



List of Courses offered from the Department of Computer Science and Engineering (CSE)

Undergraduate Courses

Level 1 Semester I

Name of the Degree	Serial No.	Course Code	Course Title	Credit
B.Sc. (Engineering) in CSE	1.	CSE 101	Fundamentals of Computer and Computing	2.00
	2.	CSE 102	Fundamentals of Computer and Computing Sessional	0.75
	3.	CSE 103	Discrete Mathematics	3.00
B.Sc. (Engineering) in ECE	4.	CSE 107	Computer Basics and Programming	2.00
	5.	CSE 108	Computer Basics and Programming Sessional	1.50
B.Sc. (Hons.) in Statistics	6.	CSE 132	Fundamental of Computer Sessional	2.00
B.A. (Hons.) in English	7.	CSE 133	Introduction to Computer	3.00
	8.	CSE 134	Introduction to Computer Sessional	1.00
B.S.S. (Hons.) in Economics	9.	CSE 135	Introduction to Computer	3.00
	10.	CSE 136	Introduction to Computer Sessional	1.00
B.S.S. (Hons.) in Sociology	11.	CSE 137	Introduction to Computing and IT	3.00
	12.	CSE 138	Introduction to Computing and IT Sessional	1.00

Level 1 Semester II

Name of the Degree	Serial No.	Course Code	Course Title	Credit
B.Sc. (Engineering) in CSE	1.	CSE 151	Structured Programming Language	3.00
	2.	CSE 152	Structured Programming Language Sessional	1.50
	3.	CSE 153	Digital Logic Design	3.00
	4.	CSE 154	Digital Logic Design Sessional	1.50
B.Sc. (Engineering) in EEE	5.	CSE 163	Computer Programming	3.00
	6.	CSE 164	Computer Programming Sessional	0.75
B.Sc. (Hons.) in Agriculture (Elective Course)	7.	CSE 171	Computer Science	2.00
	8.	CSE 172	Computer Science Sessional	2.00
B.Sc. (Hons.) in Fisheries (Elective Course)	9.	CSE 175	Computer Science	2.00
B.Sc. in FPE	10.	CSE 177	Computer Applications I	2.00
	11.	CSE 178	Computer Applications I Sessional	1.00
B.Sc. in AE	12.	CSE 179	Computer Applications I	2.00
	13.	CSE 180	Computer Applications I Sessional	1.00
B.Sc. (Hons.) in Statistics	14.	CSE 182	Computer Programming (Lab)	2.00
B.A. (Hons.) in English	15.	CSE 183	Database Management & Programming	3.00
	16.	CSE 184	Database Management & Programming Sessional	2.00
B.S.S. (Hons.) in Development Studies	17.	CSE 185	Computer Skills for Development	3.00
	18.	CSE 186	Computer Skills for Development Lab	1.00



Level 2 Semester I

Name of the Degree	Serial No.	Course Code	Course Title	Credit
B.Sc. (Engineering) in CSE	1.	CSE 201	Object Oriented Programming	3.00
	2.	CSE 202	Object Oriented Programming (C++) Sessional	1.50
	3.	CSE 203	Data Structures	3.00
	4.	CSE 204	Data Structures Sessional	1.50
	5.	CSE 205	Numerical Methods	3.00
	6.	CSE 206	Numerical Methods Sessional	0.75
B.Sc. (Engineering) in ECE	7.	CSE 211	Data Structures and Algorithms	3.00
	8.	CSE 212	Data structures and Algorithms Sessional	1.50
B.Sc. (Hons.) in Chemistry	9.	CSE 232	Computing and IT in Chemistry Sessional	2.00
B.Sc. (Hons.) in Physics	10.	CSE 233	Computer Programming Language I	3.00
	11.	CSE 234	Computer Programming Language I Sessional	1.00
B.Sc. (Hons.) in Mathematics	12.	CSE 235	Programming with C, C++	2.00
	13.	CSE 236	Programming with C, C++ Sessional	1.00
B.A. (Hons.) in English	14.	CSE 237	Web Technology and E-commerce	2.00
	15.	CSE 238	Web Technology and E-commerce Sessional	1.00
B.S.S. (Hons.) in Economics	16.	CSE 239	Database Systems	2.00
	17.	CSE 240	Database Systems Sessional	1.00
BBA in Management	18.	CSE 241	Computer in Business	3.00
BBA in Accounting and Information Systems	19.	CSE 243	Computer in Business	3.00
BBA in Marketing	20.	CSE 245	Computer in Business	3.00
BBA in Finance	21.	CSE 247	Computer in Business	3.00

