



PES University, Bengaluru

(Established under Karnataka Act No. 16 of 2013)

Program : M.Tech in Computer Science & Engineering

Program Outcomes

ID	NBA Program Outcomes	PESU M.Tech.-CSE Program Outcomes
UE17CSE_PG_PO1	Scholarship of Knowledge: Acquire in-depth knowledge of specific discipline or professional area, including wider and global perspective, with an ability to discriminate, evaluate, analyse and synthesise existing and new knowledge, and integration of the same for enhancement of knowledge.	To acquire in depth knowledge in the field of Computer Science & Engineering with specialization in Cloud Computing, Big data and IOT, Cyber security and apply the same in the design and development of Software and Hardware Systems
UE17CSE_PG_PO2	Critical Thinking: Analyze complex engineering problems critically, apply independent judgment for synthesizing information to make intellectual and/or creative advances for conducting research in a wider theoretical, practical and policy context	Analyze complex problems in Computer Science & Engineering and its associated domains; analyze alternative designs for tradeoffs between various design factors such as power, performance and accuracy.
UE17CSE_PG_PO3	Problem Solving: Think laterally and originally, conceptualize and solve engineering problems, evaluate a wide range of potential solutions for those problems and arrive at feasible, optimal solutions after considering public health and safety, cultural, societal and environmental factors in the core areas of expertise	Identify, formulate and critically study the problem, understand the interplay between theory and practice, design and develop efficient algorithms, conduct experiments, analyzing the results and applying the knowledge to different domains by considering social, environmental, economic, and security constraints.

<p>UE17CSE_PG_PO4</p>	<p>Research Skill :Extract information pertinent to unfamiliar problems through literature survey and experiments, apply appropriate research methodologies, techniques and tools, design, conduct experiments, analyze and interpret data, demonstrate higher order skill and view things in a broader perspective, contribute individually/in group(s) to the development of scientific/technological knowledge in one or more domains of engineering.</p>	<p>Critically analyze existing literature in an area of specialization, conduct investigative research to develop innovative methodologies to tackle issues identified and contribute to the development of technological knowledge and intellectual property.</p>
<p>UE17CSE_PG_PO5</p>	<p>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.</p>	<p>Apply current techniques, skills and modern computing tools to build and analyze robust, reliable, maintainable, scalable and efficient computing systems</p>
<p>UE17CSE_UG_PO6</p>	<p>Collaborative and Multidisciplinary work: Possess knowledge and understanding of group dynamics, recognize opportunities and contribute positively to collaborative-multidisciplinary scientific research, demonstrate a capacity for self-management and teamwork, decision-making based on open-mindedness, objectivity and rational analysis in order to achieve common goals and further the learning of themselves as well as others</p>	<p>Enhance skills and continuously acquire advanced knowledge in Computer Science and Engineering, multidisciplinary and interdisciplinary domains for professional excellence.</p>
<p>UE17CSE_UG_PO7</p>	<p>Project Management and Finance: Demonstrate knowledge and understanding of engineering and management principles and apply the same to one’s own work, as a member and leader in a team, manage projects efficiently in respective disciplines and multidisciplinary environments after consideration of economical and financial factors</p>	<p>Manage and execute complex software engineering projects under economic, time and performance constraints both working in teams and in an individual capacity.</p>

<p>UE17CSEP_PG_O8</p>	<p>Communication: Communicate with the engineering community, and with society at large, regarding complex engineering activities confidently and effectively, such as, being able to comprehend and write effective reports and design documentation by adhering to appropriate standards, make effective presentations, and give and receive clear instructions</p>	<p>Contribute and communicate effectively with the society confidently, be able to write effective reports and design documents by adhering to the appropriate standards, make effective presentations, give and receive clear instructions</p>
<p>UE17CSE_PG_PO9</p>	<p>Life-long Learning: Recognize the need for, and have the preparation and ability to engage in life-long learning independently, with a high level of enthusiasm and commitment to improve knowledge and competence continuously</p>	<p>Engage in lifelong learning with persistent scientific temper for professional advancement and effective communication of the technical information.</p>
<p>UE17CSE_PG_PO10</p>	<p>Ethical Practices and Social Responsibility: Acquire professional and intellectual integrity, professional code of conduct, ethics of research and scholarship, consideration of the impact of research outcomes on professional practices and an understanding of responsibility to contribute to the community for sustainable development of society</p>	<p>Become a complete professional with high integrity and ethics, with excellent professional conduct and with empathy towards the environmental and contribute to the community for sustainable development of society</p>
<p>UE17CSE_PG_PO11</p>	<p>Independent and Reflective Learning: Observe and examine critically the outcomes of one's actions and make corrective measures subsequently, and learn from mistakes without depending on external feedback.</p>	<p>Critically evaluate the outcomes of one's actions and apply self corrective measures to improve the performance.</p>