Scheme for III Semester

Course Code	Course Category	Course Title	Teaching L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
15UMAC300	PC	Engineering Mathematics-III	4-0-0	4	50	100	3		
15UISC300	PC	Data Structures	3-2-0	4	50	100	3		
15UISC301	PC	Digital Circuits	3-0-0	3	50	100	3		
15UISC302	PC	Discrete Mathematical & Graphical Structures	4-0-0	4	50	100	3		
15UISC303	PC	Computer Organization	4-0-0	4	50	100	3		
15UISC304	PC	Digital Circuits Lab	0-0-3	1.5	50			50	3
15UISC305	PC	Data Structures Lab	0-0-3	1.5	50			50	3
15UISC306	PC	Unix/Linux Lab	1-0-2	2	50			50	3
Total			19-2-8	24	400	500		150	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for IV Semester

Course Code	Course Category	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration In hours
15UMAC400	PC	Engineering Mathematics - IV	4-0-0	4	50	100	3		
15UISC400	PC	Object Oriented Programming	4-0-0	4	50	100	3		
15UISC401	PC	Analysis and Design of Algorithms	3-0-2	4	50	100	3		
15UISC402	PC	Data Communication	4-0-0	4	50	100	3		
15UISC403	PC	Microcontroller 8051	4-0-0	4	50	100	3		
15UISC404	PC	Finite Automata and Formal Language	3-2-0	4	50	100	3		
15UISL405	PC	Microcontroller Laboratory	0-0-3	1.5	50			50	3
15UISL406	PC	Object Oriented Programming Laboratory	0-0-3	1.5	50			50	3
Total			**22-2-8**	**27**	**400**	**600**		**100**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination* **L**: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

BS- Basic Science, PC- Program Core

Scheme for V Semester

Course Code	Course Category	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
15UISC500	PC	Management, Entrepreneurship and Intellectual Property Rights	4-0-0	4	50	100	3		
15UISC501	PC	Operating Systems	4-0-0	4	50	100	3		
15UISC502	PC	Database Management System	4-0-0	4	50	100	3		
15UISC503	PC	System software	4-0-0	4	50	100	3		
15UISC504	PC	Programming in Java	4-0-0	4	50	100	3		
15UISL505	PC	Database Management System Lab	0-0-2	1	50			50	3
15UISL506	PC	Java Lab	0-0-2	1	50			50	3
15UISL507	PC	Mini project – I	0-0-6	4	50	100	3		
Total			20-0-10	26	400	600		100	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for VI Semester

| Course Code | Course Category | Course Title | Teaching | | Examination | | | | |
			L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Duration in hours	Practical (SEE) Max. Marks	Duration In hours
15UISC600	PC	Web Technology	4-0-0	4	50	100	3		
15UISC601	PC	File structures	3-0-2	4	50	100	3		
15UISC602	PC	Software Engineering	4-0-0	4	50	100	3		
15UISC603	PC	Computer Networks	3-0-0	3	50	100	3		
15UISL604	PC	Web Technology Lab	0-0-2	1	50			50	3
15UISL605	PC	Mini Project-II	0-0-6	4	50			50	3
15UISE6XX	PE	Elective – I	4-0-0	4	50	100	3		
15UISE6XX	PE	Elective – II	4-0-0	4	50	100	3		
Total			**22-0-10**	**28**	**400**	**600**		**100**	

Code	Elective – I	Code	Elective –II
15UISE620	Unix Systems Programming	15UISE623	Computer Graphics
15UISE621	Advanced Computer Architecture	15UISE624	Advanced Data Base Management System
15UISE622	Advanced Data Structures	15UISE625	System simulation and Modeling

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for VII Semester

Course Code	Course Title	Teaching L-T-P-S (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration In hours
11UISC701	Network Security and Cryptography	4-0-0-0	4	50	100	3		
11UISC702	Data Mining	3-0-0-0	3	50	100	3		
11UISC706	Cloud Computing	3-0-0-0	3	50	100	3		
11UISL703	Project Phase I	0-0-6-0	4	50			50	3
11UISL704	Computer Networks Lab	0-0-2-0	1	50			50	3
11UISL705	Data Mining and Machine Learning Tools Lab	1-0-2-0	2	50			50	3
11UISE7XX	Elective-V	4-0-0-0	4	50	100	3		
11UISE7XX	Elective-VI	4-0-0-0	4	50	100	3		
Total		20-0-10-0	25	400	500		150	

Code	Elective – I	Code	Elective –II
11UISE750	Digital Image Processing	11UISE760	Mobile computing
11UISE751	Information Storage Management	11UISE761	Network Management
11UISE752	Software Testing	11UISE762	Compiler design
		11UISE763	Agile Technology

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for VIII Semester

Course Code	Course Title	L-T-P-S (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration In hours
11UISC800	Big Data Analytics	3-0-0-0	03	50	100	3		
11UISL801	Project Phase II	0-0-10-0	10	50			50	3
11UISL802	Seminar	0-0-3-0	02	50				
11UISE8XX	Elective-VII	4-0-0-0	04	50	100	3		
11UISE8XX	Elective-VIII	4-0-0-0	04	50	100	3		
Total		**11-0-13-0**	**23**	**250**	**300**		**50**	

Code	Elective courses-VII	Code	Elective courses-VIII
11UISE850	Business intelligence **	11UISE860	Software architecture
11UISE851	Mobile and Ad Hoc Networks	11UISE861	Data Science
11UISE852	Internet of Things	11UISE862	Wireless Sensor Networks

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*
L: Lecture   **T**: Tutorials   **P**: Practical
*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

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Scheme for III Semester

Course Code	Course Category	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
15UMAC300	PC	Engineering Mathematics-III	4-0-0	4	50	100	3		
15UISC300	PC	Data Structures	3-2-0	4	50	100	3		
15UISC301	PC	Digital Circuits	3-0-0	3	50	100	3		
15UISC302	PC	Discrete Mathematical & Graphical Structures	4-0-0	4	50	100	3		
15UISC303	PC	Computer Organization	4-0-0	4	50	100	3		
15UISC304	PC	Digital Circuits Lab	0-0-3	1.5	50			50	3
15UISC305	PC	Data Structures Lab	0-0-3	1.5	50			50	3
15UISC306	PC	Unix/Linux Lab	1-0-2	2	50			50	3
Total			19-2-8	24	400	500		150	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for IV Semester