Level 2 Semester II

Name of the Degree	Serial No.	Course Code	Course Title	Credit
B.Sc. (Engineering) in CSE	1.	CSE 252	Application Development Sessional	1.50
	2.	CSE 254	Object Oriented Programming (Java) Sessional	1.50
	3.	CSE 255	Algorithms Analysis and Design	3.00
	4.	CSE 256	Algorithms Analysis and Design Sessional	1.50
	5.	CSE 257	Theory of Computation and Concrete Mathematics	3.00
	6.	CSE 258	Theory of Computation and Concrete Mathematics Sessional	0.75
	7.	CSE 259	Computer Architecture and Organization	3.00
B.Sc. (Engineering) in ECE	8.	CSE 261	Object Oriented and Internet Programming	2.00
	9.	CSE 262	Object Oriented Programming Sessional	1.50
B.Sc. (Hons.) in Physics	10.	CSE 273	Computer Programming Language II	3.00
	11.	CSE 274	Computer Programming Language II Sessional	1.50
B.Sc. (Hons.) in Mathematics	12.	CSE 275	Data Structure and Algorithm	2.00
	13.	CSE 276	Data Structure and Algorithm Sessional	1.00



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Level 3 Semester I

Name of the Degree	Serial No.	Course Code	Course Title	Credit
B.Sc. (Engineering) in CSE	1.	CSE 302	Software Development Sessional	1.50
	2.	CSE 303	Database	3.00
	3.	CSE 304	Database Sessional	1.50
	4.	CSE 305	Software Engineering	3.00
	5.	CSE 307	Microprocessor and Interfacing	3.00
	6.	CSE 308	Microprocessor and Interfacing Sessional	1.50
B.Sc. (Engineering) in ECE	7.	CSE 316	Internet Programming	1.50
B.Sc. in FPE	8.	CSE 325	Computer Application II	2.00
	9.	CSE 326	Computer Application II Sessional	1.00
B.Sc. in AE	10.	CSE 327	Computer Application II	2.00
	11.	CSE 328	Computer Application II Sessional	1.00
B.Sc. (Hons.) in Mathematics	12.	CSE 329	Programming Language	2.00
	13.	CSE 330	Programming Language Sessional	1.00
B.Sc. in AE (Elective Course)	14.	CSE 345	Mechatronics	2.00
	15.	CSE 346	Mechatronics Sessional	1.00

Level 3 Semester II

Name of the Degree	Serial No.	Course Code	Course Title	Credit
B.Sc. (Engineering) in CSE	1.	CSE 352	Web and Mobile Application Development Sessional	1.50
	2.	CSE 353	Operating System	3.00
	3.	CSE 354	Operating System Sessional	0.75
	4.	CSE 355	Web Engineering	2.00
	5.	CSE 356	Web Engineering Sessional	0.75
	6.	CSE 357	Computer Networks	3.00
	7.	CSE 358	Computer Networks Sessional	0.75
	8.	CSE 359	Compiler Design	3.00
	9.	CSE 360	Compiler Design Sessional	0.75
	10.	CSE 361	Mathematical Analysis for Computer Science	3.00
B.Sc. (Engineering) in EEE	11.	CSE 365	Microprocessor and Interfacing	3.00
	12.	CSE 366	Microprocessor and Interfacing Sessional	0.75



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Level 4 Semester I

Name of the Degree	Serial No.	Course Code	Course Title	Credit
B.Sc. (Engineering) in CSE	1.	CSE 402	Project and Thesis Sessional	1.50
	2.	CSE 403	Artificial Intelligence	3.00
	3.	CSE 404	Artificial Intelligence Sessional	0.75
	4.	CSE 405	Computer Graphics and Image Processing	3.00
	5.	CSE 406	Computer Graphics and Image Processing Sessional	1.50
	6.	CSE 408	Technical Writing and Presentation Skill Development Sessional	1.50
	7.	CSE 4**	Option I	3.00
	8.	CSE 4**	Option I Sessional	0.75
	9.	CSE 4**	Option II	3.00
	10.	CSE 4**	Option II Sessional	0.75
Option I B.Sc. (Engineering) in CSE (Elective Course)	11.	CSE 409	Advanced Database Management System	3.00
	12.	CSE 410	Advanced Database Management System Sessional	0.75
	13.	CSE 411	Advanced Algorithm Design	3.00
	14.	CSE 412	Advanced Algorithm Design Sessional	0.75
	15.	CSE 413	Management Information System	3.00
	16.	CSE 414	Management Information System Sessional	0.75
	17.	CSE 415	Mobile and Wireless Communication	3.00
	18.	CSE 416	Mobile and Wireless Communication Sessional	0.75
	19.	CSE 417	Communication Engineering	3.00
	20.	CSE 418	Communication Engineering Sessional	0.75
Option II B.Sc. (Engineering) in CSE (Elective Course)	21.	CSE 419	System Analysis and Design	3.00
	22.	CSE 420	System Analysis and Design Sessional	0.75
	23.	CSE 421	Software Testing and Quality Assurance	3.00
	24.	CSE 422	Software Testing and Quality Assurance Sessional	0.75
	25.	CSE 423	Graph Theory	3.00
	26.	CSE 424	Graph Theory Sessional	0.75
	27.	CSE 425	Cryptography and Network Security	3.00
	28.	CSE 426	Cryptography and Network Security Sessional	0.75
	29.	CSE 427	Simulation and Modelling	3.00
	30.	CSE 428	Simulation and Modelling Sessional	0.75



