OPERATIONS & SUPPLY CHAIN MANAGEMENT (OSCM)

OSCM 3310 Computer And Model Based Business Decision Making
[3 credit hours]
An introduction to quantitative methods of decision making including linear programming, transportation, simulation, waiting line analysis, advanced decision theory and Markov chains. Computer packages and creative thinking will be emphasized.
Prerequisites: BUAD 2070 with a minimum grade of D-

OSCM 3340 Quality Management and Process Improvement
[3 credit hours]
Covers major aspects of lean processes and managing total quality functions in manufacturing/service operations. Includes: quality assurance, process control techniques, product liability and organization of the quality function as well as process improvement tools such as lean principles, process analysis.
Prerequisites: BUAD 3020 with a minimum grade of D-
Term Offered: Spring, Summer, Fall

OSCM 3600 Facility Planning
[3 credit hours]
The study of the design and planning of new facilities. Topics include product and process design, the application of CIM, FMS, capacity planning, facility location and layout, and job design.
Prerequisites: BUAD 3020 with a minimum grade of D-

OSCM 3610 Operations Planning and Scheduling
[3 credit hours]
A study of operations planning and its relation to organizational goals. Students learn concepts of developing materials and resources requirement plans, capacity management, just-in-time, resource scheduling in manufacturing and service organizations. Emerging concepts in the discipline will also be discussed.
Prerequisites: BUAD 3020 with a minimum grade of D-
Term Offered: Spring, Summer, Fall

OSCM 3660 Strategic Sourcing
[3 credit hours]
Relationship between supply management and firm's strategic goals, state-of-the-art supplier management, competing through effective supplier relationships, commodity strategy development, supplier negotiations, supplier selection and quality management, managing the RFP/RFQ process, cost management, and latest trends in sourcing and covered in the course.
Prerequisites: BUAD 3020 with a minimum grade of D-
Term Offered: Spring, Summer, Fall

OSCM 3750 Applied Regression Analysis
[3 credit hours]
This course emphasizes model formulation, tests of goodness-of-fit and significance of parameters for the traditional linear regression model. Business applications/cases and computer packages will be emphasized.
Prerequisites: BUAD 2070 with a minimum grade of D-

OSCM 3760 Management Science: Cases And Applications
[3 credit hours]
A study of business applications emphasizing model formulation, identification and validation. The course includes linear programming, critical path methods, queuing and various modeling techniques using computer packages.
Prerequisites: OPMT 3310 with a minimum grade of D-

OSCM 4020 Statistics For Administrative Services
[3 credit hours]
An introduction to statistical methods, including measures of central tendency and dispersion, probability and probability distributions, sampling theory, decision theory, regression and correlation. Specifically designed for the Administrative Services program.
Prerequisites: MATH 1270 with a minimum grade of D-

OSCM 4150 Supply Chain Analytics and Cases
[3 credit hours]
This course focuses on developing skills in using techniques and software tools for the design and operational control of supply chains. Students will investigate issues relating to configuring supply chain networks (distribution systems), inventory deployment, planning and routing of transportation systems, warehouse and plant location and contract design etc. The focus will be on applications to practical situations. Necessary skills will be developed using cases, projects and presentations.
Prerequisites: BUAD 3020 with a minimum grade of D-

OSCM 4210 Project Management
[3 credit hours]
This course covers planning, organizing and controlling projects. Topics such as project selection, scheduling, budgeting, resource management, project control, time-based competition and concurrent engineering will be discussed.
Prerequisites: BUAD 3020 with a minimum grade of D-

OSCM 4250 Business Analytics-Techniques and Cases
[3 credit hours]
This course provides an introduction to the analytical tools and techniques used in business for decision making with focus on using data visualization, and data mining techniques. It also familiarizes and equips students with prescriptive and evaluative techniques. Industrial grade software along with case studies will be used.
Prerequisites: BUAD 2070 with a minimum grade of D-

OSCM 4420 Service Operations Management
[3 credit hours]
The service sector is the dominant sector of the economy. Students will study various aspects of Operations Management as applied to service industries. Services for manufacturing will be emphasized.
Prerequisites: BUAD 3020 with a minimum grade of D-

OSCM 4450 Business Forcasting
[3 credit hours]
A study of qualitative and quantitative forecasting techniques. The course will cover appplications of these analysis techniques to various functions such as finance, operations and supply chain management, marketing and economics. Students will also gain experience in using statistical software packages for forecasting.
Prerequisites: BUAD 2070 with a minimum grade of D-

OSCM 4500 Supply Chain Strategy
[3 credit hours]
The course examines firms' strategic management of resources, and discusses its importance and benefits to its overall competitiveness. The purpose of the course is to provide students with an understanding of the content of firms' supply chain strategy and the processes by which they are developed and implemented. Topics covered in the course are related to operations/supply chain strategy, including environmental analysis, sustainability, product/service design, structure and infrastructure, coordination strategy, logistics and risk management.
Prerequisites: BUAD 3020 with a minimum grade of D- and MKTG 3130 with a minimum grade of D- and (OSCM 3340 with a minimum grade of D- and OSCM 3610 with a minimum grade of D- or OSCM 3660 with a minimum grade of D-)
Term Offered: Spring

OSCM 4750 Analysis of Variance
[3 credit hours]
Analysis of variance and related topics such as factorial design and Latin squares. Experimental designs including repeated measures, factorial and nested designs.

OSCM 4760 Sim Mod/Anlys Spply Chn Systm
[3 credit hours]
This course provides an introduction to the use of computer simulation for business decision making. Students are introduced to modeling uncertainty in supply chain systems using various techniques including Monte Carlo simulation, waiting ine analysis, discrete event simulation and other emerging techniques using simulation software (such as @Risk, Simul8 and ARENA) and business cases.
Prerequisites: BUAD 3020 with a minimum grade of D-

OSCM 4940 Internship
[3 credit hours]
A prearranged work study program where students specializing in OPMT or SCM optain on the job experience while learning and applying the basic concepts and techniques of their respective discipline.
Term Offered: Spring, Summer, Fall

OSCM 4980 Contemporary Topics In Operations and Supply Chain Management
[3 credit hours]
Selected current topics in Operations Management practice, trends and technology.
Prerequisites: BUAD 3020 with a minimum grade of D-
Term Offered: Spring, Fall