

School of Computing Science and Engineering (SCSE)

Outline

- I. Curriculum and Syllabus
 - 1. Annexure-I

B.Tech. (Computer Science and Engineering)
Curriculum and Syllabus (2012-13 batch onwards)

ANNEXURE-I

B.Tech. (Computer Science and Engineering) Curriculum and Syllabus

Curriculum

Semester Split-up

Flowchart

Syllabi

I. University Core (17 Credits)

S. No.	Course Code	Course Name	L	Т	P	С	H/S /M/ E	Prerequisites/ Exposure
1	ENG 001 ENG 101	Effective English (or) English for Engineers – I	3	0	0	3	Н	
2	ENG 102	English for Engineers – II	3	0	0	3	Н	ENG 001 (or) ENG 101
3	CHY 104	Environmental Studies	3	0	0	3	Н	
4	MGT 301	Ethics and Values	3	0	0	3	M	
5		Foreign Language	2	0	0	2	Н	
6	CSE 101	Computer Programming and Problem Solving	2	0	2	3	E	
						17		

II. University Elective (6 Credits)

S. No.	Course Code	Course Name	L	Т	P	C	Prerequisites/ Exposure
1		University Elective - I	3	0	0	3	
2		University Elective - II	3	0	0	3	
						6	

III. Science (38 Credits)

S. No.	Course Code	Course Name	L	Т	P	C	H/M/ S/E	Prerequisites/ Exposure
1	MAT 101	Multivariable Calculus and Differential Equations	3	1	0	4	S	
2	MAT 105	Differential and Difference Equations	3	1	0	4	S	MAT 101
3	MAT 207	Applied Probability, Statistics and Reliability	3	1	0	4	S	MAT 101, MAT 105
4	MAT202	Linear Algebra	3	1	0	4	S	MAT 101,MAT 106
5	PHY 101	Modern Physics	3	0	2	4	S	
6	MAT 106	Discrete Mathematical Structures	3	1	0	4	S	
7	CSE 208	Theory of Computation	3	1	0	4	S	MAT 106
8	MAT 206	Graph Theory and its Applications	3	0	0	3	S	MAT 106
9	MAT 203	Numerical Analysis	3	0	0	3	S	MAT 105
10	CHY 101	Engineering Chemistry	2	1	2	4	S	
						38		

IV. Program Core (116 Credits)

S. No.	Course Code	Course Name	L	Т	P	С	H/M/ S/E	Prerequisites/ Exposure
1.	EEE 101	Basic Electrical and Electronics Engineering	3	0	2	4	E	
2.	EEE 103	Electronics	3	0	2	4	E	EEE 101
3.	CSE 219	Object Oriented Paradigm and Programming	3	1	2	5	E	CSE 101
4.	CSE 109	Digital Logic	3	0	2	4	E	CSE 101
5.	CSE 220	Data Structures and Algorithms	3	1	2	5	E	CSE 101
6.	CSE 205	Computer Architecture and Organization	3	1	0	4	E	CSE 109
7.	CSE 202	Algorithm Design and Analysis	3	1	0	4	E	CSE 220
8.	CSE 221	Microprocessor and Interfacing	3	0	2	4	E	CSE 205
9.	CSE 322	Embedded Systems	3	0	2	4	E	CSE 221
10.	CSE 222	Operating Systems	3	0	2	4	E	CSE 205
11.	CSE 323	Computer Networks	3	0	2	4	E	CSE 222

12.	CSE 309	Programming Language Translators	3	1	0	4	E	CSE 208+CSE 205
13.	CSE 418	Graphics and Multimedia	3	0	2	4	E	MAT202
14.	CSE 324	Database Systems	3	0	2	4	E	CSE 220
15.	CSE 325	Software Engineering	3	0	2	4	E	CSE 324
16.	CSE 326	Internet & Web Programming	3	0	2	4	Е	CSE 219 + CSE 323
17.	CSE 327	Image and Vision Computing	3	0	0	3	E	MAT202
18.	MEE 437	Operations Research	3	0	0	3	M	MAT 207
19.	CSE 328	Software Project Management	3	0	0	3	M	CSE 325
20.	CSE 419	Mobile Computing	3	0	0	3	E	CSE 323+ CSE 326
21.	CSE 329	Management Information Systems	3	0	0	3	E	
22.	CSE 330	Agent Based Intelligent Systems	3	0	0	3	E	CSE 220
23.	MEE 101	Engineering Graphics	0	0	4	2	E	
24.	MEE 102	Workshop Practice	0	0	2	1	E	
25.		Comprehensive Exam	0	0	0	2	E	
26.		In plant Training (Industrial Internship)	0	0	0	2	E	
27.		Project work	0	0	0	20	E	
						110		

V. Program Electives (9 Credits)

S. No.		Course Name	L	Т	P	С	H/M/	Prerequisites/
5.110.		Course Nume					S/E	Exposure
1.	CSE 404	Bio-informatics	3	0	0	3	E	CSE 202
2.	CSE 405	Parallel Algorithms	3	0	0	3	E	CSE 205+ CSE 202
3.	CSE 314	Advanced Computer Architecture	3	0	0	3	E	CSE 205 +CSE 309
4.	CSE 406	Concurrent and Distributed Systems	3	0	0	3	E	CSE 222
5.	CSE 407	Software Practice and Testing	3	0	0	3	E	CSE 325
6.	CSE 408	Data Warehousing and Data Mining	3	0	0	3	E	CSE 324
7.	CSE 315	Scripting Languages	3	0	0	3	E	CSE 323
8.	CSE 403	Human Computer Interaction	3	0	0	3	E	CSE 418+ CSE 325
9.	CSE 316	Database Design	3	0	0	3	E	CSE 324
10.	CSE 409	Modeling and Simulation	3	0	0	3	E	MAT 207
11.	CSE 317	Data Communications	3	0	0	3	E	CSE 323
12.	CSE 415	Information Security	3	0	0	3	E	CSE 326
13.	CSE 319	Soft Computing	3	0	0	3	E	MAT 106

14.	CSE 416	Cloud Computing	3	0	0	3	E	CSE 325
15.	CSE 320	Multi-core Architecture	3	0	0	3	E	CSE 205
16.	CSE 420	Green Computing	3	0	0	3	E	
17.	CSE421	Information Retrieval	3	0	0	3	E	CSE 202
18.	CSE 424	Ad hoc Wireless Networks	3	0	0	3	E	CSE 323
19.	CSE 422	Medical Image Processing	3	0	0	3	E	CSE 327
20.	CSE 223	Principles of Programming	3	0	0	3	E	CSE 101
21.	CSE 331	Pattern Classification	3	0	0	3	E	MAT202
22.	CSE 423	Gaming Engineering	3	0	0	3	Е	CSE 326
23.	ECE 104	Discrete Systems and Time Series	3	0	0	3	E	

