	20			50	20	
8	MC- IT408	3	3	3		-	-	-		-	-	-			CIE	30	100	10 25			50		20		-	-
	TOTAL	20	20	20		1	1	1		4	8	8			ESE	70			600							
	TOTAL	38	38	38		3	3	3		8	16	16					1100		300		300					

• Candidate contact hours per week : 30 Hours (Minimum)	• Total Marks for S.E. Sem III & IV : 800 + 900 = 1700
• Theory and Practical Lectures : 60 Minutes Each	• Total Credits for S.E. Sem III & IV : 50 (SEM-I: 25 + SEM – II: 25)
• 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:

- BSC-IT:** Basic Science Course - Information Technology are compulsory.
- ESC-IT:** Engineering Science Course - Information Technology are compulsory.
- PCC-IT:** Professional Core Course – Information Technology are compulsory.
- MC-EV:** Mandatory Course - Environmental Studies which is compulsory for theory 70 marks and project work 30 marks.

Semester -III

Sl. No	Code No.	Subject	Semester	Credits
1.	BSC-IT301	Statistics & Fuzzy Systems	3	4
2.	PCC- IT302	Digital System and Microprocessor	3	5
3.	PCC- IT303	Data Communication	3	3
4.	PCC- IT304	Fundamentals of Economics and Management	3	3
5.	PCC- IT 305	Discrete Mathematical Structures	3	4
6.	PCC- IT306	Problem solving using C	3	5
7.	PW- IT307	Soft Skills	3	1

Semester - IV

Sl. No	Code No.	Subject	Semester	Credits
1.	PCC- IT401	Computer Network	4	4
2.	PCC-IT402	Computer Organization and Architecture	4	3
3.	PCC-IT403	Data Structures	4	3
4.	PCC-IT404	Theory of computation	4	4
5.	PCC-IT405	Software Engineering	4	3
6.	PCC- IT406	Object Oriented Programming	4	4
7.	PW-IT407	Mini Project	4	1
8.	MC-IT408	Environmental Studies	4	3

THIRD YEAR INFORMATION TECHNOLOGY – CBCS PATTERN

SEMESTER – V																					
Sr. No	Course (Subject Title)	TEACHING SCHEME									EXAMINATION SCHEME										
		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-IT501	3	3	3	-	-	-	1	2	2		CIE	30	100	40	As per BOS Guidelines	-	-	As per BOS Guidelines	50	20
2	PCC- IT502	3	3	3	-	-	-	1	2	2		ESE	70				25	10		50	20
3	PCC- IT503	3	3	3	-	-	-	-	-	-		CIE	30	100	40		-	-		-	-
4	PCC- IT504	4	4	4	1	1	1	-	-	-		ESE	70				100	40		-	-
5	OEC- IT505	3	3	3	-	-	-	-	-	-		CIE	30	100	40		-	-		-	-
6	PCC-IT506	3	3	3	-	-	-	2	4	4		ESE	70				50	20		50	20
7	HM-IT507				1	1	1										25	10			25
	TOTAL	19	19	19	2	2	2	4	8	8				500			100		200		
SEMESTER –VI																					
1	PCC-IT601	3	3	3	-	-	-	1	2	2		CIE	30	100	40	As per BOS Guidelines			As per BOS Guidelines	25	10
2	PCC-IT602	4	4	4	-	-	-	1	2	2		ESE	70				100	40			
3	PCC-IT603	4	4	4	-	-	-	1	2	2		CIE	30	100	40		50	20		25	10
4	PCC-IT604	3	3	3	1	1	1					ESE	70				100	40			
5	OEC –IT605	3	3	3	-	-	-					CIE	30	100	40		-	-		25	10
6	PCC-IT606	2	2	2	-	-	-	1	2	2		ESE	70				50	20		25	10
7	PW-IT607							1	2	2							50	20			25
	TOTAL	19	19	19	1	1	1	5	10	10				500			150		150		
	TOTAL	38	38	38	3	3	3	10	20	20				1000			250		350		

CIE- Continuous Internal Evaluation

• Candidate contact hours per week : 30 Hours (Minimum)	• Total Marks for T.E. Sem V & VI : 800 + 800 = 1600
• Theory and Practical Lectures : 60 Minutes Each	• Total Credits for T.E. Sem V & VI : 50 (SEM-I: 25 + SEM – II: 25)
• 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.	
• ** Indicates that the theory examination is of 04 hours duration.	
<p>(A) Non-Credit Self Study Course : Compulsory Civic Courses (CCC)</p> <p>For Sem V: CCC – II : Constitution of India and Local Self Government</p> <p>(B) Non-Credit Self Study Course : Skill Development Courses (SDC)</p> <p>For Sem VI: SDC – II: Any one from following (vi) to (x)</p> <p>vi) Interview & Personal Presentation Skill, vii) Entrepreneurship Development Skill, viii) Travel &</p> <p>• Tourism, ix) E-Banking & Financial Services, x) RTI & Human Right Education (HRE), IPR & Patents</p>	

Note :

- 1. PCC-IT:** Professional Core Course – Information Technology are compulsory.
- 2. OEC-IT:** Open Elective Course.