Course Code	Course Category	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration In hours
15UMAC400	PC	Engineering Mathematics - IV	4-0-0	4	50	100	3		
15UISC400	PC	Object Oriented Programming	4-0-0	4	50	100	3		
15UISC401	PC	Analysis and Design of Algorithms	3-0-2	4	50	100	3		
15UISC402	PC	Data Communication	4-0-0	4	50	100	3		
15UISC403	PC	Microcontroller 8051	4-0-0	4	50	100	3		
15UISC404	PC	Finite Automata and Formal Language	3-2-0	4	50	100	3		
15UISL405	PC	Microcontroller Laboratory	0-0-3	1.5	50			50	3
15UISL406	PC	Object Oriented Programming Laboratory	0-0-3	1.5	50			50	3
Total			**22-2-8**	**27**	**400**	**600**		**100**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination* **L**: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

BS- Basic Science, PC- Program Core

Scheme for V Semester

Course Code	Course Category	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
			Teaching		Examination				
15UISC500	PC	Management, Entrepreneurship and Intellectual Property Rights	4-0-0	4	50	100	3		
15UISC501	PC	Operating Systems	4-0-0	4	50	100	3		
15UISC502	PC	Database Management System	4-0-0	4	50	100	3		
15UISC503	PC	System software	4-0-0	4	50	100	3		
15UISC504	PC	Programming in Java	4-0-0	4	50	100	3		
15UISL505	PC	Database Management System Lab	0-0-2	1	50			50	3
15UISL506	PC	Java Lab	0-0-2	1	50			50	3
15UISL507	PC	Mini project – I	0-0-6	4	50	100	3		
Total			**20-0-10**	**26**	**400**	**600**		**100**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for VI Semester

Course Code	Course Category	Course Title	Teaching		Examination					
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)			Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in hours		Max. Marks	Duration In hours
15UISC600	PC	Web Technology	4-0-0	4	50	100	3			
15UISC601	PC	File structures	3-0-2	4	50	100	3			
15UISC602	PC	Software Engineering	4-0-0	4	50	100	3			
15UISC603	PC	Computer Networks	3-0-0	3	50	100	3			
15UISL604	PC	Web Technology Lab	0-0-2	1	50				50	3
15UISL605	PC	Mini Project-II	0-0-6	4	50				50	3
15UISE6XX	PE	Elective – I	4-0-0	4	50	100	3			
15UISE6XX	PE	Elective – II	4-0-0	4	50	100	3			
Total			**22-0-10**	**28**	**400**	**600**			**100**	

Code	Elective – I	Code	Elective –II
15UISE620	Unix Systems Programming	15UISE623	Computer Graphics
15UISE621	Advanced Computer Architecture	15UISE624	Advanced Data Base Management System
15UISE622	Advanced Data Structures	15UISE625	System simulation and Modeling

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for VII Semester

Course Code	Course Category	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
15UISC700	PC	User Interface Design	4-0-0	4	50	100	3		
15UISC701	PC	Big Data Analytics	4-0-0	4	50	100	3		
15UISC702	PC	Data Mining	3-0-0	3	50	100	3		
15UISL703	PC	Project- Phase I	0-0-4	4	50			50	3
15UISL704	PC	Computer Networks Lab	0-0-2	1	50			50	3
15UISL705	PC	Data Analytics Lab	0-0-2	1	50			50	3
15UISE7XX	PE	Elective-V	4-0-0	4	50	100	3		
15UISE7XX	PE	Elective-VI	4-0-0	4	50	100	3		
Total			**19-0-8**	**25**	**400**	**500**		**150**	

Code	Elective – I	Code	Elective –II
15UISE750	Cloud Computing	15UISE760	Mobile computing
15UISE751	Object Oriented modeling & Design	15UISE761	Information Storage Management
15UISE752	Software Testing	15UISE762	Internet of Things

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for VIII Semester

Course Code	Course Category	Course Title	Teaching L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration In hours
15UISC800	PC	Machine Learning	3-0-0	3	50	100	3		
15UISL801	PC	Project- Phase II	0-0-6	10	50			50	3
15UISL802	PC	Seminar	0-0-2	2	50				
15UISL803	PC	Machine Learning Lab	0-0-2	1	50			50	3
15UISE8XX	PE	Elective – VII	4-0-0	4	50	100	3		
15UISE8XX	PE	Elective – VIII	4-0-0	4	50	100	3		
Total			11-0-10	24	300	300		100	

Code	Elective – I	Code	Elective –II
15UISE850	Network Security & Cryptography	15UISE860	Wireless Sensor Networks
15UISE851	Artificial Intelligence	15UISE861	Digital Image Processing
15UISE852	Project management	15UISE862	Service Oriented Architecture

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

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Scheme for III Semester

Course Code	Course Category	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
18UMAC300	BS	Engineering Mathematics-III	3 - 0 - 0	3	50	100	3	-	-
18UISC300	PC	Data Structures	3 - 2 - 0	4	50	100	3	-	-
18UISC301	PC	Logic Design	3 - 0 - 0	3	50	100	3	-	-
18UISC302	PC	Discrete Mathematics & Graph Theory	4 - 0 - 0	4	50	100	3	-	-
18UISC303	PC	Unix and Shell Programming	3 - 0 - 2	4	50	100	3	-	-
18UISC304	PC	Computer Organization and Architecture	3 - 0 - 0	3	50	100	3	-	-
18UISL305	PC	Data Structures Laboratory	0 - 0 - 3	1.5	50	-	-	50	3
18UISL306	PC	Logic Design Laboratory	0 - 0 -3	1.5	50	-	-	50	3
Total			**19 - 2 - 8**	**24**	**400**	**600**		**100**	

CIE: Continuous Internal Evaluation **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

BS- Basic Science, PC- Program Core

Scheme for IV Semester

Course Code	Course Category	Course Title	Teaching L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration In hours
18UMAC400	BS	Engineering Mathematics - IV	3 - 0 - 0	3	50	100	3	-	-
18UISC400	PC	Object Oriented Programming	4 - 0 - 0	4	50	100	3	-	-
18UISC401	PC	Microcontroller	4 - 0 - 0	4	50	100	3	-	-
18UISC402	PC	Finite Automata and Formal Language	3 - 2 - 0	4	50	100	3	-	-
18UISC403	PC	Design and Analysis of Algorithms	3 - 0 - 0	3	50	100	3	-	-
18UISC404	PC	Operating System	3 - 0 - 0	3	50	100	3	-	-
18UISL405	PC	Object Oriented Programming Laboratory	0 - 0 - 3	1.5	50	-	-	50	3
18UISL406	PC	Microcontroller Laboratory	0 - 0 -3	1.5	50	-	-	50	3
18UISL407	PC	Introductory Project	0 - 0-2	1	50	-	-	-	-
Total			**20 - 2 -8**	**25**	**450**	**600**		**100**	

CIE: Continuous Internal Evaluation SEE: Semester End Examination* L: Lecture   T: Tutorials   P: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

