he Bachelor in Computer Application (BCA) Program was started by School of Computer Science & Engineering (SCE) to meet the demand for well-qualified computer professionals. The program focuses on theoretical computer science as well as software and application development. These programs are expected to enable students to become leading engineers and researchers who are highly motivated and have the practical, creative, and management skills to drive an advanced next-generation information society within all industrial fields.

The Program has provided well-equipped computer labs with latest computer software. The Program ensures that program objectives are constantly met and learning outcomes are monitored through periodical test and assignment.

Our objective is to fill in the demand the emerging sectors are generating and to prepare the students to fit into the future workplace. These professional programs are design to breed production-ready undergraduates & postgraduates with the right attitude & best understanding of how production & latest technology workflow occurs in a professional environment. It also confirms Poornima University's educational philosophy and goal.

The three year, six semester BCA programme emphasizes on computer application oriented courses like C++, Java, Web Application Development, etc. There are two projects one minor followed by major in the final semester. Each semester has lab course where the students have to do compulsory lab assignments for a minimum of 6 hours per week. Students are free to select the electives offered under the choice based credit system. Programme equips the students with sound academic base from which an advanced career in computer applications including the latest developments keeping pace with the industry can be developed. The program also carries out the required analysis and synthesis involved in computer systems, information systems and computer applications. Under the credit system student has to earn the required number of credits as demanded by the curriculum.

PEOs, POs & PSOs

PROGRAM EDUCATIONAL OBJECTIVES

PEO1: The program will produce graduates who will be competent professionals in IT industry, academics, government, or entrepreneurs.
PEO2: The graduates will be able to adapt to the fast changing world of Information Technology needs and will become effective collaborators and through latest & innovative methodologies, they will be able to address the social, technical and business challenges.
PEO3: Graduates will be a good team player and in course of time will be able to lead the team to find solutions and improvements in their field of expertise or become entrepreneurs and play the leading roles in enterprises.
PEO4: The graduates will be able to display interpersonal skills, communicate efficiently and effectively and will be able to lead/function in multiple disciplinary teams.
PEO5: Graduates will be able to understand the need for lifelong learning and IT skill upgradation, through taking up certifications or higher education.
PEO6: Graduates will be able to understand professional and ethical responsibilities..

PROGRAM OUTCOMES (PO)

PO1:Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools prediction and modelling to complex engineering activities with an understanding of the limitations.
PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and the need for sustainable development.
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. .
PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and receive clear instructions.
PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in team, to manage projects and in multidisciplinary environments.
PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOS)

PSO1: The graduates are proficient in fundamental principles and methods of Computer Science, Mathematical and Scientific reasoning and are able to: a) Apply fundamental concepts of integration, differentiation, vector calculus, probability & statistics, and discrete mathematics. b) Design, create & evaluate algorithms appropriate to specific problems.
PSO2: The graduates possess in-depth knowledge of various components of hardware and system software. The students have thorough understanding of/to: a) Describe, identify and illustrate desktop, network and server environments b) Apply networking concepts to build efficient networks and troubleshoot them c) Ability to employ cloud concepts to illustrate cloud

computing solutions d) Basic and advanced elements of information security to solve problems and foresee threats e) Classify various information security threats and trends in the current IT world, and illustrate them.

PSO3: The graduates are competent in object oriented programming languages and possess basic knowledge of several other programming languages and can create first level program.

PSO4: The graduates exhibit knowledge of diverse software engineering practices and project management, can work as a team leader/team member and communicate efficiently with team in developing software of multidisciplinary nature.

PSO5: The graduates possess ability to explore emerging technologies and provide innovative solutions to real time problems within constraints such as financial, environmental, social and ethical.

PROGRAM HIGHLIGHTS

1. The oldest & largest school of Poornima University
2. High end desktop computer provided by university to each student
3. Teaching happens in laboratory with real time hands-on practice
4. Guidance by Professionally Trained Faculty & Industry Experts via use of Latest Aids and Live Projects
5. Performance of Students are assessed continuously throughout the semester
6. Program tailored to produce skilled and ready-to-deploy talent
7. Tech-enabled program delivery using tablets, PCs and learning management system
8. Emphasis on application-oriented learning & Outcome Based Learning
9. Access to cloud labs for 24×7
10. Mandatory semester long and summer internships to gain vast industry exposure
11. 110% placement track record
12. Opportunity to learn artificial intelligence, machine learning, robotics, data science, natural language processing, computer networking, computer security and privacy, and much more.
13. Industry-led Course Curriculum designed consulting from industry experts and academic leaders maintaining the Accreditation Standards.
14. Most of our alumni work at tech companies around the world, from large tech titans to the smallest startups
15. Our education prepares a student to excel in a variety of careers and make a positive impact in the world
16. Students have a variety of opportunities to gain hands-on experience and develop their leadership skills
17. Regular Workshops & Seminars by the Industry Experts