

Semester IV

CODE	COURSE NAME	CREDIT	L - T – P
MAT 141 (BS)	Discrete Mathematics	3	3-0-0
CSE 202 (ES)	Web Technology	4	3-0-2
CSE 203 (ES)	Formal Languages and Automata Theory	3	3-0-0
CSE 204 (ES)	Computer Organization and Architecture	3	3-0-0
CSE 205 (ES)	Object Oriented Programming	4	3-0-2
CDC 204 (HS)	Soft Skills 4	1	1-0-0
CSE 230	Industry Standard Coding Practice -1	2	0-0-4
	Total	20	16-0-8

Semester V

CODE	COURSE NAME	CREDIT	L - T – P
MAT 221 (BS)	Probability and Statistics	3	3-0-0
CSE 301 (ES)	Operating Systems	4	3-0-2
CSE 303 (ES)	Computer Networks	4	3-0-2
CSE 304 (ES)	Database Management Systems	4	3-0-2
CSE 306 (ES)	Compiler Design	4	3-0-2
CSE 311/ CSE 312 (CE)	CS Stream Elective 1	4	3-0-2
CDC (HS)	Soft Skills - 5	P/F	1-0-0
	Total	23	19-0-10

Semester VI

CODE	COURSE NAME	CREDIT	L - T – P
MAT 131 (BS)	Differential Equations	3	3-0-0
CSE 305 (ES)	Software Engineering	4	3-0-2
CSE 313/ CSE 314/ CSE 315 (CE)	CS Stream Elective 2	4	3-0-2
CSE 321/CSE 322/CSE 323 (TE)	CS Technical Elective – 1	3	3-0-0
OE	Open Elective -1	3	3-0-0
OE	Open Elective -2	3	3-0-0
CSE 340	UROP	3	0-0-6
CCC	Industry Standard Coding Practice -2	2	0-0-4
	Total	25	18-0-14

Semester VII

CODE	COURSE NAME	CREDIT	L - T - P
CSE 410/ CSE 411/ CSE 412 (CE)	CS Stream Elective 3	4	3-0-2
CSE 421/.../429 (TE)	CS Technical Elective 2	3	3-0-0
OE	Open Elective- 3	3	3-0-0
OE	Open Elective – 4	3	3-0-0
CSE 460	Capstone Project Phase – I	6	0-0-12
	Total	19	12-0-14

Semester VIII

CODE	COURSE NAME	CREDIT	L - T - P
CSE 413/ CSE 414/ CSE 415 (CE)	CS Stream Elective – 4	4	3-0-2
OE	Open Elective 5	3	3-0-0
CSE 461	Capstone Project – Phase II	6	0-0-12
	Total	13	6-0-14

List of Stream Electives

Artificial Intelligence and Machine Learning Stream

CSE 311	Introduction to Machine Learning
CSE 314	Digital Image Processing
CSE 410	Principles of Soft Computing
CSE 413	Artificial Intelligence

Cyber Security Stream

CSE 312	Introduction to Cryptography
CSE 315	Network Security
CSE 411	Mobile and Wireless Security
CSE 414	Internet Protocols and Networking

Data Science Stream

CSE 311	Introduction to Machine Learning
CSE 313	Introduction to Data Science
CSE 412	Introduction to Big Data
CSE 415	Inference and Representation

List of Technical Electives

1. CSE 321 Data and Web Mining
2. CSE 322 Complexity Theory
3. CSE 323 Advanced Computer Architecture
4. CSE 421 Natural Language Processing
5. CSE 422 Human Computer Interaction
6. CSE 423 Distributed Operating Systems
7. CSE 424 Fog Computing
8. CSE 425 Parallel Algorithms
9. CSE 426 Web Services
10. CSE 427 Advanced Database Management Systems
11. CSE 428 Computer Graphics and Multimedia
12. CSE 429 Advanced Data Structures and Algorithms