BS- Basic Science, PC- Program Core

Total Credits offered for the Second year: 49

Scheme for V Semester

Course Code	Course Category	Course Title	Teaching		Examination					
			L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE)			Practical (SEE)	
						*Max. Marks	Duration in hours		Max. Marks	Duration in hours
15UISC500	PC	Management, Entrepreneurship and Intellectual Property Rights	4-0-0	4	50	100	3			
15UISC501	PC	Operating Systems	4-0-0	4	50	100	3			
15UISC502	PC	Database Management System	4-0-0	4	50	100	3			
15UISC503	PC	System software	4-0-0	4	50	100	3			
15UISC504	PC	Programming in Java	4-0-0	4	50	100	3			
15UISL505	PC	Database Management System Lab	0-0-2	1	50				50	3
15UISL506	PC	Java Lab	0-0-2	1	50				50	3
15UISL507	PC	Mini project – I	0-0-6	4	50	100	3			
Total			**20-0-10**	**26**	**400**	**600**			**100**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for VI Semester

Course Code	Course Category	Course Title	Teaching		Examination					
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)			Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration In hours	
15UISC600	PC	Web Technology	4-0-0	4	50	100	3		
15UISC601	PC	File structures	3-0-2	4	50	100	3		
15UISC602	PC	Software Engineering	4-0-0	4	50	100	3		
15UISC603	PC	Computer Networks	3-0-0	3	50	100	3		
15UISL604	PC	Web Technology Lab	0-0-2	1	50			50	3
15UISL605	PC	Mini Project-II	0-0-6	4	50			50	3
15UISE6XX	PE	Elective – I	4-0-0	4	50	100	3		
15UISE6XX	PE	Elective – II	4-0-0	4	50	100	3		
Total			**22-0-10**	**28**	**400**	**600**		**100**	

Code	Elective – I	Code	Elective –II
15UISE620	Unix Systems Programming	15UISE623	Computer Graphics
15UISE621	Advanced Computer Architecture	15UISE624	Advanced Data Base Management System
15UISE622	Advanced Data Structures	15UISE625	System simulation and Modeling

CIE: Continuous Internal Evaluation　　　**SEE**: Semester End Examination*

L: Lecture　　**T**: Tutorials　　**P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Total Credits offered for the ThirdYear: 54

Scheme for VII Semester

Course Code	Course Category	Course Title	Teaching L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
15UISC700	PC	User Interface Design	4-0-0	4	50	100	3		
15UISC701	PC	Big Data Analytics	4-0-0	4	50	100	3		
15UISC702	PC	Data Mining	3-0-0	3	50	100	3		
15UISL703	PC	Project- Phase I	0-0-6	4	50			50	3
15UISL704	PC	Computer Networks Lab	0-0-2	1	50			50	3
15UISL705	PC	Data Analytics Lab	0-0-2	1	50			50	3
15UISE7XX	PE	Elective-V	4-0-0	4	50	100	3		
15UISE7XX	PE	Elective-VI	4-0-0	4	50	100	3		
Total			**19-0-10**	**25**	**400**	**500**		**150**	

Code	Elective – I	Code	Elective –II
15UISE750	Cloud Computing	15UISE760	Mobile computing
15UISE751	Object Oriented modeling & Design	15UISE761	Information Storage Management
15UISE752	Software Testing	15UISE762	Internet of Things

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for VIII Semester

Course Code	Course Category	Course Title	Teaching		Examination					
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)		
					Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration In hours	
15UISC800	PC	Machine Learning	3-0-0	3	50	100	3			
15UISL801	PC	Project- Phase II	0-0-6	10	50			50	3	
15UISL802	PC	Seminar	0-0-2	2	50					
15UISL803	PC	Machine Learning Lab	0-0-2	1	50			50	3	
15UISE8XX	PE	Elective – VII	4-0-0	4	50	100	3			
15UISE8XX	PE	Elective – VIII	4-0-0	4	50	100	3			
Total			**11-0-10**	**24**	**300**	**300**		**100**		

Code	Elective – I	Code	Elective –II
15UISE850	Network Security & Cryptography	15UISE860	Wireless Sensor Networks
15UISE851	Artificial Intelligence	15UISE861	Digital Image Processing
15UISE852	Project management	15UISE862	Service Oriented Architecture

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

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Scheme for III Semester

Course Code	Course Category	Course Title	Teaching		CIE	Theory (SEE)		Practical (SEE)	
			L-T-P (Hrs/Week)	Credits	Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
18UMAC300	BS	Engineering Mathematics-III	3 - 0 - 0	3	50	100	3	-	-
18UISC300	PC	Data Structures	3 - 2 - 0	4	50	100	3	-	-
18UISC301	PC	Logic Design	3 - 0 - 0	3	50	100	3	-	-
18UISC302	PC	Discrete Mathematics & Graph Theory	4 - 0 - 0	4	50	100	3	-	-
18UISC303	PC	Unix and Shell Programming	3 - 0 - 2	4	50	100	3	-	-
18UISC304	PC	Computer Organization and Architecture	3 - 0 - 0	3	50	100	3	-	-
18UISL305	PC	Data Structures Laboratory	0 - 0 - 3	1.5	50	-	-	50	3
18UISL306	PC	Logic Design Laboratory	0 - 0 -3	1.5	50	-	-	50	3
Total			**19 - 2 - 8**	**24**	**400**	**600**		**100**	

CIE: Continuous Internal Evaluation **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks

BS- Basic Science, PC- Program Core

Scheme for IV Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration In hours
18UMAC400	BS	Engineering Mathematics - IV	3 - 0 - 0	3	50	100	3	-	-
18UISC400	PC	Object Oriented Programming	4 - 0 - 0	4	50	100	3	-	-
18UISC401	PC	Microcontroller	4 - 0 - 0	4	50	100	3	-	-
18UISC402	PC	Finite Automata and Formal Language	3 - 2 - 0	4	50	100	3	-	-
18UISC403	PC	Design and Analysis of Algorithms	3 - 0 - 0	3	50	100	3	-	-
18UISC404	PC	Operating System	3 - 0 - 0	3	50	100	3	-	-
18UISL405	PC	Object Oriented Programming Laboratory	0 - 0 - 3	1.5	50	-	-	50	3
18UISL406	PC	Microcontroller Laboratory	0 - 0 -3	1.5	50	-	-	50	3
18UISL407	PC	Introductory Project	0 - 0- 2	1	50	-	-	-	-
Total			20 - 2 -8	25	450	600		100	

CIE: Continuous Internal Evaluation **SEE**: Semester End Examination* **L**: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