Level 4 Semester II

Name of the Degree	Serial No.	Course Code	Course Title	Credit
B.Sc. (Engineering) in CSE	1.	CSE 452	Project and Thesis Sessional	3.00
	2.	CSE 453	Multimedia System and Animation Techniques	3.00
	3.	CSE 454	Multimedia System and Animation Techniques Sessional	0.75
	4.	CSE 455	Computer Ethics and Cyber Law	2.00
	5.	MGT 405	Industrial Management	3.00
	6.	CSE 4**	Option III	3.00
	7.	CSE 4**	Option III Sessional	0.75
	8.	CSE 4**	Option IV	3.00
	9.	CSE 4**	Option IV Sessional	0.75
Option III B.Sc. (Engineering) in CSE (Elective Course)	10.	CSE 459	Data Mining and Warehousing	3.00
	11.	CSE 460	Data Mining and Warehousing Sessional	0.75
	12.	CSE 461	Cloud Computing	3.00
	13.	CSE 462	Cloud Computing Sessional	0.75
	14.	CSE 463	VLSI Design	3.00
	15.	CSE 464	VLSI Design Sessional	0.75
	16.	CSE 465	Digital System Design	3.00
	17.	CSE 466	Digital System Design Sessional	0.75
	18.	CSE 467	Parallel and Distributed System	3.00
	19.	CSE 468	Parallel and Distributed System Sessional	0.75
Option IV B.Sc. (Engineering) in CSE (Elective Course)	20.	CSE 469	Machine Learning and Pattern Recognition	3.00
	21.	CSE 470	Machine Learning and Pattern Recognition Sessional	0.75
	22.	CSE 471	Natural Language Processing	3.00
	23.	CSE 472	Natural Language Processing Sessional	0.75
	24.	CSE 473	Human and Computer Interaction	3.00
	25.	CSE 474	Human and Computer Interaction Sessional	0.75
	26.	CSE 475	Robotics	3.00
	27.	CSE 476	Robotics Sessional	0.75
	28.	CSE 477	Bioinformatics	3.00
	29.	CSE 478	Bioinformatics Sessional	0.75



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Postgraduate Courses

M.Sc. in CSE

January-June Semester

Name of the Degree	Serial No.	Course Code	Course Title	Credit
M.Sc. in CSE	1.	CSE 501	Computer Arithmetic	3.00
	2.	CSE 503	Advanced Database Systems	3.00
	3.	CSE 505	Research Methodology	2.00
	4.	CSE 5** CSE 5**	Two Courses from Option I (Elective Courses)	4.00
	5.	CSE 500	A. Research (Satisfactory/Unsatisfactory)	3.00
				Total

Option I (Elective Courses)

Name of the Degree	Serial No.	Course Code	Course Title	Credit
M.Sc. in CSE	1.	CSE 507	Advanced Artificial Intelligence	2.00
	2.	CSE 509	Computational Geometry	2.00
	3.	CSE 511	Combinatorial Optimization	2.00
	4.	CSE 513	Advanced Algorithms	2.00
	5.	CSE 515	Bioinformatics Algorithms	2.00
	6.	CSE 517	Software Testing and Quality Assurance	2.00
	7.	CSE 519	Advanced Microprocessor	2.00
	8.	CSE 521	Advanced Computer Architecture	2.00
	9.	CSE 523	Advanced Syntactic Pattern Recognition	2.00
	10.	CSE 525	Data Mining	2.00
	11.	CSE 527	Data Warehousing	2.00

July-December Semester

Name of the Degree	Serial No.	Course Code	Course Title	Credit
M.Sc. in CSE	1.	CSE 529	Advanced Digital Image Processing	3.00
	2.	CSE 531	Software Project Management	3.00
	3.	CSE 533	Network Security	2.00
	4.	CSE 5** CSE 5**	Two Courses from Option II (Elective Courses)	4.00
	5.	CSE 500	B. Research (Satisfactory/ Unsatisfactory)	3.00
				Total



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Option II (Elective Courses)

Name of the Degree	Serial No.	Course Code	Course Title	Credit
M.Sc. in CSE	1.	CSE 535	Embedded System	2.00
	2.	CSE 537	Advanced Operating Systems	2.00
	3.	CSE 539	Advanced Computer Networks	2.00
	4.	CSE 541	Distributed Computing Systems	2.00
	5.	CSE 543	Mobile Computing	2.00
	6.	CSE 545	Wireless Sensor Networks	2.00
	7.	CSE 547	Advanced Machine Learning	2.00
	8.	CSE 549	Advanced Multimedia Systems	2.00
	9.	CSE 551	Computer Animation and Virtual Reality	2.00
	10.	CSE 553	Advanced Computer Graphics	2.00
	11.	CSE 555	Human Computer Interaction	2.00

Third Semester (Thesis Semester)

Name of the Degree	Serial No.	Course Code	Course Title	Credit
M.Sc. in CSE	1.	CSE 500	Research Semester	
	2.		C. Thesis Work	2.00
	3.		D. Thesis Evaluation	5.00
	4.		E. Thesis Defense	3.00

M.Sc. in FPM

Name of the Degree	Serial No.	New Course Code	Course Title	Credit
M.Sc. in FPM (Elective Course)	1.	CSE 533	Computer Programming & Applications	2.00