## **6.2** Course outline

Semester-wise course outline for the entire program

	First Year				
	<b>Couse Code</b>	Title	Credit	Remarks	
First Semester	CSE 100	Viva-Voce	1		
	MATH 101	Mathematics I (Matrix, Differential Calculus and	3		
		Coordinate Geometry)			
	ENG 103	Communicative English	3	TD1 15.0	
me	CSE 105	Structured Programming	3	Theory : 15 Cr.	
Se	CSE 106	Structured Programming Laboratory	1	Laboratory : 3 Cr. Viva-Voce : 1 Cr.	
irst	CSE 107	Electrical Circuits	3	viva-voce : 1 Cr.	
	CSE 108	Electrical Circuits Laboratory	1		
	PHY 109	Physics	3		
	URP 112	Computer Aided Engineering Drawing Laboratory	1		
		To	otal Credit	19	
	<b>Couse Code</b>	Title	Credit	Remarks	
	CSE 150	Viva-Voce	1		
٤	MATH 151	Mathematics II (Integral Calculus, Differential Equations and Series Solution)	3		
ste	CSE 153	Discrete Mathematics	3		
me	CSE 155	Data Structures	3	Theory : 15 Cr.	
Š	CSE 156	Data Structures Laboratory	1	Laboratory : 4 Cr.	
Second Semester	CSE 157	Electronic Devices and Circuits-I	3	Viva-Voce : 1 Cr.	
	CSE 158	Electronic Devices and Circuits-I Laboratory	1		
a)					
Se	CSE 159	Object Oriented Programming (C++)	3		
Še	CSE 159 CSE 160	Object Oriented Programming (C++) Laboratory	3		
Se	CSE 159	Object Oriented Programming (C++) Laboratory Technical Writing and Presentation Laboratory	3 1 1 otal Credit	20	

		Second Year		
	Couse Code	Title	Credit	Remarks
First Semester	CSE 200	Viva-Voce	1	
	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	Theory : 15 Cr.
Sen	CSE 206	Numerical Methods Laboratory	1	Laboratory : 4 Cr.
st ?	CSE 207	Electronic Devices and Circuits-II	3	Viva-Voce : 1 Cr.
Fir	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	
		To	tal Credit	20
		10	tai Ci cuit	20
	Couse Code	Title	Credit	Remarks
	Couse Code CSE 250	Title Viva-Voce		_ ·
_		Title	Credit 1 3	_ ·
ter	CSE 250	Title Viva-Voce Introduction to Probability and Statistics Digital Logic Design	Credit 1	_ ·
nester	CSE 250 STAT 251	Title Viva-Voce Introduction to Probability and Statistics	Credit 1 3	Remarks
Semester	CSE 250 STAT 251 CSE 253	Title Viva-Voce Introduction to Probability and Statistics Digital Logic Design	Credit 1 3	Remarks  Theory : 15 Cr.
id Semester	CSE 250 STAT 251 CSE 253 CSE 254	Title Viva-Voce Introduction to Probability and Statistics Digital Logic Design Digital Logic Design Laboratory	1 3 3 1	Remarks  Theory : 15 Cr. Laboratory : 4 Cr.
cond Semester	CSE 250 STAT 251 CSE 253 CSE 254 CSE 255	Title Viva-Voce Introduction to Probability and Statistics Digital Logic Design Digital Logic Design Laboratory Database Systems	1 3 3 1	Remarks  Theory : 15 Cr.
Second Semester	CSE 250 STAT 251 CSE 253 CSE 254 CSE 255 CSE 256	Title Viva-Voce Introduction to Probability and Statistics Digital Logic Design Digital Logic Design Laboratory Database Systems Database Systems Laboratory Algorithms-II Algorithms-II Laboratory	Credit  1 3 3 1 3 1 3 1 1 3 1	Remarks  Theory : 15 Cr. Laboratory : 4 Cr.
Second Semester	CSE 250 STAT 251 CSE 253 CSE 254 CSE 255 CSE 256 CSE 257	Title Viva-Voce Introduction to Probability and Statistics Digital Logic Design Digital Logic Design Laboratory Database Systems Database Systems Laboratory Algorithms-II	1 3 3 1 1 3 1 3	Remarks  Theory : 15 Cr. Laboratory : 4 Cr.
Second Semester	CSE 250 STAT 251 CSE 253 CSE 254 CSE 255 CSE 256 CSE 257 CSE 258	Title Viva-Voce Introduction to Probability and Statistics Digital Logic Design Digital Logic Design Laboratory Database Systems Database Systems Laboratory Algorithms-II Algorithms-II Laboratory Data and Telecommunication Data and Telecommunication Laboratory	Credit  1 3 3 1 3 1 3 1 1 3 1	Remarks  Theory : 15 Cr. Laboratory : 4 Cr.

