**PEOs & PSOs of B.Tech (UG Program)**

**The following are Graduate Attributes for UG Engineering Programme:**

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| **PO#** | **Graduate Attributes** | **PO Statements** |
| **PO 1** | **Engineering knowledge** | Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. |
| **PO 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 |
| **PO 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. |
| **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 and responsibilities and norms of the engineering practice. |
| **PO 9** | **Individual and team work** | Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. |
| **PO 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. |
| **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 multidisciplinary 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. |

**B.TECH Program Educational Objectives(PEO’s):**

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| **Sl.No.** | **PEO#** | **Program Educational Objectives** |
| **1** | **PEO - 1** | Graduates of program will have thorough understanding of key principles and practices of computing techniques requires for identifying, formulating and solving both hardware and software related problems. |
| **2** | **PEO – 2** | Graduates of program will be capable of analyzing problems based on scenario, design solutions for meeting the needs of the industry and society. |
| **3** | **PEO – 3** | Graduates of program will have professional skills, lifelong learning, inter personnel and organizational skills for successful career or pursue higher education. |

**B.TECH Program Specific Outcomes:**

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| **PSO#** | **Program Specific Outcomes** |
| **PSO - 1** | **Computing Techniques:** Apply the knowledge about principles of programming languages, Computer Algorithms, Databases, System Software and Computer Networks for the interconnection. |
| **PSO – 2** | **Computer Product and Application Development:** Interpret and analyze the problem, formulate an efficient hardware and software solution for the real world, socio-industry related problems and needs using computing methodologies and latest technologies.  |
| **PSO – 3** | **Successful Career and Entrepreneurship Perspectives:** Fulfilling desire by attaining Employment, Excel in competitive examinations, Higher studies, Research, and initiate startup’s.  |