Semester - V

Sl. No	Code No.	Subject	Semester	Credits
1.	PCC-IT501	Operating System-I	5	4
2.	PCC-IT602	Database Engineering	5	4
3.	PCC- IT503	Computer Algorithms	5	3
4.	PCC- IT504	System Programming	5	5
5.	OEC- IT505	Microcontrollers	5	3
6.	PCC-IT506	Application Development Tool I	5	5
7.	HM-IT507	Soft Skill	5	1

Semester - VI

Sl. No	Code No.	Subject	Semester	Credits
1.	PCC-IT601	Computer Graphics	6	4
2.	PCC-IT602	Information Security	6	5
3.	PCC-IT603	Internet Technology	6	5
4.	PCC-IT604	Operating System II	6	4
5.	OEC –IT605	Robotics	6	3
6.	PCC-IT606	Application Development Tool II	6	3
7.	PW-IT607	Seminar	6	1

FINAL YEAR INFORMATION TECHNOLOGY – CBCS PATTERN

SEMESTER –VII																											
Sr. No	Course (Subject Title)	TEACHING SCHEME									EXAMINATION SCHEME																
		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-IT701	4	4	4		1	1	1		-	-	-			CIE	30	100	40	As per BOS Guidelines		50	20					
2	PCC-IT702	3	3	3		1	1	1		1	2	2			ESE	70											
3	PCC-IT703	3	3	3		-	-	-		1	2	2			CIE	30	100	40									
4	PCE-IT704	3	3	3		1	1	1		-	-	-			ESE	70											
5	PCC-IT705	3	3	3		-	-	-		2	4	4			CIE	30	100	40									
6	PW-IT706	-	-	-		-	-	-		2	4	4			ESE	70											
7	WI-IT707	-	-	-		-	-	-		-	-	-											50	20			
	TOTAL	16	16	16		3	3	3		6	12	12				400							150		250		
SEMESTER –VIII																											
1	PCC-IT801	4	4	4		-	-	-		1	2	2			CIE	30	100	40	As per BOS Guidelines	50	20		25	10			
2	PCC-IT801	3	3	3		1	1	1		-	-	-			ESE	70											
3	PCE-IT803	4	4	4		1	1	1						CIE	30	100	40										
4	PCE-IT804	3	3	3		1	1	1		-	-	-			ESE			70									
5	PCC-IT505	2	2	2		-	-	-		2	4	4			CIE	30	100	40									
6	PW-IT806	-	-	-		-	-	-		2	4	4			ESE	70											
7	HM-IT807									1	2	2													50	20	
	TOTAL	16	16	16		3	3	3		6	12	12				400									200		200
	TOTAL	32	32	32		6	6	6		12	24	24				800									325		450

• Candidate contact hours per week : 30 Hours (Minimum)	• Total Marks for B.E. Sem VII & VIII : 800 + 800 = 1600
• Theory and Practical Lectures : 60 Minutes Each	• Total Credits for B.E. Sem VII & VIII : 50 (SEM-I: 24 + 1 WI + SEM – II: 25)
• 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-IT:** Professional Core Course – Information Technology are compulsory.
2. **PCE-IT:** Professional Core Elective – Information Technology are compulsory.
3. **MC-IT:** Mandatory Course- Information Technology are compulsory.
4. **SI-IT:** Summer Internship- Information Technology are compulsory.
5. **PW-IT:** Project Work- Information Technology are compulsory.

Semester -VII

Sl. No	Code No.	Subject		Semester	Credits
1.	PCC-IT701	Project Management		7	5
2.	PCC-IT702	Mobile Computing		7	4
3.	PCC-IT703	Advanced Database Systems		7	4
4.	PCE-IT704	Elective –I	Image processing	7	4
			Soft Computing		
			Enterprise Resource Planning		
5.	PCC-IT705	Web Technologies –I		7	5
6.	PW-IT706	Project - I		7	2
7.	WI-IT707	Winter Internship		7	

Semester - VIII

Sl. No	Code No.	Subject		Semester	Credits
1.	PCC-IT801	Storage Networks		8	5
2.	PCC-IT801	Cloud Computing		8	4
3.	PCE-IT803	Elective -II	Cyber Security	8	5
			Information Retrieval		
			Business Intelligence		
4.	PCE-IT804	Elective -III	Software Testing	8	4
			Distributed Computing		
			Artificial Intelligence		
5.	PCC-IT505	Web Technologies –II		8	4
6.	PW-IT806	Project - II		8	2
7.	HM-IT807	Advanced Software Technologies		8	1

Course Wise Credit Distribution

Course code	Definitions	Total Credit	Total Percentage
BSC	BASIC SCIENCE COURSES	16	8.33
PCC	PROFESSIONAL CORE COURSES	115	59.89
MC	MANDATORY COURSE	1	0.52
ESC	ENGINEERING SCIENCE COURSES	28	14.58
PCE	PROFESSIONAL CORE ELECTIVES	13	6.77
SI	SUMMER INTERNSHIP	-	-
MP	MINI PROJECT WORK	2	1.04
PW	PROJECT Work	4	2.08
OEC	OPEN ELECTIVE COURSES	6	3.12
HM	Humanities and Management	7	3.64