

SYLLABUS :-

Prerequisites: IM21003 Operations Research-IDiscrete system simulation, Generation of pseudo-random numbers, Generation of random deviates. Continuous system simulation, Numerical integration schemes such as, Euler and Runge-Kutta. Simulation languages such as EXTEND and STELLA. Design of simulation experiments, Variance prediction techniques, Statistical analysis of outputs, Optimisation of parameters, Verification and validation aspects of simulation models. Simulators for training skill, Principles, Learning theory, Examples. Simulation games, Principles, Types, Studies on effectiveness. Books J. Banks, J. S. Carson, B. L. Nelson and D. M. Nicol (2001), Discrete Event System Simulation, 3rd Ed., Pearson Education International Series. A. M. Law and W. D. Kelton (2000), Simulation Modeling and Analysis, 3rd Ed., McGraw Hill International - Industrial Engg. Series.