

Program Name: M.Tech (Software Engineering)

Program Educational Objectives (PEOs)

Program educational objectives of M.Tech in Software Engineering are to:

- PEO-I.** Develop technologically competent computer professionals in today's IT centric scenario by training them in the contemporary software engineering principles and paradigms.
- PEO-II.** Provide students a deep insight into various cutting edge technologies & tools and thereby creating diverse career opportunities.
- PEO-III.** Improve analytical, logical and presentation skills of the students by applying evolving technologies of software engineering in developing practical solutions to complex problems in consonance with the legal and ethical responsibilities.
- PEO-IV.** Provide the students with project engineering and management skills catering to the changing industry needs and constraints across the advancing domains of computing.
- PEO-V.** Prepare the students to take up research oriented projects, industry internships and entrepreneurship endeavors by training them to work with multi-disciplinary teams and engaging them for life-long learning in pursuit of their professional accomplishment.

Program Outcomes (PO's)

Students from the M.Tech in Software Engineering will attain the ability to (by the time of graduation)

- PO-a.** Apply the knowledge of software engineering principles and paradigms in the design of system components and processes that meet the specific needs of the industry
- PO-b.** Identify, analyze and formulate solutions to complex engineering problems using innovative and emerging technologies.
- PO-c.** Conceptualize and solve engineering problems with feasible optimal solutions in consideration of socio-economic factors.
- PO-d.** Extract information relevant to novel problems and apply appropriate research methodology to develop scientific knowledge.
- PO-e.** Use the techniques, skills and CASE tools necessary for engineering practice and coordinate the construction, deployment and maintenance of software systems.
- PO-f.** Function effectively on teams to accomplish a common goal.
- PO-g.** Understand engineering and management principles to manage projects effectively keeping in view of economic and financial factors.
- PO-h.** Effectively communicate technical information in speech, presentation and documentation.
- PO-i.** Recognize the need to engage in lifelong learning and be exposed to all the nuances of contemporary technologies.
- PO-j.** To apply ethical principles and societal values to be committed to professional ethics and responsibilities and norms of the engineering practice.
- PO-k.** Self-learn and pursue higher studies to upgrade qualifications and attain constructive growth in profession.