SCMT - SUPPLY CHAIN MGMT

SCMT 610 Business Analytics
Credits 1 to 3. 1 to 3 Lecture Hours.
Utilization of quantitative tools such as forecasting, optimization and Monte Carlo simulation in order to deal with uncertainties in business and to assist in making better business decisions. May be repeated up to 3 hours credit. Classification 6 students may not enroll in this course. **Prerequisite:** Enrollment is limited to MBA students.

SCMT 611 Statistical Foundation of Data Analytics
Credits 3. 3 Lecture Hours.
Collection, tabulation and presentation of numerical data; sampling, estimation of averages and variation, probability and error, hypothesis testing, linear and logistic regression; practical applications to functional problems in accounting, finance, marketing and management.

SCMT 614 Operations Management
Credits 1 to 3. 1 to 3 Lecture Hours.
Theory and applications of designing, analyzing and controlling productive systems in the allocation and use of resources to produce goods and services. May be repeated for up to 3 hours credit. Classification 6 students may not enroll in this course. **Prerequisites:** SCMT 610 or equivalent; enrollment is limited to MBA students.

SCMT 616 Supply Chain Management
Credits 1 to 3. 1 to 3 Lecture Hours.
Focus on the integrated management of the total product delivery system; purchasing, inventory management and distribution functions with emphasis on physical and information flows. **Prerequisites:** SCMT 614; MBA classification.

SCMT 637 Modeling and Optimization
Credits 3. 3 Lecture Hours.
Application of quantitative decision-making techniques to management decision problems; focus on model development, solution and implementation of results with particular emphasis on linear and mixed-integer programming.

SCMT 638 Information Technology in Supply Chain Management
Credits 3. 3 Lecture Hours.
Review, evaluate, and contribute to the existing knowledge base regarding the management of information flows from automatic identification systems such as RFID. **Prerequisites:** ISEN 615 and PhD students or Masters students with a thesis degree plan or approval of instructor.

SCMT 645 Business Process Design
Credits 3. 3 Lecture Hours.
Introduction to business process design and analysis; tools and techniques to document, analyze and improve business processes; Six Sigma process design and improvement; process metrics; computer simulation of processes; aligning business process with organizational goals and objectives; and case study of real world business problems. **Prerequisites:** Graduate classification or approval of instructor; SCMT 614, SCMT 660 or approval of instructor.

SCMT 665 Artificial Intelligence for Business
Credits 3. 3 Lecture Hours.
Managerial emphasis on deployment of artificial intelligence (AI) in various business functional areas; leveraging AI to create organizational value; AI technologies as neural networks; deep learning and reinforcement learning; societal concerns about the impact of AI on the future of work; ethical challenges resulting from the use of AI. **Prerequisite:** Graduate classification and approval of instructor.

SCMT 667 Logistics and Distribution Management
Credits 3. 3 Lecture Hours.
Contemporary logistics activities including inbound and outbound materials and service flows, with special emphasis on their relationships to the firm’s manufacturing function. Classification 6 students may not enroll in this course. **Prerequisite:** SCMT 614 or SCMT 660 or equivalent.

SCMT 681 Seminar
Credits 1 to 3. 1 to 3 Lecture Hours.
Evaluation of the historical evolution, current research, and significant issues in management information systems, production/operations management, or management science. May be repeated for credit five times as content varies. **Prerequisites:** Doctoral classification and approval of department head.

SCMT 685 Directed Studies
Credits 1 to 4. 1 to 4 Other Hours.
Directed study on selected problems using recent developments in business research methods. **Prerequisites:** Approval of instructor and graduate advisor.

SCMT 689 Special Topics in...
Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours.
Selected topics in identified areas of operations and supply chain management.

SCMT 691 Research
Credits 1 to 23. 1 to 23 Other Hours.
Research for thesis or dissertation. Classification 6 students may not enroll in this course.

SCMT 705 Global Operations
Credits 1 to 4. 1 to 4 Lecture Hours.
Concepts, techniques and tools to design, analyze and improve core operational capabilities; production control; inventory management; quality management; process design; forecasting; product design; facility layout; capacity planning. **Prerequisite:** For Master of Science in Business students only.