FIRST YEAR UNDERGRADUATE STUDENTS

I SEMESTER B. TECH - CHEMISTRY (GROUP - II)					
Course No.	Name of the Courses	L	Т	Р	Credit
					Hours
AMC11101	Mathematics-I	3	1	0	7
ACC11101	Chemistry	3	0	0	6
ECC11101	Electronics Engineering	3	0	0	6
CSC11101	Computer Programming	3	0	0	6
HSS Elective (Any One):					
HSE11101	English for Science & Technology				
HSE11102	Innovation, Patent and Intellectual	3	0	0	6
	Property Rights				
MSD/APD11301	Disaster Management & Energy	3	0	0	6
	Resources (S)				
ACC 11201	Chemistry Practical	0	0	2	2
ECC 11201	Electronics Engineering Practical	0	0	2	2
CSC 11201	Computer Programming	0	0	2	2
MCC11202	Manufacturing Process	0	0	3	3
Total					46
Contact Hrs.		18	1	9	28

COMPUTER PROGRAMMING

CSC11101

3-0-0

C Fundamentals: Introduction to C, Data types, Constants and variable declaration, Scope, Storage classes, Data input and output functions, Sample programs.

Operators & Expressions: Arithmetic, Relational, Logical, Bitwise operators, Conditional, Assignment, Precedence and Order of Evaluation, Library functions.

Control & Looping Statements: if, while, for, do-while, switch, break and continue statements, nested loops.

Arrays: Declaration, Initialization, Processing an array, 1D, 2D and multidimensional arrays, Strings and their Operations.

Functions: Defining functions, Function prototypes, Accessing a function, Passing arguments, Passing arrays and Recursive functions.

Pointers: Declaration, Operations on pointers, passing pointers to a function, Pointers and arrays, Array of Pointers.

Structures & Unions: Defining a structure, processing a structure, User defined data types, Structure and pointers, passing structure to a function, Self-referential structures, Nested structures, Unions

File Management: File operations, Creating and processing a data file, Command line arguments.

Fundamentals of Object-Oriented Programming: Basic concepts, Objects and classes, Data abstraction and encapsulation, Inheritance, Polymorphism and Dynamic binding.