

**MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY  
BHOPAL - 462003**

<b>Name of Program</b>	<b>B.Tech</b>	<b>Semester</b>	<b>III</b>	<b>Year</b>	<b>II</b>
<b>Name of Course</b>	Principles of Programming Languages				
<b>Course Code</b>	CSE 213				
<b>Core / Elective / Other</b>	Core				

**Prerequisite:**

1. NIL

**Course Outcomes:**

On successful completion of the course, students should be able to

1. Design effective algorithms.
2. Implement the algorithms with use of existing programming languages.
3. Extend the vocabulary of useful programming constructs.

**Description of Contents in brief:**

Preliminary concepts of programming language, Language evaluation criteria, Issues in Language Translation: Syntax, Semantics, Stages, analysis and synthesis, Data types, Expressions and Statements, Subprograms and Blocks, Abstract Data types, Parameter Passing, Scoping Rules, Exception handling, Runtime Environment, Object-oriented programming concepts. Implementations of modern programming languages Java, C++, Concurrency: Subprogram level concurrency, semaphores, monitors, message passing. Functional Programming Languages, Logic Programming Languages.

**List of Text Books:**

1. Concepts of Programming Language by Robert .W. Sebesta

**List of Reference Books:**

1. Programming Languages by Louden
2. Programming languages by Ghezzi
3. Programming Languages Design and Implementation by Pratt and Zelkowitz