BS- Basic Science, PC- Program Core

Scheme for V Semester

Course Code	Course Category	Course Title	L-T-P (Hrs./Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in Hrs.	Practical (SEE) Max. Marks	Practical (SEE) Duration in Hrs.
18UHUC500	HU	Management, Entrepreneurship and IPR	4 - 0 - 0	4	50	100	3	-	-
18UISC500	PC	Software Engineering	4 - 0 - 0	4	50	100	3	-	-
18UISC501	PC	Java and Web Technology	4 - 0 - 0	4	50	100	3	-	-
18UISC502	PC	Database Management System	3 - 0 - 0	3	50	100	3	-	-
18UISC503	PC	Computer Networks	3 - 0 - 0	3	50	100	3	--	--
18UISE5XX	PE	Program Elective-1	3 - 0 - 0	3	50	100	3	--	--
18UISL504	PC	Database Management System Lab	0 - 0 - 3	1.5	50	--	--	50	3
18UISL505	PC	Java Lab	0 - 0 - 3	1.5	50	--	--	50	3
18UISL506	PC	Minor Project-1	0 - 0 - 2	1	50	--	--	--	--
18UHUL507	HU	Soft skills/Aptitude	0 - 0 - 2	1	50	--	--	--	--
Total			**21 - 0 - 10**	**26**	**500**	**600**		**100**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination* **L**: Lecture   **T**: Tutorials **P**: Practical
*SEE for theory courses is conducted for 100 marks and reduced to 50 marks
PC- Program Core HU- Humanities, PC- Program Core

 Minor project – 1 is undertaken to focus on the domain related problem definitions, building prototypes which can lead to take up the project in the higher semester(s). The work based on the core courses studied shall be used to formulate the problem. The team consisting of 10-12 students shall be asked to identify the problems related to community and try to propose the solution. The faculty members handling the courses for that semester shall guide the students. A committee consisting of minimum 3 faculty members shall evaluate at the end for CIE. There is no SEE for Minor project-1.

 Soft skills/Aptitude: This is included with an objective of improving the communication skills, proficiency in English language and aptitude ability of the student. This is a credit course and aimed to enhance the employability. Both the internal and external resource persons shall be engaged in imparting the related knowledge and shall have only CIE as the evaluation component. There shall be one test conducted at the end for 25 marks in Aptitude testing and there shall be one presentation by the student for 25 marks or any other suitable testing components. The arrangement for CIE evaluation is to be done by the department and maintain the relevant documents.

Management, Entrepreneurship and IPR course shall be taught in the V semester only. However, the departments can take flexibility of deciding the contents of the course as per the department specific requirements. The credit for this course is 4 and common to all departments

Elective

Code	Elective – 1
18UISE511	System software
18UISE512	Advanced Data Structures
18UISE513	Real Time Operating Systems and Embedded Systems

Scheme for VI Semester

Course Code	Course Category	Course Title	L-T-P (Hrs./Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in Hrs.	Practical (SEE) Max. Marks	Practical (SEE) Duration in Hrs.
18UISC600	PC	Artificial Intelligence and Machine Learning	3-0-2	4	50	100	3	-	-
18UISC601	PC	Internet of Things	4-0-0	4	50	100	3	-	-
18UISE6XX	PE	Program Elective-2	3-0-0	3	50	100	3	-	-
18UISE6XX	PE	Program Elective-3	3-0-0	3	50	100	3	-	-
18UISO6XX	OE	Open Elective	3-0-0	3	50	100	3	--	--
18UISL602	PC	Computer Networks Lab	0-0-3	1.5	50	--	--	50	3
18UISL603	PC	Web Technology Lab	0-0-3	1.5	50	--	--	50	3
18UISL604	PC	Minor Project-2	0-0-4	2	50	--	--	50	3
18UHUL605	HU	Soft skills/Aptitude	0-0-2	1	50	--	--	--	--
		Total	**16 - 0 -14**	**23**	**450**	**500**		**150**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination* **L**: Lecture   **T**: Tutorials **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

PC- Program Core, PE-Program Elective, OE- Open Elective and HU- Humanities.

Minor project-2 is to be taken up having had an exposure to the project work in the previous semesters. The students are expected to locate the state-of-the-art technology in his/her domain of interest by an extensive literature survey and select a topic from an emerging area relevant to their branch/interdisciplinary and define the problem for the project work. The problem could be defined to develop prototypes for industrial needs. A team consisting of not more than 4 students shall be guided by a faculty member. This project work is to supplement and prepare the students to take up major project work at higher semesters. A committee consisting of minimum 3 faculty members shall evaluate at the end for CIE with suitable rubrics. The weightage of marks shall be 50% for the committee and 50% for the guide. There is a SEE (viva voce) examination which shall be examined by two internal examiners appointed by COE based on the suggestions by the respective HoD.

Soft skills/Aptitude: This is included with an objective of improving the communication skills, proficiency in English language and aptitude ability of the student. This is a credit course and aimed to enhance the employability. Both the internal and external resource persons shall be engaged in imparting the related knowledge and shall have only CIE as the evaluation component. There shall be one test conducted at the end for 25 marks in Aptitude testing and there shall be one presentation by the student for 25 marks or any other suitable testing components. The arrangement for CIE evaluation is to be done by the department and maintain the relevant documents.

Elective

Code	Elective – 2	Code	Elective – 3	Code	Open Elective
18UISE611	ADBMS	18UISE621	Object Oriented Modeling and Design	18UISO631	Management Information Systems
18UISE612	User Interface Design	18UISE622	Data mining	18UISO632	Cyber Law and Ethics
18UISE613	Computer graphics using Open GL	18UISE623	Unix Systems Programming	18UISO633	Agile Methodologies

Scheme for VII Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE)		Practical (SEE)	
						*Max. Marks	Duration in hours	Max. Marks	Duration in hours
15UISC700	PC	User Interface Design	4-0-0	4	50	100	3	-	-
15UISC701	PC	Big Data Analytics	4-0-0	4	50	100	3	-	-
15UISC702	PC	Data Mining	3-0-0	3	50	100	3	-	-
15UISL703	PC	Project- Phase I	0-0-6	4	50	-	-	50	3
15UISL704	PC	Computer Network Lab	0-0-2	1	50	-	-	50	3
15UISL705	PC	Data Analytics Lab	0-0-2	1	50	-	-	50	3
15UISE7XX	PE	Elective-V	4-0-0	4	50	100	3	-	-
15UISE7XX	PE	Elective-VI	4-0-0	4	50	100	3	-	-
Total			**19-0-10**	**25**	**400**	**500**		**150**	

Code	Elective – V	Code	Elective –VI
15UISE750	Cloud Computing	15UISE760	Mobile computing
15UISE751	Object Oriented modeling & Design	15UISE761	Information Storage Management
15UISE752	Software Testing	15UISE762	Internet of Things

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

Scheme for VIII Semester

Course Code	Course Category	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration In hours
15UISC800	PC	Machine Learning	3-0-0	3	50	100	3	-	-
15UISL801	PC	Project- Phase II	0-0-6	10	50	-	-	50	3
15UISL802	PC	Seminar	0-0-2	2	50	-	-	-	-
15UISL803	PC	Machine Learning Lab	0-0-2	1	50	-	-	50	3
15UISE8XX	PE	Elective – VII	4-0-0	4	50	100	3	-	-
15UISE8XX	PE	Elective – VIII	4-0-0	4	50	100	3	-	-
Total			11-0-10	24	300	300		100	

