CE 724A: Reliability Analysis and Design of Structure   **3-0-0-0 [9]**

Course Contents:
Review of the basic probability theory, Introduction to risk analysis, Structural reliability, First order reliability methods, First order reliability analysis with correlated and non-normal stochastic variables, Second order reliability methods, Simulation based reliability methods (Monte Carlo and its variants), Reliability evaluation of systems, Reliability based design of structures: Level I methods, Code Calibration and partial safety factor, Load combinations, Time-variant reliability, Reliability updating