VIT®
UNIVERSITY
(Estd. u/s 3 of UGC Act 1956)
Vellore-632 014, Tamil Nadu, India.

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	T	P	C	H/S/M/E	Prerequisites/ Exposure
1	ENG 001 ENG 101	Effective English (or) English for Engineers – I	3	0	0	3	**H**	
2	ENG 102	English for Engineers – II	3	0	0	3	**H**	ENG 001 (or) ENG 101
3	CHY 104	Environmental Studies	3	0	0	3	**H**	
4	MGT 301	Ethics and Values	3	0	0	3	**M**	
5		Foreign Language	2	0	0	2	**H**	
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**	**T**	**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**	**T**	**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	T	P	C	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	E	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**	**T**	**P**	**C**	**H/M/ S/E**	**Prerequisites/ 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	**E**	CSE 326
23.	ECE 104	Discrete Systems and Time Series	3	0	0	3	**E**	

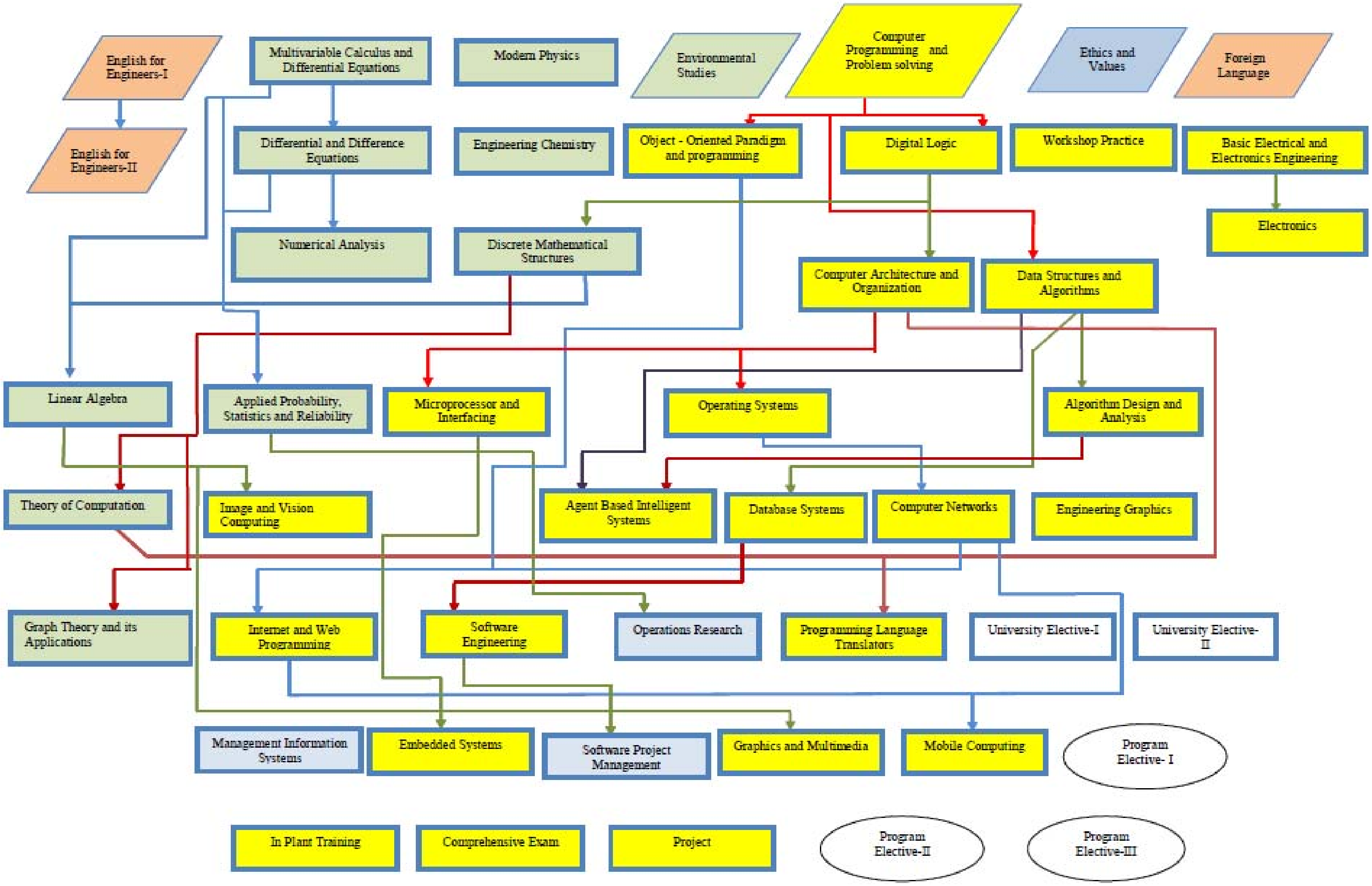
English for Engineers-I
Multivariable Calculus and Differential Equations
Modern Physics
Environmental Studies
Computer Programming and Problem solving
Ethics and Values
Foreign Language
English for Engineers-II
Differential and Difference Equations
Engineering Chemistry
Object - Oriented Paradigm and programming
Digital Logic
Workshop Practice
Basic Electrical and Electronics Engineering
Electronics
Numerical Analysis
Discrete Mathematical Structures
Computer Architecture and Organization
Data Structures and Algorithms
Linear Algebra
Applied Probability, Statistics and Reliability
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Image and Vision Computing
Agent Based Intelligent Systems
Database Systems
Computer Networks
Engineering Graphics
Graph Theory and its Applications
Internet and Web Programming
Software Engineering
Operations Research
Programming Language Translators
University Elective-I
University Elective-II
Management Information Systems
Embedded Systems
Software Project Management
Graphics and Multimedia
Mobile Computing
Program Elective- I
In Plant Training
Comprehensive Exam
Project
Program Elective-II
Program Elective-III