

## B.Tech CSE Courses Organized by Categories

### Sciences

**CS101** Mathematics - I  
**CS102** Mathematics - II  
**CS211** Mathematics - III  
**CS221** Probability & Statistics  
**CS103** Physics  
**CS104** Chemistry  
**CS151** Physics Lab  
**CS152** Chemistry Lab  
**CS405F** Quantum Computing

### Technical Communication

**CS105** English  
**CS253** Communication Skills Lab  
**CS263** Soft Skills Lab

### Basic Engineering

**CS106** Computer Programming with 'C'  
**CS154** Computer Programming Lab  
**CS107** Engineering Mechanics  
**CS108** Engineering Graphics  
**CS212** Circuit Theory  
**CS222** Environmental Studies  
**CS311** Professional Ethics & Human Values  
**CS424** Industrial Engineering & Management  
**CS305C** Operations Research  
**CS416A** Total Quality Management

### CSE Foundation

**CS213** Digital Logic Design  
**CS215** Discrete Mathematics Structures  
**CS216** Data Structures  
**CS252** Data Structures Lab (C)  
**CS223** Electronic Devices & Circuits  
**CS261** EDC Lab

### Computation

**CS313** Automata Theory & Formal Languages  
**CS322** Compiler Design  
**CS325** Design & Analysis of Algorithms  
**CS383** Algorithms Lab  
**CS320A** Artificial Intelligence  
**CS325E** Natural Language Processing  
**CS326E** Neural Networks

### Computer Architecture

**CS324** Computer Organization  
**CS325** Microprocessors & Microcontrollers  
**CS382** Microprocessors & Microcontrollers Lab  
**CS422** Advanced Computer Architecture  
**CS436E** VLSI Design

### Databases

**CS315** Database Management Systems  
**CS352** RDBMS Lab  
**CS423** Data Engineering  
**CS441** Data Engineering Lab  
**CS328B** Advanced DBMS

### Networks

**CS312** Data Communications  
**CS321** Computer Networks  
**CS411** Wireless Networks  
**CS421** Cryptography & Wireless Security  
**CS425F** Mobile Ad Hoc Networks

### Programming Languages

**CS214** Object Oriented Programming (C++)  
**CS251** OOPs Lab  
**CS314** Java Programming  
**CS351** Java Programming Lab  
**CS353** Web Technologies  
**CS362** Web Technologies Lab  
**CS414** Enterprise Programming  
**CS452** Enterprise Programming Lab  
**CS362F** Principles of Programming Languages  
**CS415A** Open Source Systems  
**CS453A** Open Source Systems Lab  
**CS415C** .NET Technologies  
**CS453C** .NET Technologies Lab

### Software Engineering

**CS314** Software Engineering  
**CS413** Object Oriented Analysis & Design  
**CS415F** Software Testing Methodologies  
**CS453F** Software Testing Methodologies Lab  
**CS425B** Advanced Software Engineering

### Applications

**CS415B** Interactive Computer Graphics  
**CS453B** Interactive Computer Graphics Lab  
**CS415D** Digital Signal Processing  
**CS453D** Digital Signal Processing Lab  
**CS425E** Multimedia Systems  
**CS453E** Multimedia Systems Lab  
**CS416B** E-Commerce & ERP  
**CS416D** Bio-Informatics  
**CS425A** Digital Image Processing  
**CS425C** Grid Computing  
**CS425E** Pervasive Computing

### Comprehensive Courses

**CS351** Term Paper  
**CS451** SE Lab / Mini Project  
**CS462** Project Work