School of Computing Science and Engineering

B.Tech Cloud Computing & Automation

Programme Output (POs):

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. 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.

3. 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.

4. 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.

5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. 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.

7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. 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 give and receive clear instructions.

11. 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 a team, to manage projects and in multidisciplinary environments.

12. 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.

Programme Specific Outcomes (PSOs):

PSO1: Understand and develop computer programs in the areas related to algorithms, system software, cloud-based systems and cloud-oriented methodologies by identifying, demonstrating and analyzing the knowledge of engineering with cloud computing in efficient design of computer-based systems of varying complexity.

PSO2: Applying algorithmic principles, innovative Computer science and engineering design and implementation skills to propose optimal solutions to complex problems by choosing a better platform for research in cloud computing.

PSO3: Identify standard Software Engineering practices and strategies by applying software project development methods using open-source programming environment to design and evaluate a quality product for business success.

PSO4: Demonstrate and examine basic understanding of engineering fundamentals, professional/social ethics and apply mathematical foundations to design and solve computational problems.

Programme Educational Outcome (PEOs):

PEO1: To impart deep technical knowledge about the field of cloud computing and automation.

PEO2: To develop an understanding of cloud computing technologies at different levels of abstraction, including computer architecture and design, operating systems, database management, algorithms and applications.

PEO3: To develop in students a strong foundation in the field of Mathematical and basics of engineering fundamentals, necessary to analyze and evaluate real world engineering problems related to cloud computing and to further prepare them for higher studies, R&D.

PEO4: To develop life-long learning attitude among students and to make them aware about professional and social responsibility.

PEO5: To inculcate an understanding among the students for utilizing their knowledge of computer engineering and mathematical theory to solve current and future computing problems.

PEO6: To inspire leadership and professional values in the students.