

Govt. Digvijay College Rajnandgaon
Department of Computer Science
Course Outcomes
Session 2022-23

B.Sc. I (Computer Science)

On completion of the course students will be able to

1. Learn Basics of Computer Fundamentals.
2. Learn computer related number system and codes.
3. Learn to develop simple algorithms and flow charts to solve a problem.
4. Develop problem solving skills coupled with top down design principles.
5. Learn about the strategies of writing efficient and well-structured computer algorithms / programs.
6. Learn the about the 'C' programming language.
7. Develop the skills for formulating iterative solutions to a problem.
8. Understand recursive techniques in programming.
9. Learn array processing algorithms coupled with iterative methods.
10. Learn text and string processing efficient algorithms.
11. Learn structure , union and use of pointers.
12. To be familiar with fundamental data structures and with the manner in which these data structures can best be implemented; become accustomed to the description of algorithms in both functional and procedural styles.
13. To have a knowledge of complexity of basic operations like insert, delete, search on these data structures.
14. Ability to choose a data structure to suitably model any data used in computer applications.
15. Design programs using various data structures including hash tables, Binary and general search trees, heaps, graphs etc.
16. Ability to assess efficiency tradeoffs among different data structure implementations.
17. Implement and know the applications of algorithms for sorting, pattern matching etc.

B.Sc. II (Computer Science)

On completion of the course students will be able to

1. To introduce the overall organization of the microcomputer.
2. To introduce the common peripheral devices used in computers
3. To introduce the hardware components, use of micro processor and function of various chips used in microcomputer.
4. To introduce the internet & web related technology & learn the intricacies of web-page designing using HTML.
5. To introduce the object oriented programming concept using C++ language.
6. To introduce the problem solving methodology using the C++ programming features.

B.Sc. III (Computer Science)

On completion of the course students will be able to

1. To introduce the overall organization of the microcomputers and operating systems.

2. To introduce the interaction of common devices used with computers with operating software, excluding the Assembly languages, with special reference to DOS/WINDOWS.
3. To introduce the working of hardware components, Micro-Processors and various chips used in micro-computers by operating system, without the use of electronic circuitry.
4. To introduce the use of operating systems architecture with IBM-PC & clones, excluding Assembly language, with forms an important part of hardware.
5. To introduce Data Base Management System concepts.
6. To introduce the Relation Database management System and Relation Database design.
7. To introduce the RDBMS software and Utility of query language.
8. To introduce basic concept of GUI Programming and database connectivity using visual Basic.

M.Sc. (Computer Science) – I Semester

1. Knowledge of mathematical foundation of computer science
2. Understand about the advance computer operating system.
3. Advance knowledge of data structure and its algorithm using in ‘C’ Language.
4. Develop the C++ computer software with Object oriented concept.
5. Understand computer system architecture.

M.Sc. (Computer Science) – II Semester

On completion of the course students will be able to

1. Understand Relational Database Management System
2. Knowledge of advanced computer Networking.
3. Development software in Visual Basic 6 programming Language.
4. Understand working and mechanism of compiler and design .
5. Knowledge of Numerical analysis & its application .

M.Sc. (Computer Science) – III Semester

On completion of the course students will be able to

1. Development advanced software in JAVA Language.
2. Understand working , mechanism and algorithms of computer graphics.
3. Working in LINUX operating system and shell scripting.
4. Knowledge of Image processing and its application.
5. Understand Object Oriented Analysis and Design.

M.Sc. (Computer Science) – IV Semester

On completion of the course students will be able to

1. Understand Software Engineering.
2. Knowledge of Artificial intelligence and expert system .
3. Understanding data mining and data warehousing.
4. Complete computer software project development with documentation.

