



Manipal University Jaipur
Faculty of Science, Technology and Architecture
Department of IoT & IS
B.Tech-CSE (IoT & IS)

Program Outcomes and Program Specific Outcomes

Program Outcomes (POs)

- [PO 1]. Engineering knowledge: apply the knowledge of mathematics, computer science, and communication engineering fundamentals to the solution of complex engineering problems.
- [PO 2]. Problem analysis: identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using basic principles of mathematics, computing techniques and communication engineering principles.
- [PO 3]. Design/development of solutions: design solutions for complex engineering problems and design system components or processes that meet the specified requirements with appropriate consideration for law, safety, cultural & societal obligations with environmental considerations. ...
- [PO 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.
- [PO 5]. Modern tool usage: create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- [PO 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.
- [PO 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.
- [PO 8]. Ethics: apply ethical principles and commit to professional ethics, responsibilities and norms of the engineering practice.
- [PO 9]. Individual and teamwork: function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- [PO 10]. Communication: communicate effectively for all engineering processes & activities with the peer engineering team, community and with society at large. Clarity of thoughts, being able to comprehend and formulate effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- [PO 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 varied environments.
- [PO 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.

Program Specific Outcomes (PSOs)

- [PSO 1]. Apply the fundamental knowledge of computer science and engineering in developing effective software/hardware for real world complex engineering problems by adapting advanced technologies.
- [PSO 2]. Analyze and configure various IoT based innovative and smart applications using recent hardware and software tools.
- [PSO 3]. Design industrial IoT based solutions for improving operational efficiency at home and industry automation systems.