

Bidhan Chandra College, Rishra

Department of Computer Science

Programme and Course Outcome (up to Sem 2)

in Computer Science under credit framework (2023)

Programme offered	Four year B.Sc. (Honours/ Honours with Research) in Computer Science	
B.Sc. (Hons.) in Computer Science		
Programme Outcome	PO1	The syllabus of the course is at par with the present needs of the I.T. industries. Equal stress is given on theory and practical. There is a 'Project' included in the course which helps the students to get the idea of how the different real life software developments take place.
	PO2	In doing 'Project' students are divided into no. of groups so that they can get the essence of real life software projects where projects are done by a team.
	PO3	After completion of the course the students can pursue higher education such as M.Sc. in Computer Science, PGDCA, MCA, MBA etc.
	PO4	After completion of the course students can get jobs at different leading I.T. companies as well as different public and private sector companies, banks, rail etc.
Semester I		
Course Code	Course Name	Course Outcome
DSC/CC-1	Computer fundamentals and Digital Logic	Students are taught computer fundamentals along with different logic gates, combinational circuits, sequential circuits and integrated circuits
DSC/CC-1-P	Computer fundamentals and Digital Logic Lab	Students get hand-on experience on circuit design. They are taught how to design different logic gates, combinational circuits, sequential circuits and integrated circuits
SEC – 1	Data visualization using spreadsheet	This Skill Enhancement Course (SEC) provides a comprehensive introduction to essential concepts required for proficient utilization of spreadsheets. Students will gain proficiency in data management, visualization, analysis, and presentation using a widely-used open source spreadsheet software application such as Open Office, Libre Office, or Google Spreadsheets. Through this course, students will acquire the ability to proficiently create, format, manipulate, and analyze data within spreadsheets to meet a diverse range of needs.

SEC – 1-P	Data visualization using spreadsheet Lab	<ol style="list-style-type: none"> 1. The purpose and potential applications of spreadsheets. 2. Create, format, and modify spreadsheets. 3. Use of formulas, functions, and calculations to perform data visualization. 4. Understanding and utilization of advanced spreadsheet features such as data validation, conditional formatting, and pivot tables. 5. Design visually appealing charts and graphs to represent data. 6. Collaborate and share spreadsheets with others. 7. Apply spreadsheet skills to real-world scenarios and problem-solving. 8. Role of spreadsheets in data analysis. 9. Import, clean, and transform data for analysis. 10. Applicability of statistical and mathematical functions for data visualization. 11. Advanced features and tools for data visualization. 12. Perform exploratory data analysis and identify patterns and trends. 13. Create informative reports and summaries based on data analysis. 14. Apply data analysis techniques to real-world problems.

Semester II		
Course Code	Course Name	Course Outcome
DSC/CC-2	Problem Solving using C	Students are taught the high level language C. They learn the basics of C programming language such as data types, preprocessors, loops, control statements, functions, arrays, pointers, linked list, stacks, queues and user defined data types and file accessing.
DSC/CC-2-P	Problem Solving using C Lab	Students are given assignments on above topics in C programming language. They solve the assignments using C in the computer lab.

SEC – 2	Web Development	<p>This course provides an introduction to web development using HTML (Hypertext Markup Language) and CSS (Cascading Style Sheets). Students will learn the core concepts needed to create and style web pages. The course covers the fundamentals of HTML structure, CSS styling properties, and responsive web design principles.</p>
SEC – 2-P	Web Development Lab	<ol style="list-style-type: none"> 1. Understanding the basics of web development and the role of HTML and CSS. 2. Create well-structured HTML documents using proper tags and elements. 3. Apply CSS to style web pages, including layout, typography, colors, and images. 4. Implement responsive design techniques to ensure optimal display on different devices. 5. Incorporate multimedia elements, such as images, videos, and audio, into web pages. 6. Understand best practices for organizing and maintaining code in web development projects. 7. Develop and deploy a basic website using HTML and CSS.

