

## DEPARTMENT OF CIVIL ENGINEERING

### PROGRAM OUTCOMES

#### **(M.Tech. with Specialization in Water Resources Development & Irrigation Engineering)**

The Program Outcomes (POs) are as follows:

- A. The graduate will have an ability to apply the knowledge of mathematics, science and engineering to real life problems.
- B. The graduates will be able to understand problems, formulations, and to conduct experiments, by analysis and interpreting the data.
- C. The graduates will be able to design the experiments to evaluate the performance of engineering systems or component with respect to specifications.
- D. The graduates will be able to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability.
- E. The graduates will be able to improve the function effectively in water resources engineering field, as well as in members of multidisciplinary teams.
- F. The graduates will come to know the application of modern tools such as different computer software, modern instrumentation for understanding the limitations of engineering activities and also for the modeling and design of engineering systems.
- G. The graduates will be able to understand the professional and ethical responsibility.
- H. The graduates will come to know recognition of need for and an ability to engage in lifelong learning.
- I. The graduates will be able to make effective communication in oral, written, graphical forms with confidence.
- J. The graduates will be capable of understanding and implementing of the impact of engineering solution in global and societal context.
- K. Also we expect our graduates to achieve the following within two years of graduating:
  - should demonstrate peer recognized expertise together with the ability to articulate that expertise and use it for contemporary problem solving in the analysis, design, and evaluation of water resources engineering projects.
  - should demonstrate engagement in the engineering profession, locally and globally, by contributing to the ethical, competent, and creative practice of engineering or other professional careers.
  - should demonstrate sustained learning and adapting to a constantly changing field through graduate work, professional development, and self-study.
  - should demonstrate leadership and initiative to ethically advance professional and organizational goals, facilitate the achievements of others, and obtain substantive results.
  - should demonstrate a commitment to teamwork while working with others of diverse cultural and interdisciplinary backgrounds.
  - should have good research publications at national / international symposia / journals.