

# Operations Management (OPMA)

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## COURSES

### **OPMA 3306. OPERATIONS MANAGEMENT. 3 Hours.**

Introduction to concepts and problem-solving techniques important in operations management and production management. Topics include demand forecasting, capacity management, resource allocation, inventory management, supply chain management, quality control, project management. Prerequisite: Concurrent enrollment with BSTAT 3321 or BSTAT 3322.

### **OPMA 3308. OPERATIONS PLANNING AND CONTROL. 3 Hours.**

Course covers operations planning and control systems in manufacturing and service organizations. Topics include inventory control, material requirements planning, Just-in-Time and lean manufacturing, production scheduling, capacity planning, operations planning and control software. Prerequisite: OPMA 3306.

### **OPMA 3310. PROJECT MANAGEMENT. 3 Hours.**

Course covers concepts and issues important in effectively managing projects. Topics include project selection, project planning, negotiation, budgeting, scheduling, resource allocation, project control, project auditing, and project termination. Corequisite: OPMA 3306.

### **OPMA 4191. STUDIES IN OPERATIONS MANAGEMENT. 1 Hour.**

Advanced studies, on an individual basis, in the various fields of operations management. May be repeated for credit with consent of department chair. Prerequisite: 90 credit hours and permission of instructor.

### **OPMA 4291. STUDIES IN OPERATIONS MANAGEMENT. 2 Hours.**

Advanced studies, on an individual basis, in the various fields of operations management. May be repeated for credit with consent of department chair. Prerequisite: 90 credit hours and permission of instructor.

### **OPMA 4301. COMPUTER MODELS IN OPERATIONS MANAGEMENT. 3 Hours.**

Course covers applications of computer models used in operations management. Prerequisite: OPMA 3306.

### **OPMA 4302. SUPPLY CHAIN LOGISTICS. 3 Hours.**

Physical supply, in-plant movement and storage, and physical distribution which comprise logistics systems in industry. Topics include facility location, transportation, warehousing, inventory control, distribution networks, and logistics information systems. Prerequisite: OPMA 3306.

### **OPMA 4303. INTRODUCTION TO MANAGEMENT SCIENCES. 3 Hours.**

Introduction to optimization and quantitative analysis of business problems. Topics include applications of linear and integer programming, network analysis, simulation, game theory, queuing theory, and other operations research tools. Prerequisite: OPMA 3306, may be taken concurrently.

### **OPMA 4307. QUALITY PLANNING AND ANALYSIS. 3 Hours.**

Quality of products and services needed by society, to include consideration of quality costs and improvements, designing for quality, process controls, inspections, testing, acceptance sampling, management controls, and quality information systems. Prerequisite: OPMA 3306 and BUSA 3321/STAT 3321.

### **OPMA 4309. GLOBAL SUPPLY CHAIN MANAGEMENT. 3 Hours.**

Course covers concepts and issues important in managing supply chains. A strategic view is taken of the way companies coordinate their operations with suppliers and customers in a global marketplace. The strategic use of information systems to better manage supply chains is also covered. Prerequisite: OPMA 3306 and OPMA 4302.

### **OPMA 4310. SUPPLY CHAIN ANALYTICS-THEORY AND PRACTICE. 3 Hours.**

Analytics is used to assist decision makers to make well-informed data-driven decisions. The course covers Analytics techniques and tools used in Supply Chain. It covers various quantitative techniques and advanced technologies, such as data mining, big data, statistics, etc. In addition to learning concepts, students will also learn widely used advanced tools hands-on. Prerequisite: OPMA 3306 and basic computer knowledge.

### **OPMA 4312. PURCHASING MANAGEMENT. 3 Hours.**

Examines the purchasing management role and responsibilities in the firm. This will cover issues of quality, solicitation techniques, source selection, pricing principles, legal aspects, value analysis, purchasing systems and ongoing administration of commercial, industrial and government contracts. Prerequisite: OPMA 3306 and OPMA 4302.

### **OPMA 4314. SERVICE OPERATIONS. 3 Hours.**

Service operations make up the fastest-growing segment in economies throughout the developed world. This course is intended to help emerging business leaders understand challenges and opportunities inherent in the unique nature of service operations. This course emphasizes both strategic and tactical decision-making, with a focus on the effective design, delivery and improvement of service outputs. Prerequisite: OPMA 3306.

### **OPMA 4331. SEMINAR IN OPERATIONS MANAGEMENT. 3 Hours.**

Readings and discussion of special topics in operations management. May be repeated for credit with consent of department chair. Prerequisite: Junior or senior standing and consent of instructor.

### **OPMA 4391. STUDIES IN OPERATIONS MANAGEMENT. 3 Hours.**

Advanced studies, on an individual basis, in the various fields of operations management. May be repeated for credit with consent of department chair. Prerequisite: 90 credit hours and permission of instruction.

**OPMA 4393. OPERATIONS MANAGEMENT INTERNSHIP. 3 Hours.**

Practical training in operations management. Analysis of theory applied to real life situations. May be used as an advanced business elective only; graded on a pass/fail basis. No credit will be given for previous experience or activities. May not be repeated for credit. Prerequisite: Junior standing and consent of department internship advisor.

