

6.2 Course outline

Semester-wise course outline for the entire program

First Year				
First Semester	Couse Code	Title	Credit	Remarks
	CSE 100	Viva-Voce	1	Theory : 15 Cr. Laboratory : 3 Cr. Viva-Voce : 1 Cr.
	MATH 101	Mathematics I (Matrix, Differential Calculus and Coordinate Geometry)	3	
	ENG 103	Communicative English	3	
	CSE 105	Structured Programming	3	
	CSE 106	Structured Programming Laboratory	1	
	CSE 107	Electrical Circuits	3	
	CSE 108	Electrical Circuits Laboratory	1	
	PHY 109	Physics	3	
	URP 112	Computer Aided Engineering Drawing Laboratory	1	
	Total Credit			19
Second Semester	Couse Code	Title	Credit	Remarks
	CSE 150	Viva-Voce	1	Theory : 15 Cr. Laboratory : 4 Cr. Viva-Voce : 1 Cr.
	MATH 151	Mathematics II (Integral Calculus, Differential Equations and Series Solution)	3	
	CSE 153	Discrete Mathematics	3	
	CSE 155	Data Structures	3	
	CSE 156	Data Structures Laboratory	1	
	CSE 157	Electronic Devices and Circuits-I	3	
	CSE 158	Electronic Devices and Circuits-I Laboratory	1	
	CSE 159	Object Oriented Programming (C++)	3	
	CSE 160	Object Oriented Programming (C++) Laboratory	1	
	CSE 162	Technical Writing and Presentation Laboratory	1	
	Total Credit			20

Second Year				
First Semester	Couse Code	Title	Credit	Remarks
	CSE 200	Viva-Voce	1	Theory : 15 Cr. Laboratory : 4 Cr. Viva-Voce : 1 Cr.
	MATH 201	Mathematics –III (Vector, Complex Variable, Fourier Analysis and Laplace Transformation)	3	
	CSE 203	Computer Ethics and Cyber Law	3	
	CSE 205	Numerical Methods	3	
	CSE 206	Numerical Methods Laboratory	1	
	CSE 207	Electronic Devices and Circuits-II	3	
	CSE 208	Electronic Devices and Circuits-II Laboratory	1	
	CSE 209	Algorithms-I	3	
	CSE 210	Algorithms-I Laboratory	1	
	CSE 212	Object Oriented Programming (JAVA) Laboratory	1	
	Total Credit			20
Second Semester	Couse Code	Title	Credit	Remarks
	CSE 250	Viva-Voce	1	Theory : 15 Cr. Laboratory : 4 Cr. Viva-Voce : 1 Cr.
	STAT 251	Introduction to Probability and Statistics	3	
	CSE 253	Digital Logic Design	3	
	CSE 254	Digital Logic Design Laboratory	1	
	CSE 255	Database Systems	3	
	CSE 256	Database Systems Laboratory	1	
	CSE 257	Algorithms-II	3	
	CSE 258	Algorithms-II Laboratory	1	
	CSE 259	Data and Telecommunication	3	
	CSE 260	Data and Telecommunication Laboratory	1	
	Total Credit			20

Third Year				
First Semester	Couse Code	Title	Credit	Remarks
	CSE 300	Viva-Voce	1	Theory : 15 Cr. Laboratory : 6 Cr. Viva-Voce : 1 Cr.
	ECO 301	Economics	3	
	CSE 303	Computer Graphics	3	
	CSE 304	Computer Graphics Laboratory	1	
	CSE 305	Computational Geometry	3	
	CSE 307	Computer Architecture and Organization	3	
	CSE 309	Operating Systems	3	
	CSE 310	Operating Systems Laboratory	1	
	CSE 312	Web Design and Programming Laboratory-I (PHP/C#)	2	
	CSE 314	OOAD Laboratory	2	
	Total Credit			22
Second Semester	Couse Code	Title	Credit	Remarks
	CSE 350	Viva-Voce	1	Theory : 15 Cr. Laboratory : 3 Cr. Viva-Voce : 1 Cr.
	BIS 351	Management and Accounting	3	
	CSE 353	Human Computer Interaction	3	
	CSE 355	Introduction to Bioinformatics	3	
	CSE 357	Microprocessors	3	
	CSE 358	Microprocessors and Assembly Language Laboratory	1	
	CSE 359	Computer Networks	3	
	CSE 360	Computer Networks Laboratory	1	
	CSE 362	Web Design and Programming Laboratory-II (JSP/Python)	1	
	Total Credit			19

Forth Year				
First Semester	Couse Code	Title	Credit	Remarks
	CSE 400	Viva-Voce	1	Theory : 12 Cr. Laboratory : 4 Cr. Research Project : 2 Cr. Viva-Voce : 1 Cr.
	CSE 401	Theory of Computation and Compiler Design	3	
	CSE 403	Software Engineering and Information System Design	3	
	CSE 404	Software Engineering and ISD Laboratory	1	
	CSE 405	Digital Image Processing	3	
	CSE 406	Digital Image Processing Laboratory	1	
	CSE 407	Wireless Networks	3	
	CSE 410	Mobile Application Development Laboratory	2	
	CSE 440	Research Project	2	
	Total Credit			19
Second Semester	Couse Code	Title	Credit	Remarks
	CSE 450	Viva-Voce	1	Theory : 12 Cr. Laboratory : 5 Cr. Research Project : 3 Cr. Viva-Voce : 1 Cr.
	CSE 451	Data Mining and Big Data Analysis	3	
	CSE 452	Data Mining and Big Data Analysis Laboratory	1	
	CSE 453	Artificial Intelligence	3	
	CSE 454	Artificial Intelligence Laboratory	1	
	CSE 455	Software Quality Assurance	3	
	CSE 457	Machine Learning	3	
	CSE 457	Machine Learning Laboratory	1	
	CSE 460	IoT Laboratory	2	
	CSE 480	Research Project	3	
	Total Credit			21