

POs:

After completion of graduation, students will be competent to:

- PO1: Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.
- PO2: Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.
- PO3: Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.
- PO4: Effective Citizenship: Demonstrate empathetic social concern and equity centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
- PO5: Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.
- PO6: Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.
- PO7: Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes

PSOs:

At the end of this program, the students would be able to:

- PSO1: Understand the computer hardware and software. PSO2: use the knowledge of software installation.
- PSO3: Select modern computing tools and techniques for programming task.
- PSO4: Identify, analyze, formulate and develop computer-based solutions to meet desired needs within realistic constraints.
- PSO5: Develop databases and perform operations on them.
- PSO6: Identify research and development areas in multiple disciplines. PSO7: Design and develop the small web applications.

Employability Potential of the B.Sc. with Computer Science/Computer Application (Voc/Non-Voc)/Information Technology:

The BSc with Computer Science, Computer application and IT helps develop a widely applicable skill set in computing with strong programming and mathematics skills, as well as wide ranging skills in project management, effective presentations and teamwork. Graduate with a portfolio of work fit to present to potential employers. Depending on your chosen pathway, you can focus on particular areas of interest such as programming, web development, design of database design and video games. Graduate with the Computer Science will be able to apply for a range of computational and mathematical jobs in the creative industries, business, finance, education, medicine, engineering and science. Typical job titles include:

- Data analyst
- Assistant Programmer
- Web designer
- Web developer
- Applications developer
- UI Developer
- Cyber security analyst
- Game designer

- Games developer Mobile App Developer
- Software Developer

Graduates of BSc Computer Science can find jobs in a variety of sectors like IT departments, MNCs, colleges, etc. in both private and government companies.

Some of the common job sectors, where a fresher and experienced professional can find a relevant job after completing this course are:

IT dept., Consultancies, Technical Support, Cyber Security, Software Engineering, MNCs, Website Development, Mobile App Development, Website Designing, Data Analyzation, Computer Manufacturers, Government Agencies, etc.

Bachelor degree with Computer Science/ Computer Application/IT has become one of the most favored undergraduate programs for students now a day. A career in Computer field has been proved rewarding since last decade. This field has the potential to boost the career. After completing B.Sc in Computer science/ Computer Application/IT, one can always go for higher studies for a better career prospects. They can join Master of Computer Application (MCA) or M.Sc in Computer science course. (MCA and M.Sc – Computer Science are equivalent degrees as recognized by UGC).

India is known to be a leader in software and the IT sector. The software and IT companies are the major employers of computer science graduates and offers the best packages to the young graduates which are unmatched with any other branches of science. Information Technology is a consistently growing field in respect of job opportunities. Computer science professionals or software professionals in recent scenario have a very bright career prospect. With growing of IT and software companies, a variety of job opportunities for trained computer professionals are being offered not only in India and abroad as well. IT sector is quite broad in terms of employment and job options, which gives fresher's new opportunities to make successful careers. Computer graduate can also get jobs in non-IT companies like universities, research, private and public industries, government departments, business organizations, commercial organizations and the manufacturing sector, etc.

Future scope for B.Sc. Computer Science/CA and IT graduates:

- Offer higher studies such M.Sc. and Ph.D. , MCA and MBA
- Likewise, foreign Universities also accept computer graduates for higher studies.
- Computer student can become small or medium scale entrepreneur.
- Union and State Public service commission's like UPSC, MPSC, Bank Probationary officers, other competitive examinations, etc. offer a multitude of jobs and positions like Data Entry operator, Assistant Programmer, etc.
- Students can become Content Developer for IT industries.
- Employee at Security Printing and Minting co-operation of India.

Cos

Upon completion of this course successfully, Students would be able to -

1. Understand the computer, I/O and peripheral devices.
2. Understand concept of Operating systems.
3. Apply the Programming concepts.
4. Learn C language.
5. Write Simple C Programs.

COs

Upon completion of this course successfully, Students would be able to demonstrate/perform/accomplish the following

1. Write word processing task.
2. Create worksheet and perform operations on it.
3. Design, compile and debug programs in C language.
4. Classify conditional expressions and looping statement to solve problems associated with conditions and repetitions.
5. Demonstrate the programs using arithmetic and relational operators.
6. Implement the concept of various string handling functions.
7. Classify programming components that efficiently solve computing problems in real-world.

Cos

Upon completion of this course successfully, Students would be able to -

1. Implement basic data structures such as arrays, stacks.
2. use linked list, trees and queues.
3. Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data.
4. Describe the procedural and object-oriented paradigm with concepts of streams, classes, functions, data and objects.
5. Perform programming on functions, inline functions, constructor and destructor.
6. Perform programming on the concept of function overloading, operator overloading, virtual functions and polymorphism.

COs

Upon completion of this course successfully, Students would be able to demonstrate/perform/accomplish the following

1. Perform various operations Data structure using CPP.
2. Develop the concept of dynamic memory allocation through linked list.
3. Design stack and queue with contiguous and non-contiguous data storage mechanism.
4. Perform the various operations on binary tree.

