CS 5420 TECHNIQUES OF SIMULATION

Semester Hours: 3.0
Coordinator: Hassen Rajaei
Text: Simulation Using Promodel
Author(s): HARRELL, GHOSH, BOWDEN
Year: 2012

Contact Hours: 3

SPECIFIC COURSE INFORMATION

Catalog Description:
Principles of simulation and application of simulation languages to both continuous and discrete systems. Prerequisite: Full Admission to MS in CS program or consent of department is required for enrollment.

Course type: Elective

SPECIFIC COURSE GOALS

• I can identify application areas of computer simulation such as industry defense, finance, and education.
• I can explain the differences between the types of simulation such as Monte Carlo, VS. Discrete Event, and/or Real-Time simulation
• I can analyze relevant research and communicate my findings

LIST OF TOPICS COVERED

• Introduction (1 week)
• Simulation Basics (2 weeks)
• Stages of Simulation Model Development (2 weeks)
• Abstract Representation Techniques (1 week)
• Random Number Distribution (2 weeks)
• Evaluation of Simulation Modeling (2 weeks)
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• Term Project (4 weeks)