SMIT SIKKIM MANIPAL UNIVERSITY
SIKKIM MANIPAL INSTITUTE OF TECHNOLOGY

Program Name: Bachelor in Computer Applications (MCA)

Program Outcomes (PO)

1. **Computational Knowledge**: Apply the knowledge of mathematics, fundamentals of computing, and fundamentals of machine learning to solve software development problems.
2. **Problem analysis:** Identify, formulate, review and analyse computing processes and arrive at substantial conclusions using principles of mathematics, and computing sciences.
3. **Design/development of solutions**: Design and evaluate solutions for *complex* computing problems, along with their components, and processes that meet the requirements with appropriate consideration of public health and safety measures.
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 modelling for the computational problem with an understanding of its limitations.
6. **Environment and sustainability:** Understand the impact of developing a solution for a computational problem in societal and environmental contexts and demonstrate the knowledge context of the sustainable development environment.
7. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of professional computing practice.
8. **Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and multidisciplinary settings.
9. **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.
10. **Project management and finance:** Demonstrate knowledge and understanding of the computing and management principles and apply these to one's work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
11. **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.
12. **Innovation and Entrepreneurship:** Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.