Code	Elective – VII	Code	Elective –VIII
15UISE850	Network Security & Cryptography	15UISE860	Wireless Sensor Networks
15UISE851	Artificial Intelligence	15UISE861	Digital Image Processing
15UISE852	Project management	15UISE862	Service Oriented Architecture

CIE: Continuous Internal Evaluation **SEE**: Semester End Examination*

L: Lecture **T**: Tutorials **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

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Scheme for III Semester

Course Code	Course Category	Course Title	Teaching		Examination					
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)			Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in hours		Max. Marks	Duration in hours
18UMAC300	BS	Engineering Mathematics-III	3 - 0 - 0	3	50	100	3		-	-
18UISC300	PC	Data Structures	3 - 2 - 0	4	50	100	3		-	-
18UISC301	PC	Logic Design	3 - 0 - 0	3	50	100	3		-	-
18UISC302	PC	Discrete Mathematics & Graph Theory	4 - 0 - 0	4	50	100	3		-	-
18UISC303	PC	Unix and Shell Programming	3 - 0 - 2	4	50	100	3		-	-
18UISC304	PC	Computer Organization and Architecture	3 - 0 - 0	3	50	100	3		-	-
18UISL305	PC	Data Structures Laboratory	0 - 0 - 3	1.5	50	-	-		50	3
18UISL306	PC	Logic Design Laboratory	0 - 0 -3	1.5	50	-	-		50	3
Total			19 - 2 - 8	24	400	600			100	

CIE: Continuous Internal Evaluation **SEE**: Semester End Examination*

L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks

BS- Basic Science, PC- Program Core

Scheme for IV Semester

Course Code	Course Category	Course Title	Teaching L-T-P (Hrs/Week)	Teaching Credits	Examination CIE Max. Marks	Examination Theory (SEE) *Max. Marks	Examination Theory (SEE) Duration in hours	Examination Practical (SEE) Max. Marks	Examination Practical (SEE) Duration In hours
18UMAC400	BS	Engineering Mathematics - IV	3 - 0 - 0	3	50	100	3	-	-
18UISC400	PC	Object Oriented Programming	4 - 0 - 0	4	50	100	3	-	-
18UISC401	PC	Microcontroller	4 - 0 - 0	4	50	100	3	-	-
18UISC402	PC	Finite Automata and Formal Language	3 - 2 - 0	4	50	100	3	-	-
18UISC403	PC	Design and Analysis of Algorithms	3 - 0 - 0	3	50	100	3	-	-
18UISC404	PC	Operating System	3 - 0 - 0	3	50	100	3	-	-
18UISL405	PC	Object Oriented Programming Laboratory	0 - 0 - 3	1.5	50	-	-	50	3
18UISL406	PC	Microcontroller Laboratory	0- 0- 3	1.5	50	-	-	50	3
18UISL407	PC	Introductory Project	0 - 0- 2	1	50	-	-	-	-
Total			**20 - 2 -8**	**25**	**450**	**600**		**100**	

CIE: Continuous Internal Evaluation **SEE**: Semester End Examination* **L**: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

BS- Basic Science, PC- Program Core

Total Credits offered for the Second year: 49

Scheme for V Semester

Course Code	Course Category	Course Title	Teaching		Examination					
			L-T-P (Hrs./Week)	Credits	CIE	Theory (SEE)			Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.		Max. Marks	Duration in Hrs.
18UHUC500	HU	Management, Entrepreneurship and IPR	4 - 0 - 0	4	50	100	3		-	-
18UISC500	PC	Software Engineering	4 - 0 - 0	4	50	100	3		-	-
18UISC501	PC	Java and Web Technology	4 - 0 - 0	4	50	100	3		-	-
18UISC502	PC	Database Management System	3 - 0 - 0	3	50	100	3		-	-
18UISC503	PC	Computer Networks	3 - 0 - 0	3	50	100	3		--	--
18UISE5XX	PE	Program Elective-1	3 - 0 - 0	3	50	100	3		--	--
18UISL504	PC	Database Management System Lab	0 - 0 - 3	1.5	50	--	--		50	3
18UISL505	PC	Java Lab	0 - 0 - 3	1.5	50	--	--		50	3
18UISL506	PC	Minor Project-1	0 - 0 - 2	1	50	--	--		--	--
18UHUL507	HU	Soft skills/Aptitude	0 - 0 - 2	1	50	--	--		--	--
Total			**21 - 0 - 10**	**26**	**500**	**600**			**100**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination* **L**: Lecture   **T**: Tutorials **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks

PC- Program Core HU- Humanities, PC- Program Core

Minor project – 1 is undertaken to focus on the domain related problem definitions, building prototypes which can lead to take up the project in the higher semester(s). The work based on the core courses studied shall be used to formulate the problem. The team consisting of 10-12 students shall be asked to identify the problems related to community and try to propose the solution. The faculty members handling the courses for that semester shall guide the students. A committee consisting of minimum 3 faculty members shall evaluate at the end for CIE. There is no SEE for Minor project-1.

Soft skills/Aptitude: This is included with an objective of improving the communication skills, proficiency in English language and aptitude ability of the student. This is a credit course and aimed to enhance the employability. Both the internal and external resource persons shall be engaged in imparting the related knowledge and shall have only CIE as the evaluation component. There shall be one test conducted at the end for 25 marks in Aptitude testing and there shall be one presentation by the student for 25 marks or any other suitable testing components. The arrangement for CIE evaluation is to be done by the department and maintain the relevant documents.

Management, Entrepreneurship and IPR course shall be taught in the V semester only. However, the departments can take flexibility of deciding the contents of the course as per the department specific requirements. The credit for this course is 4 and common to all departments

Elective

Code	Elective – 1
18UISE511	System software
18UISE512	Advanced Data Structures
18UISE513	Real Time Operating Systems and Embedded Systems

Scheme for VI Semester

Course Code	Course Category	Course Title	Teaching		Examination					
			L-T-P (Hrs./Week)	Credits	CIE Max. Marks	Theory (SEE)			Practical (SEE)	
						*Max. Marks	Duration in Hrs.		Max. Marks	Duration in Hrs.
18UISC600	PC	Artificial Intelligence and Machine Learning	3-0-2	4	50	100	3		-	-
18UISC601	PC	Internet of Things	4-0-0	4	50	100	3		-	-
18UISE6XX	PE	Program Elective-2	3-0-0	3	50	100	3		-	-
18UISE6XX	PE	Program Elective-3	3-0-0	3	50	100	3		-	-
18UISO6XX	OE	Open Elective	3-0-0	3	50	100	3		--	--
18UISL602	PC	Computer Networks Lab	0-0-3	1.5	50	--	--		50	3
18UISL603	PC	Web Technology Lab	0-0-3	1.5	50	--	--		50	3
18UISL604	PC	Minor Project-2	0-0-4	2	50	--	--		50	3
18UHUL605	HU	Soft skills/Aptitude	0-0-2	1	50	--	--		--	--
		Total	**16 - 0 -14**	**23**	**450**	**500**			**150**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination* **L**: Lecture   **T**: Tutorials **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

PC- Program Core, PE-Program Elective, OE- Open Elective and HU- Humanities.