Govt. Digvijay College Rajnandgaon

Department of Computer Science

Programme Outcome

B.Sc. (Computer Science)

On completion of the B.Sc.(Computer science) students are able to:

1. Ability to learn basics fundamental of computer. Demonstrate the aptitude of Computer Programming and Computer based problem solving skills.
2. Display the knowledge of appropriate theory, practices and tools for the specification, design, implementation.
3. Ability to learn and acquire knowledge through online courses available at different MOOC Providers.
4. Ability to link knowledge of Computer Science with other two chosen auxiliary disciplines of study.
5. Display ethical code of conduct in usage of Internet and Cyber systems.
6. Ability to pursue higher studies of specialization and to take up technical employment.
7. Ability to formulate, to model, to design solutions, procedure and to use software tools to solve real world problems and evaluate .
8. Ability to operate, manage, deploy, configure computer network, hardware,software operation of an organization.
9. Ability to present result using different presentation tools.
10. Ability to appreciate emerging technologies and tools.
11. The emphasis in on the design concepts & organizational details of the common PC ,learning the complicated electronics of the system of the computer Engineers.
12. Introduction to the web-language –HTML & problem solving through the concept of object oriented programming.
13. The emphasis is on the design concepts and organizational details of the common PC, leaving the complicated Electronics of the system to the computer engineers.
14. To introduce DBMS and RDBMS using Back- end tool and Front-end tool. Object of the Course:
15. Serve as the Asstt. Programmers or the Software Engineers with the sound knowledge of practical and theoretical concepts for developing software.
16. Serve as the Computer Engineers with enhanced knowledge of computers and its building blocks.
17. Work as the Hardware Designers/Engineers with the knowledge of Networking Concepts.
18. Work as the System Engineers and System integrator Serve as the System Administrators with thorough knowledge of DBMS.
19. To Give Technical Support for the various systems.
20. Serve as the IT Officers in Banks and cooperative societies.
21. Work as DTP Operator in small-scale industries.
22. Serve as the Web Designers with latest web development technologies.

M.Sc. (Computer Science)

On the completion of the M.Sc. (Computer science) students are able to work as:

1. Programmer or Software Engineer
2. Computer Engineer
3. Web Designer

4. Hardware Designer/Engineer
5. Systems Engineer
6. System integrator
7. System Administration
8. Technical Support
9. Support Engineer
10. Technical Writer
11. Consultant
12. Management
13. Administration
14. IT Sales and Marketing
15. IT Officer
16. Computer Scientist
17. Research Staff Member
18. Systems Analyst
19. Logic Designer
20. Computer Scientist in research and R & D laboratories.
21. Computer Science Graduates Earn Higher Salaries


H.O.D.
Department of Computer Science
Govt. Dnyanesh College Raigarh

Govt. Digvijay College Rajnandgaon
Department of Computer Science
Programme Specific Outcome

B.Sc. (Computer Science)

On completion of the B.Sc. (Computer Science) programme, students will be able to

1. Ability to apply knowledge of computing, mathematics, and basic sciences that may be relevant and appropriate to the domain
2. Ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution
3. Ability to design, implement, and evaluate computer-based system, process, component, or program to meet desired needs
4. An ability to function effectively on teams to accomplish a common goal
5. Ability to analyze the local and global impact of computing on individuals, organizations, and society
6. Recognition of the need for and an ability to engage in continuing professional development
7. Ability to use current techniques, skills, and tools necessary for computing practices.
8. Ability to use and apply current technical concepts and practices in the core development of solutions in the form of Information technology
9. Ability to incorporate effectively integrates IT-based solutions to applications.
10. An ability to assist and manage the execution of an effective project plan.

M.Sc. (Computer Science)

On the completion of the M.Sc. (Computer science) students are able to

1. Understand applications of C++ like Smart Pointer , Generic Pointer , Object Validation and Reference Counting.
2. Get hands on various Linux commands and shell script for different application.
3. Explore programming techniques of Java beans and swing.
4. Understand network fundamentals with TCP/IP architecture.
5. Understand artificial intelligence and AI problem solving techniques.
6. Explore logic for solving various AI problems.
Understand data warehousing for business analysis using OLAP, OLTP, MOLAP and ROLAP.
7. Explore the concepts of data mining and data preprocessing.
8. Ability to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems
9. Able to go for higher education teaching job and eligible for NET/SET test.