

# Sri Krishna Institute of Technology

## Department of Civil Engineering

### CO'S

3<sup>rd</sup> Semester

#### **21CV32(Geodetic Engineering)**

1. Execute survey using compass and plane table
2. Find the level of ground surface and Calculation of area and volumes
3. Operate theodolite for field execution
4. Estimate the capacity of reservoir
5. Interpret satellite imageries

#### **21CV33(STRENGTH OF MATERIALS)**

1. Evaluate the behavior when a solid material is subjected to various types of forces (namely Compressive, Tensile, Thermal, Shear, flexure, Torque, internal fluid pressure) and estimate stresses and corresponding strain developed. (L3)
2. Estimate the forces developed and draw schematic diagram for stresses, forces, moments for simple beams with different types of support and are subjected to various types of loads (L3).
3. Evaluate the behavior when a solid material is subjected to Torque and internal fluid pressure and estimate stresses and corresponding strain developed. (L3)
4. Distinguish the behavior of short and long column and calculate load at failure & explain the behavior of spring to estimate deflection and stiffness (L3)
5. Examine and Evaluate the mechanical properties of various materials under different loading conditions

#### **21CV34(Earth Resources and Engineering)**

1. Apply geological knowledge in different civil engineering practice.
2. Students will acquire knowledge on durability and competence of foundation rocks, and confidence enough to use the best building materials.
3. competent enough to provide services for the safety, stability, economy and life of the structures that they construct
4. Able to solve various issues related to ground water exploration, build up dams, bridges, tunnels which are often confronted with ground water problems
5. Intelligent enough to apply GIS, GPS and remote sensing as a latest tool in different civil engineering for safe and solid construction.



**4<sup>th</sup> Semester**

**21CV42(Fluid Mechanics and Hydraulics)**

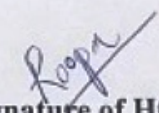
1. Understand fundamental properties of fluids and solve problems on Hydrostatics
2. Apply Principles of Mathematics to represent Kinematics and Bernoulli's principles
3. Compute discharge through pipes, notches and weirs
4. Design of open channels of various cross sections
5. Design of turbines for the given data and understand their operation characteristics

**21CV43(PUBLIC HEALTH ENGINEERING)**

2. Estimate average and peak water demand for a community.
2. Evaluate water quality and environmental significance of various parameters and plan suitable treatment system.
3. Design the different units of water treatment plant
4. Understand and design the various units of wastewater treatment plant
5. Acquire capability to conduct experiments and estimate the concentration of different parameters and compare the obtained results with the concerned guidelines and regulations.

**(21CV44)ANALYSIS OF STRUCTURES**

1. Evaluate slope and deflections in beams using geometrical methods.
2. Determine deflections in trusses and frames using energy principles.
3. Analyze arches and cables for stress resultants.
4. Apply slope deflection method in analyzing indeterminate structures and construct bending moment diagram.
5. Analyze continuous beams, frames and trusses using stiffness matrix method of analysis.

  
**Signature of HOD**