Total Credits offered for the Second year: 49

Scheme for VII Semester

Course Code	Course Category	Course Title	Teaching		Examination					
			L-T-P (Hrs./Week)	Credits	CIE	Theory (SEE)			Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration in Hrs.
18UISC700	PC	Big Data Analytics	3-2-0	4	50	100	3	-	-
18UISC701	PC	Storage Management	4-0-0	4	50	100	3	-	-
18UISO7XX	PE	Program Elective-4	3-0-0	3	50	100	3	-	-
18UISE7XX	OE	Open Elective	3-0-0	3	50	100	3	--	--
18UISL702	PC	Big Data Analytics Lab	0-0-2	1	50	--	--	50	3
18UISL703	PC	Major Project Phase-1	0- 0 -4	2	50	--	--	50	3
18UISL704	PC	Internship	4weeks	2	50	--	--	50	3
Total			**13-2-6**	**19**	**350**	**400**		**150**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination* **L**: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for 100 marks and reduced to 50 marks

PC- Program Core

Elective

Code	Elective – 4	Code	Open Elective
18UISE711	Digital Image Processing	18UISO721	Cloud Computing
18UISE712	Mobile Communication and Computing	18UISO722	Supply Chain Management
18UISE713	Deep Learning	18UISO723	Virtual Reality and Augmented Reality

18UISE714	Software Testing		

Scheme for VIII Semester

Course Code	Course Category	Course Title	Teaching		Examination					
			L-T-P (Hrs./Week)	Credits	CIE	Theory (SEE)			Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.		Max. Marks	Duration in Hrs.
18UISC800	PC	Cryptography and Cyber Security	4-0-0	4	50	100	3		-	-
18UIS8XX	PE	Program Elective-5	3-0-0	3	50	100	3		-	-
18UISO8XX	OE	Open Elective	3-0-0	3	50	100	3		--	--
18UISL801	PC	Technical Seminar	0-0-2	1	50	--	--		--	--
18UISL802	PC	Major Project Phase-2	0-0 -12	7	50	--	--		50	3
Total			10-0-14	18	250	300	--		50	--

PC- Program Core ,PE-Program Elective, OE- Open Elective

Code	Program Elective-5	Code	Program / Open Elective
18UISE811	Wireless Sensor Networks	18UISO821	Dev-Ops
18UISE812	Block Chain Management	18UISO822	Data Sciences
18UISE813	Data Compression	18UISO823	Computer Vision

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I Semester M. Tech.

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max.	*Max.	Duration	Max.	Duration
18PITEC100	Big Data Analytics	4-0-0	4	50	100	3		
18PITEC101	Applied Mathematics	4-0-0	4	50	100	3		
18PITEEXXX	Elective 1	4-0-0	4	50	100	3		
18PITEEXXX	Elective 2	4-0-0	4	50	100	3		
18PITEEXXX	Elective 3	3-0-2	4	50	100	3		
18PITEL102	Data Analytics Lab	0-0-3	2	50			50	3
18PITEL103	** Seminar	0-0-3	1	100				
Total		19-0-8	23	400	500		50	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examinations
L: Lecture   **T**: Tutorials   **P**: Practical
*   SEE for theory courses is conducted for 100 marks and reduced to 50 marks
**   Seminar is to be conducted every week and 2-3 students/week will present a topic from emerging areas in power systems preferably the contents not studied in their regular courses. The seminar shall be evaluated by 3 faculty members having specialization in power system and allied areas.

Elective List:

Course Code	Elective Courses	Course Code	Elective Courses
18PITEE125	Agile Technology	18PITEE128	Fuzzy System
18PITEE126	Web Services	18PITEE129	Artificial Intelligence
18PITEE127	Internet of things		

II Semester M. Tech.

| Course Code | Course Title | Teaching | | Examination | | | | |
| | | L-T-P (Hrs/Week) | Credits | CIE | Theory (SEE) | | Practical (SEE) | |
				Max.	*Max.	Duration	Max.	Duration
18PITEC200	Machine Learning	4-0-0	4	50	100	3		
18PITEC201	Natural Language Processing	3-0-2	4	50	100	3		
18PITEEXXX	Elective 4	4-0-0	4	50	100	3		
18PITEEXXX	Elective 5	4-0-0	4	50	100	3		
18PITEEXXX	Elective 6	4-0-0	4	50	100	3		
18PITEL202	Machine learning Lab	0-0-3	2	50			50	3
18PITEL203	** Seminar	0-0-3	1	100				
Total		19-0-8	23	400	500		50	

CIE: Continuous Internal Evaluation **SEE**: Semester End Examinations
L: Lecture **T**: Tutorials **P**: Practical
* SEE for theory courses is conducted for 100 marks and reduced to 50 marks
* * Seminar is to be conducted every week and 2-3 students/week will present a topic from emerging areas in power systems preferably the contents not studied in their regular courses. The seminar shall be evaluated by 3 faculty members having specialization in power system and allied areas.

Elective List:

Course Code	Elective Courses	Course Code	Elective Courses
18PITEE225	Web Services	18PITEE228	Predictive Modeling
18PITEE226	Cloud Computing	18PITEE229	Optimization Technique
18PITEE227	Simulation and Modeling		

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| Course Code | Course Title | Teaching | | Examination | | | | |
| | | L-T-P-S (Hrs/Week) | Credits | CIE | Theory (SEE) | | Practical (SEE) | |
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
18PITEC300	Computer Vision	4-0-0	4	50	100	3		
18PITEEXX	Elective 7	4-0-0	4	50	100	3		
18PITELXXX	Internship in Industry/R&D organization/ Elective 8	** Min 4 weeks during vacation after 2ndsem/ 3-0-0	3	50/50	100	3	50	3
18PITEL302	*** Project Phase 1	0-0-15	9	50			50	3
Total		**8/11-0-15**	**20**	**200**	**200/300**		**100**	

* SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

** The students are expected to undergo training in industry for a period of **four weeks** during the vacation immediately after completion of II Semester examination. A faculty is to be allotted to guide the student. A committee consisting of three faculty members shall evaluate the work carried out and the knowledge the students have acquired. **OR The students can take one elective course if they do not undergo internship.**

Project phase-I: The students are expected to formulate the problem and carry out the intensive literature survey along with preliminary investigations supporting the project phase-II in IV semester

Elective 7

Course code	Elective Courses
18PITEE325	Modern Cryptography
18PITEE326	Deep Learning
18PITEE327	Knowledge Discovery

Elective 8

Course code	Elective Courses
18PITEE335	Pattern Recognition
18PITEE336	Distributed Computing
18PITEE337	Bio Informatics

IV Semester M. Tech.

