

OPERATIONS MANAGEMENT (OPM)

OPM 2070 - Introduction to Business Statistics

3 Credits

This course introduces students to the principles of statistics. Subjects include: descriptive statistics for displaying and summarizing business data; the use of probabilities and random variables in business decision models, probability distribution, statistical inference as a decision-making tool, sampling of business data, simple linear regression and correlation, time series analysis, use of index numbers in economic data and the use of statistics to manage supply chains.

Prerequisite(s): (Math Waiver per Advisor with a minimum score of 1200, 1 Course from MATH 1200-4999, or SLUMP with a minimum score of 1400)

Attributes: Business Common Body Knowledge

OPM 2930 - Special Topics

3 Credits (Repeatable for credit)

OPM 2980 - Independent Study

1 or 3 Credits (Repeatable for credit)

Permission of the department chair.

OPM 3050 - Introduction to Management Science and Operations Management

3 Credits

The objectives of this course are to: 1) acquaint the student with the overall operations research/management science process; 2) expose the student to several of the most widely utilized operations research/management science and production planning models, along with the solution techniques; 3) familiarize the student with the use of computers in facilitating managerial decisions.

Prerequisite(s): OPM 2070; (MATH 1320, MATH 1510, MATH 1520, or MATH 2530)

Attributes: Business Common Body Knowledge

OPM 3930 - Special Topics

3 Credits (Repeatable for credit)

OPM 3980 - Independent Study

1 or 3 Credits (Repeatable for credit)

Permission of the department chair.

OPM 4440 - Sourcing & Strategy

3 Credits

The course focuses on strategic management of supply chains in the context of an integrated enterprise. In particular, procurement, purchasing, sourcing, supplier selection, and total cost of ownership.

Prerequisite(s): OPM 3050; Minimum Earned Credits of 90

Attributes: Supply Chain Minor Requirement

OPM 4460 - Logistics & Warehousing

3 Credits

The objectives of this course are: (1) to acquaint the student with the use of logistics management theory and techniques for analyzing and controlling global manufacturing and operations management systems; (2) to expose the student to several of the most widely utilized models for supply chain management in the manufacturing and service sectors (financial, health care, public sectors, etc.), along with case studies; and (3) to familiarize the student with the use of computer software in facilitating logistics decisions.

Prerequisite(s): OPM 3050; Minimum Earned Credits of 90

Attributes: Supply Chain Minor Requirement

OPM 4930 - Special Topics

3 Credits (Repeatable for credit)

OPM 4980 - Advanced Independent Study in Operations Management

1-3 Credits (Repeatable for credit)

Permission of the department chair.

OPM 5020 - Applied Business Statistics

3 Credits

This course challenges students to think about business problems in a systematic fashion by reviewing mathematical concepts and developing statistical thinking skills. Statistical thinking can lead to both a better understanding of the problem and can result in higher quality solution options. The course provides coverage of the more widely used statistical methods to aid in problem formulation, data analysis and managerial decision-making. At the end of this course students will have a more sophisticated understanding of the mathematics that underlie probability and statistical concepts, issues involving data interpretation, and decision-making under conditions of uncertainty.

Attributes: MBA Foundation

OPM 5050 - Introduction to Operations Management

3 Credits

The objective of this course are (1) familiarize students with production planning and control (2) to familiarize students with the use of operations research techniques for analyzing and controlling manufacturing, inventory, and operations management systems; and (3) to train students to use computers for making production and operations management decisions.

Prerequisite(s): OPM 5020 with a grade of C or higher

Attributes: MBA Foundation

OPM 5910 - Graduate Internship

1-6 Credits (Repeatable for credit)

Restrictions:

Enrollment is limited to students with a major in Supply Chain Management.