		Third Year		
	<b>Couse Code</b>	Title	Credit	Remarks
First Semester	CSE 300	Viva-Voce	1	
	ECO 301	Economics	3	
	CSE 303	Computer Graphics	3	
	CSE 304	Computer Graphics Laboratory	1	The course of 15 Cm
	CSE 305	Computational Geometry	3	Theory: 15 Cr.
Š	CSE 307	Computer Architecture and Organization	3	Laboratory : 6 Cr. Viva-Voce : 1 Cr.
irst	CSE 309	Operating Systems	3	viva-voce . 1 Ci.
至	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	
	<b>Couse Code</b>	Title	Credit	Remarks
	CSE 350	Viva-Voce	1	
	BIS 351	Management and Accounting	3	
er	CSE 353	Human Computer Interaction	3	
est	CSE 355	Introduction to Bioinformatics	3	Theory 15 Cm
em	CSE 357	Microprocessors	3	Theory : 15 Cr. Laboratory : 3 Cr.
S	CSE 358	Microprocessors and Assembly Language Laboratory	1	Viva-Voce : 1 Cr.
Ono	CSE 359	Computer Networks	3	viva-voce . 1 Ci.
Second Semester	CSE 360	Computer Networks Laboratory	1	
01	CSE 362	Web Design and Programming Laboratory-II	1	
		(JSP/Python)		
	Total Credit		19	

		Forth Year		
First Semester	<b>Couse Code</b>	Title	Credit	Remarks
	CSE 400	Viva-Voce	1	
	CSE 401	Theory of Computation and Compiler Design	3	
	CSE 403	Software Engineering and Information System Design	3	Theory : 12 Cr.
	CSE 404	Software Engineering and ISD Laboratory	1	Laboratory : 4 Cr.
	CSE 405	Digital Image Processing	3	Research
st ?	CSE 406	Digital Image Processing Laboratory	1	Project : 2 Cr.
Ę	CSE 407	Wireless Networks	3	Viva-Voce : 1 Cr.
	CSE 410	Mobile Application Development Laboratory	2	
	CSE 440	Research Project	2	
	Total Credit		al Credit	19
	<b>Couse Code</b>	Title	Credit	Remarks
	CSE 450	Viva-Voce	1	
	CSE 451	Data Mining and Big Data Analysis	3	
ter	CSE 452	Data Mining and Big Data Analysis Laboratory	1	The course 12 Cm
lest	CSE 453	Artificial Intelligence	3	Theory: 12 Cr.
em	CSE 454	Artificial Intelligence Laboratory	1	Laboratory : 5 Cr. Research
d S	CSE 455	Software Quality Assurance	3	Project : 3 Cr.
Ono	CSE 457	Machine Learning	3	Viva-Voce : 1 Cr.
Second Semester	CSE 457	Machine Learning Laboratory	1	1114-1000 . 101.
	CSE 460	IoT Laboratory	2	
	CSE 480	Research Project	3	