



**FIRST-YEAR OF BACHELOR OF
COMPUTER SCIENCE MAJOR /MINOR PRACTICAL
REVISED SYLLABUS ACCORDING TO CBCS
NEP2020**

**COURSE TITLE: Practical of Imperative Programming & Web
Programming
SEMESTER-I, W.E.F. 2023-2024**

**Recommended by the Board of Studies in Computer Science
And**

Approved by the Academic Council

Devrukh Shikshan Prasarak Mandal's

Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and
Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh.
Tal. Sangameshwar, Dist. Ratnagiri-415804, Maharashtra,
India

Academic Council Item No: _____

Name of the Implementing Institute	:	Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh. Tal. Sangameshwar, Dist. Ratnagiri-415804,
Name of the Parent University	:	University of Mumbai
Name of the Programme	:	Bachelor of Science
Name of the Department	:	Computer Science
Name of the Class	:	First Year
Semester	:	First
No. of Credits	:	02
Title of the Course	:	Practical of Imperative Programming and Web Programming
Course Code	:	S103CSP
Name of the Vertical in adherence to NEP 2020	:	Major and Minor
Eligibility for Admission	:	Any 12 th Pass seeking Admission to Degree Programme in adherence to Rules and Regulations of the University of Mumbai and Government of Maharashtra
Passing Marks	:	40%
Mode of Assessment	:	Formative and Summative
Level	:	UG
Pattern of Marks Distribution for TE and CIA	:	50:50
Status	:	NEP-CBCS
To be implemented from Academic Year	:	2023-2024
Ordinances /Regulations (if any)	:	

Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce and Vid. Dadasaheb Pitre Science College, Devrukh (An Autonomous College Affiliated with University of Mumbai)

Syllabus for First Year of Bachelor of Science in Computer Science

(With effect from the academic year 2023-2024)

SEMESTER-I

Paper No.– 3

Course Title: Practical of Imperative Programming & Web Programming No. of Credits - 02

Type of Vertical: Major and Minor

COURSE CODE: S103CSP

Learning Outcomes Based on BLOOM's Taxonomy:

After completing the course, the learner will be able to...		
Course Learning Outcome No.	Blooms Taxonomy	Course Learning Outcome
CLO-01	Synthesize	Perform basic programming practical on computer
CLO-02	Apply	Apply accurate logic regarding problem
CLO-03	Analyse	analyse Programming problems
CLO-04	Explain	Handle Critical programming task

Syllabus for First Year of Bachelor of Science in Computer Science

(With effect from the academic year 2023-2024)

SEMESTER-I

Paper No.– 3

Course Title: Practical of Imperative Programming & Web Programming No. of Credits - 02

Type of Vertical: Major and Minor

COURSE CODE: S103CSP

Course: S103CSP	Practical of Imperative Programming & Web Programming
Module I	<p style="text-align: center;">Practical of Imperative Programming</p> <ol style="list-style-type: none"> 1. Programs to understand the basic data types and I/O. 2. Programs on Operators and Expressions 3. Programs on decision statements. 4. Programs on looping. 5. Programs on arrays. 6. Programs on functions. 7. Programs on structures and unions. 8. Programs on pointers. 9. Programs on string manipulations. 10. Programs on basic file operations. <p style="text-align: center;">Practical of Web Programming</p> <ol style="list-style-type: none"> 1. Design a webpage that makes use of <ol style="list-style-type: none"> a. Document Structure Tags b. Various Text Formatting Tags c. List Tags d. Image and Image Maps 2. Design a webpage that makes use of <ol style="list-style-type: none"> a. Table tags b. Form Tags (forms with various form elements) c. Navigation across multiple pages d. Embedded Multimedia elements 3. Design a webpage that make use of Cascading Style Sheets with <ol style="list-style-type: none"> a. CSS properties to change the background of a Page b. CSS properties to change Fonts and Text Styles c. CSS properties for positioning an element 4. Write JavaScript code for <ol style="list-style-type: none"> a. Performing various mathematical operations such as calculating factorial / finding Fibonacci Series / Displaying Prime Numbers in a given range / Evaluating Expressions / Calculating reverse of a number b. Validating the various Form Elements

<ol style="list-style-type: none">5. Write JavaScript code for<ol style="list-style-type: none">a. Demonstrating different JavaScript Objects such as String, RegExp, Math, Dateb. Demonstrating different JavaScript Objects such as Window, Navigator, History, Location, Document,c. Storing and Retrieving Cookies6. Create a XML file with Internal / External DTD and display it using<ol style="list-style-type: none">a. CSSb. XSL7. Design a webpage to handle asynchronous requests using AJAX on<ol style="list-style-type: none">a. Mouseoverb. button click8. Write PHP scripts for<ol style="list-style-type: none">a. Retrieving data from HTML formsb. Performing certain mathematical operations such as calculating factorial / finding Fibonacci Series / Displaying Prime Numbers in a given range / Evaluating Expressions / Calculating reverse of a numberc. Working with Arraysd. Working with Files (Reading / Writing)9. Write PHP scripts for<ol style="list-style-type: none">a. Working with Databases (Storing Records / Retrieving Records and Display them)b. Storing and Retrieving Cookiesc. Storing and Retrieving Sessions10. Design a webpage with some jQuery animation effects.
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Required Previous Knowledge

Students should know the types of basic computer handling and computer applications

Access to the Course

The course is available for all the students who have selected Computer Science as a major DSC.

Forms of Assessment

The assessment of the course will be of Practical type. At the end of the semester, 80 Marks practical examination will be conducted. 10 marks will be for journal and 10 marks for viva based on the experiments.

Semester End Practical Examination (100 Marks)
Question Paper Pattern
Time: 3 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	All	Certified Journal	05
Q.2	All	Any two experiments	40
Q.3	All	Viva based on experiments	05
		Total	50

Grading Scale

10 points grading scale will be used. The grading scale used is O to F. Grade O is the highest passing grade on the grading scale, and grade F is a fail. The Board of Examinations of the college reserves the right to change the grading scale.