Course Code	Course Title	Teaching		Examination					
		L-T-P-S (Hrs/Week)	Credits	CIE	Theory (SEE)			Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours		Max. Marks	Duration in hours
18PITEL400	Project phase-II	0-0-20	22	100	-	-		100	3
Total		**0-0-20**	**22**	**100**	**-**			**100**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination

L: Lecture   **T**: Tutorials   **P**: Practical

*   SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

**   Project phase-II: The students are expected to work on a project for the full semester in an industry or an institution

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Scheme of Teaching and Examination
I Semester M. Tech.

| Course Code | Course Title | Teaching | | Examination | | | | |
| | | L-T-P (Hrs/Week) | Credits | CIE | Theory (SEE) | | Practical (SEE) | |
				Max.	*Max.	Duration	Max.	Duration
18PITEC100	Big Data Analytics	4-0-0	4	50	100	3		
18PITEC101	Applied Mathematics	4-0-0	4	50	100	3		
18PITEEXXX	Elective 1	4-0-0	4	50	100	3		
18PITEEXXX	Elective 2	4-0-0	4	50	100	3		
18PITEEXXX	Elective 3	3-0-2	4	50	100	3		
18PITEL102	Data Analytics Lab	0-0-3	2	50			50	3
18PITEL103	** Seminar	0-0-3	1	100				
Total		**19-0-8**	**23**	**400**	**500**		**50**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examinations
L: Lecture   **T**: Tutorials   **P**: Practical
*   SEE for theory courses is conducted for 100 marks and reduced to 50 marks
**   Seminar is to be conducted every week and 2-3 students/week will present a topic from emerging areas in power systems preferably the contents not studied in their regular courses. The seminar shall be evaluated by 3 faculty members having specialization in power system and allied areas.

Elective List:

Course Code	Elective Courses	Course Code	Elective Courses
18PITEE125	Agile Technology	18PITEE128	Fuzzy System
18PITEE126	Web Services	18PITEE129	Artificial Intelligence
18PITEE127	Internet of things		

II Semester M. Tech.

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max.	*Max.	Duration	Max.	Duration
18PITEC200	Machine Learning	4-0-0	4	50	100	3		
18PITEC201	Natural Language Processing	3-0-2	4	50	100	3		
18PITEEXXX	Elective 4	4-0-0	4	50	100	3		
18PITEEXXX	Elective 5	4-0-0	4	50	100	3		
18PITEEXXX	Elective 6	4-0-0	4	50	100	3		
18PITEL202	Machine learning Lab	0-0-3	2	50			50	3
18PITEL203	** Seminar	0-0-3	1	100				
Total		19-0-8	23	400	500		50	

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Elective List:

Course Code	Elective Courses	Course Code	Elective Courses
18PITEE225	Web Services	18PITEE228	Predictive Modeling
18PITEE226	Cloud Computing	18PITEE229	Optimization Technique
18PITEE227	Simulation and Modeling		

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Course Code	Course Title	Teaching		Examination				
		L-T-P-S (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
18PITEC300	Computer Vision	4-0-0	4	50	100	3		
18PITEEXX	Elective 7	4-0-0	4	50	100	3		
18PITELXXX	Internship in Industry/R&D organization/ Elective 8	** Min 4 weeks during vacation after 2nd sem/ 3-0-0	3	50/50	100	3	50	3
18PITEL302	*** Project Phase 1	0-0-15	9	50			50	3
Total		**8/11-0-15**	**20**	**200**	**200/300**		**100**	

*   SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

**   The students are expected to undergo training in industry for a period of **four weeks** during the vacation immediately after completion of II Semester examination. A faculty is to be allotted to guide the student. A committee consisting of three faculty members shall evaluate the work carried out and the knowledge the students have acquired. **OR The students can take one elective course if they do not undergo internship.**

Project phase-I: The students are expected to formulate the problem and carry out the intensive literature survey along with preliminary investigations supporting the project phase-II in IV semester

Elective 7   **Elective 8**

Course code	Elective Courses
18PITEE325	Modern Cryptography
18PITEE326	Deep Learning

18PITEE327	Knowledge Discovery

Course code	Elective Courses
18PITEE335	Pattern Recognition
18PITEE336	Distributed Computing
18PITEE337	Bio Informatics

IV Semester M. Tech.

Course Code	Course Title	Teaching		Examination					
		L-T-P-S (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)		
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours	
18PITEL400	Project phase-II	0-0-20	22	100	-	-	100	3	
Total		**0-0-20**	**22**	**100**	**-**		**100**		

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination
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*   SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

**   Project phase-II: The students are expected to work on a project for the full semester in an industry or an institution
*

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Scheme of Teaching and Examination
I Semester

Course Code	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
20PRMIC100	Research Methodology and IPR	2-0-0	2	50	50	2		
20PITC100	Data Analytics	4-0-0	4	50	100	3		
20PITC101	Distributed Computing Systems	4-0-0	4	50	100	3		
20PITC102	Artificial Intelligence	4-0-0	4	50	100	3		
20PITEXXX	Elective 1	4-0-0	4	50	100	3		
20PITL103	Data Analytics Lab	0-0-3	2	50			50	3
20PITL104	Seminar	0-0-2	1	50				
Total		**18-0-5**	**21**	**350**	**450**		**50**	

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Seminar is to be conducted every week and 2-3 students/week will present a topic from emerging areas in respective PG program preferably the contents not studied in their regular courses. The seminar shall be evaluated by 3 faculty members having specialization in respective program and allied areas.

Electives for I Semester:

Course Code	Elective 1 Courses
20PITE125	Agile Technology
20PITE126	Cloud Computing
20PITE127	Storage Technologies

Scheme of Teaching and Examination
II Semester M. Tech.

Course Code	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
20PITC200	Machine and Deep Learning	4-0-0	4	50	100	3		
20PITC201	Internet of Things	3-2-0	4	50	100	3		
20PITEXXX	Elective 2	3-0-2	4	50	100	3		
20PITEXXX	Elective 3	4-0-0	4	50	100	3		
20PITEXXX	Elective 4	3-0-2	4	50	100	3		
20PITL202	Machine Learning Lab	0-0-3	2	50			50	3
20PITL203	Seminar	0-0-2	1	50				
Total		**17-2-9**	**23**	**350**	**500**		**50**	

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L: Lecture   **T**: Tutorials   **P**: Practical

*SEE for theory courses is conducted for **100 marks** and reduced to **50 marks**.

