

CE680A: Traffic Flow Modeling and Simulation**3-0-0-0 [9]****Course Contents:**

Traffic flow characteristics; Deterministic and stochastic models of stream flows; Car following models; Stability and diffusion phenomena in traffic; Boltzmann models; Signalized and un-signalized intersections; Coordination and optimization of network of signalized intersections; Pedestrian flow problems; Fundamentals of traffic simulation modeling; Simulation methodologies and model design; Simulation languages; Study of large scale simulation models.