

DEPARTMENT VISION	INSTITUTION VISION
The Department of Civil Engineering strives to graduate highly qualified engineers, maintain nationally recognized research and provide quality professional and community service to the society.	To emerge as a premier institution in the field of technical education and research in the state and as a home for holistic development of the students and contribute to the advancement of society and the region.

DEPARTMENT MISSION	INSTITUTION MISSION
<ul style="list-style-type: none"> <li>To enhance quality of the program by creating an environment conducive for innovative teaching and learning.</li> <li>To generate research opportunities that creates synergy among faculty, students, and practicing professionals.</li> <li>To work in conjunction with other departments in the institution to provide multidisciplinary opportunities for both students and faculty.</li> <li>To contribute for the improvement in the quality of life in society through innovation, sharing, and use of knowledge.</li> </ul>	To provide high quality technical education through a creative balance of academic and industry oriented learning; to create an inspiring environment of scholarship and research; to instill high levels of academic and professional discipline; and to establish standards that inculcate ethical and moral values that contribute to growth in career and development of society in general.

**Course Learning Objectives:**

- To impart preliminary concepts of Strength of Material and Principles of Elasticity and Plasticity Stress strain behavior of materials and their governing laws. Introduce student the moduli of Elasticity and their relations
- To impart concepts of Bending Moment and Shear force for beams with different boundary and loading conditions and to draw the diagrams of variation across the length.
- To give concepts of stresses developed in the cross section and bending equations calculation of section modulus of sections with different cross sections
- The concepts above will be utilized in measuring deflections in beams under various loading and support conditions
- To classify cylinders based on their thickness and to derive equations for measurement of stresses across the cross section when subjected to external pressure.

**Course Outcomes:**

- The student will be able to understand the basic materials behavior under the influence of different external loading conditions and the support conditions
- The student will be able to draw the diagrams indicating the variation of the key performance features like bending moment and shear forces
- The student will have knowledge of bending concepts and calculation of section modulus and for determination of stresses developed in the beams and deflections due to various loading conditions
- The student will be able to assess stresses across section of the thin and thick cylinders to arrive at optimum sections to withstand the internal pressure using Lamé's equation.