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Seminar is to be conducted every week and 2-3 students/week will present a topic from emerging areas in respective PG program preferably the contents not studied in their regular courses. The seminar shall be evaluated by 3 faculty members having specialization in respective program and allied areas.

Electives for II Semester:

Course Code	Elective 2 Courses	Course Code	Elective 3 Courses	Course Code	Elective 4 Courses
20PITE225	Data Science	20PITE228	Virtual reality	20PITE231	Advanced Computer Graphics
20PITE226	Client-server Programming	20PITE229	Parallel Computing	20PITE232	User Interface Design
20PITE227	Network Engineering	20PITE230	Mobile Adhoc & sensor network	20PITE233	Pervasive computing

Scheme of Teaching and Examination
III Semester M. Tech.

Course Code	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
20PITC300	Web Services	4-0-0	4	50	100	3		
20PITEXXX	Elective 5	3-0-0	3	50	100	3		
20PITEXXX	Elective 6	3-0-0	3	50	100	3		
20PITEXXX	Elective 7	3-0-0	3	50	100	3	--	--
				OR				
20PITL301	Internship in Industry or R&D organization	** Min 4 weeks during vacation after 2nd sem	3	50	--	--	100	3
20PITL302	*** Project phase 1	0-0-15	9	50			50	3
Total		**13-0-15/10-4weeks-15)**	**22**	**250**	**400/300**		**50/150**	

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** The students are expected to undergo training in industry for a period of *four weeks* during the vacation immediately after completion of II Semester examination. A faculty is to be allotted to guide the student. A committee consisting of three faculty members shall evaluate the work carried out and the knowledge the students have acquired.**OR The students can take one elective course if they do not undergo internship.**
***Project phase-I: The students are expected to formulate the problem and carry out the intensive literature survey along with preliminary investigations supporting the project phase-II in IV semester.

Electives for III Semester:

Course Code	Elective 5 Courses	Course Code	Elective 6 Courses	Course Code	Elective 7 Courses
20PITE325	Computer Vision	20PITE328	Natural Language Processing	20PITE331	Modern Cryptography
20PITE326	Semantic Web and Social Network	20PITE329	Enterprise Application Programming	20PITE322	Bio Informatics
20PITE327	Cyber Crime and Cyber Forensics	20PITE330	Block Chain Management	20PITE333	Data Compression

Scheme of Teaching and Examination
IV Semester M. Tech.

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
20PITL400	Project phase-II	0-0-20	22	100	--	--	100	3
Total		**0-0-20**	**22**	**100**	**--**	**--**	**100**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination

 L: Lecture   **T**: Tutorials   **P**: Practical

 *SEE for theory courses is conducted for 100 marks and reduced to 50 marks.

** Project phase-II: The students are expected to work on a project for the full semester in an
    industry or an institution

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Scheme of Teaching and Examination
I Semester

Course Code	Course Title	Teaching		Examination				
				CIE	Theory (SEE)		Practical (SEE)	
		L-T-P (Hrs/Week)	Credits	Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
20PRMIC100	Research Methodology and IPR	2-0-0	2	50	50	2		
20PITC100	Data Analytics	4-0-0	4	50	100	3		
20PITC101	Distributed Computing Systems	4-0-0	4	50	100	3		
20PITC102	Artificial Intelligence	4-0-0	4	50	100	3		
20PITEXXX	Elective 1	4-0-0	4	50	100	3		
20PITL103	Data Analytics Lab	0-0-3	2	50			50	3
20PITL104	Seminar	0-0-2	1	50				
Total		**18-0-5**	**21**	**350**	**450**		**50**	

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Seminar is to be conducted every week and 2-3 students/week will present a topic from emerging areas in respective PG program preferably the contents not studied in their regular courses. The seminar shall be evaluated by 3 faculty members having specialization in respective program and allied areas.

Electives for I Semester:

Course Code	Elective 1 Courses
20PITE125	Agile Technology

| 20PITE126 | Cloud Computing |
| 20PITE127 | Storage Technologies |

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Scheme of Teaching and Examination
II Semester M. Tech.

| Course Code | Course Title | Teaching | | Examination | | | | |
| | | L-T-P (Hrs/Week) | Credits | CIE | Theory (SEE) | | Practical (SEE) | |
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
20PITC200	Machine and Deep Learning	4-0-0	4	50	100	3		
20PITC201	Internet of Things	3-2-0	4	50	100	3		
20PITEXXX	Elective 2	3-0-2	4	50	100	3		
20PITEXXX	Elective 3	4-0-0	4	50	100	3		
20PITEXXX	Elective 4	3-0-2	4	50	100	3		
20PITL202	Machine Learning Lab	0-0-3	2	50			50	3
20PITL203	Seminar	0-0-2	1	50				
Total		**17-2-9**	**23**	**350**	**500**		**50**	

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20PITE226	Client-server Programming	20PITE229	Parallel Computing	20PITE232	User Interface Design
20PITE227	Network Engineering	20PITE230	Mobile Adhoc & sensor network	20PITE233	Pervasive computing

Scheme of Teaching and Examination
III Semester M. Tech.

Course Code	Course Title	L-T-P (Hrs/Week)	Credits	CIE Max. Marks	Theory (SEE) *Max. Marks	Theory (SEE) Duration in hours	Practical (SEE) Max. Marks	Practical (SEE) Duration in hours
20PITC300	Web Services	4-0-0	4	50	100	3		
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20PITEXXX	Elective 6	3-0-0	3	50	100	3		
20PITEXXX	Elective 7	3-0-0	3	50	100	3	--	--
				OR				
20PITL301	Internship in Industry or R&D organization	** Min 4 weeks during vacation after 2ndsem	3	50	--	--	100	3
20PITL302	*** Project phase 1	0-0-15	9	50			50	3
Total		**13-0-15/10-4weeks-15)**	**22**	**250**	**400/ 300**		**50/150**	

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20PITE326	Semantic Web and Social Network	20PITE329	Enterprise Application Programming	20PITE322	Bio Informatics
20PITE327	Cyber Crime and Cyber Forensics	20PITE330	Block Chain Management	20PITE333	Data Compression

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Scheme of Teaching and Examination
IV Semester M. Tech.

Course Code	Course Title	Teaching		Examination					
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)			Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours		Max. Marks	Duration in hours
20PITL400	Project phase-II	0-0-20	22	100	--	--		100	3
Total		**0-0-20**	**22**	**100**	**--**	**--**		**100**	

CIE: Continuous Internal Evaluation   **SEE**: Semester End Examination

  L: Lecture   **T**: Tutorials   **P**: Practical

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**** Project phase-II: The students are expected to work on a project for the full semester in an industry or an institution

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