OPM 5930 - Special Topics

3 Credits (Repeatable for credit)

OPM 5980 - Graduate Independent Study in Operations Management

1-3 Credits (Repeatable for credit)

OPM 6000 - Forecasting and Demand Management

3 Credits

Advanced topics in statistical modeling, data analysis and decision making. Extensive use of computer packages and real business databases. Topics include model building and research design; variance and experimental design; multiple regression and correlation analysis; time series and forecasting; statistical quality control; non-parametric procedures; model decision analysis.

Prerequisite(s): OPM 5020 with a grade of C or higher

OPM 6050 - Operations Management

3 Credits

Designed to familiarize students with decision-making tools and models that are utilized by operational managers, to present business firm integrated operational practices in the manufacturing and service sectors, and to analyze and examine the business strategic planning process from a cross-functional perspective, utilizing case studies. Topics include: operations and supply-chain strategy, project management, strategic capacity management, job scheduling and control, logistics for facility location decisions, aggregate planning, and deterministic/stochastic inventory decisions.

Attributes: MBA Project Management Conc

OPM 6430 - Quality Improvement/Lean Sigma

3 Credits

This course is intended to serve as an in-depth examination of quality principles applied specifically to manufacturing, service and supply chain environments. Both managerial and statistical aspects will be covered.

Prerequisite(s): OPM 5050 with a grade of C or higher

OPM 6440 - Supply Chain Sourcing & Strategy

3 Credits

The course focuses on strategic management of supply chains in the context of an integrated enterprise. In particular, procurement, purchasing, sourcing, supplier selection, and total cost of ownership. (Offered in Fall)

Prerequisite(s): OPM 5050* with a grade of C or higher

* Concurrent enrollment allowed.

Attributes: MBA Project Management Conc, MBA Supply Chain Mgmt Conc

OPM 6460 - Supply Chain Management

3 Credits

This course develops a framework for supply chain decision-making. To deal with the complexity of large supply networks, we study them as the conglomeration of smaller parts, e.g., as individual processes and stock points. By taking this approach, we develop tactical knowledge and high-level insights applicable to the management of industrial-size supply networks. We demonstrate that companies can use (and have used) these insights to significantly enhance their competitiveness.

Attributes: MBA Supply Chain Mgmt Conc

OPM 6600 - Pricing & Revenue Analytics

3 Credits

All businesses face operational and pricing challenges including: how to configure and operate their supply chain, how to allocate products to sales channels and outlets, and how to price their products over time to different market segments. The ultimate goal is to match demand with supply. This course looks at the operations management challenges faced by companies and supply chains in various industries through business cases and analytics exercises. This course focuses on incorporating data-driven decision making into companies' complex pricing decision processes. (Offered in Fall)

Prerequisite(s): OPM 5020 with a grade of C or higher

OPM 6800 - Prescriptive Analytics

3 Credits

The purpose of the course is to provide an in-depth treatment of quantitative techniques that are useful for data analysis and management decision-making. The main topics of the course are optimization methods, advanced regression techniques, advanced time series analysis and some basic techniques in data mining. The emphasis of the course is on the practical application of analytical techniques to problems from different functional areas of business. Example applications include marketing research, sports analytics, supply chain procurement, and financial portfolio selection.

OPM 6811 - Supply Chain Consulting

3 Credits

This consulting course provides students a real-world opportunity to apply the knowledge and skills garnered throughout the MSSCM program. Various organizations have partnered with the Business School to work with supply chain related problems that these organizations are currently facing. In these organizations, students' teams will work one day per week over the course of a semester. A typical team consists of six to eight students paired with one faculty team facilitator and a research assistant. Students would require operational and supply chain skills and other soft skills such as teamwork, leadership, and communications. Under the supervision of a faculty member, student groups will develop potential solutions to a given organizational problem. At the end of each semester the team will be required to author a report detailing their work and make a formal presentation summarizing that report.

OPM 6930 - Special Topics

3 Credits (Repeatable for credit)

OPM 6980 - Graduate Independent Study in Operations Management

1 or 3 Credits (Repeatable for credit)