**OPMA 5199. GRADUATE OPERATIONS MANAGEMENT INTERNSHIP. 1 Hour.**

Practical training in operations management. Analysis of theory applied to real life situations. Course counts as an elective and has a pass/fail grade. No credit will be given for previous experience or activities.

**OPMA 5299. GRADUATE OPERATIONS MANAGEMENT INTERNSHIP. 2 Hours.**

Practical training in operations management. Analysis of theory applied to real life situations. Course counts as an elective and has a pass/fail grade. No credit will be given for previous experience or activities.

**OPMA 5321. INTRODUCTION TO MANAGEMENT SCIENCES. 3 Hours.**

Introduction to optimization and quantitative analysis of business problems. Topics include applications of linear and integer programming, network analysis, simulation, game theory, queuing theory, and other operations research tools.

**OPMA 5361. OPERATIONS MANAGEMENT. 3 Hours.**

Introduction to concepts and problem-solving techniques important in production management and operations management. Topics include demand forecasting, capacity management, resource allocation, inventory management, supply chain management, quality control, and project management. Prerequisite: BSTAT 5301 or equivalent.

**OPMA 5362. SERVICES OPERATIONS. 3 Hours.**

Service operations make up the fastest-growing segment in economies throughout the developed world. This course is intended to help emerging business leaders understand challenges and opportunities inherent in the unique nature of service operations. This course emphasizes both strategic and tactical decision-making, with a focus on the effective design, delivery and improvement of service outputs. Prerequisite: OPMA 5361.

**OPMA 5363. OPERATIONS PLANNING AND CONTROL. 3 Hours.**

Course covers operations planning and control systems in manufacturing and service organizations. Topics include inventory control, material requirements planning, Just-In-Time and lean manufacturing, production scheduling, capacity planning, and operations planning and control software. Previous introductory course in operations management suggested.

**OPMA 5364. PROJECT MANAGEMENT. 3 Hours.**

Course covers concepts and issues important in effectively managing projects. Topics include project selection, project planning, negotiation, budgeting, scheduling, resource allocation, project control, project auditing, and project termination.

**OPMA 5365. PURCHASING MANAGEMENT. 3 Hours.**

Examines the purchasing management role and responsibilities in the firm. This will cover issues of quality, solicitation techniques, source selection, pricing principles, legal aspects, value analysis, purchasing systems and ongoing administration of commercial, industrial and government contracts. Prerequisite: OPMA 5361 and OPMA 5369.

**OPMA 5367. QUALITY MANAGEMENT. 3 Hours.**

Course focuses on quality of products and services needed by society. Topics include consideration of quality cost and improvements, designing for quality, process controls, inspections, testing, acceptance sampling, management controls, and quality information systems. Previous introductory course in statistics suggested.

**OPMA 5368. GLOBAL SUPPLY CHAIN MANAGEMENT. 3 Hours.**

Course covers concepts and issues important in managing supply chains. A strategic view is taken of the way companies coordinate their operations with suppliers and customers in a global marketplace. The strategic use of information systems to better manage supply chains is also covered. Previous introductory course in operations management suggested. Prerequisite: OPMA 5361 and OPMA 5369.

**OPMA 5369. SUPPLY CHAIN LOGISTICS. 3 Hours.**

Course covers physical supply, in-plant movement and storage, and physical distribution of materials, which comprise logistics systems in industry. Topics include facility location, transportation, warehousing, inventory control, distribution networks, and logistics information systems. Previous introductory course in operations management suggested. Prerequisite: OPMA 5361 or equivalent.

**OPMA 5379. ORGANIZATIONAL RESEARCH PROJECT. 3 Hours.**

Students conduct a research project at a local organization, focusing on applications of business concepts studied in their coursework. Prerequisite: Cohort MBA Major.

**OPMA 5382. INDEPENDENT STUDIES IN OPERATIONS MANAGEMENT. 3 Hours.**

Extensive analysis of an Operations Management topic.

**OPMA 5389. INDEPENDENT STUDIES IN MILITARY ACQUISITION. 3 Hours.**

This course is reserved for military officers in the Training with Industry or I-Grade programs at UT Arlington. Studies consist of an acquisition practicum with training at an assigned agency and a required seminar at UT Arlington.

**OPMA 5392. SELECTED TOPICS IN OPERATIONS MANAGEMENT. 3 Hours.**

In-depth study of selected topics in operations management. May be repeated when topics vary.

**OPMA 5399. GRADUATE OPERATIONS MANAGEMENT INTERNSHIP. 3 Hours.**

Practical training in operations management. Analysis of theory applied to real life situations. Course counts as an elective and has a pass/fail grade. No credit will be given for previous experience or activities.

**OPMA 5689. INDEPENDENT STUDIES IN MILITARY ACQUISITION. 6 Hours.**

This course is reserved for military officers in the Training with Industry or I-GRAD programs at UT Arlington. Studies consist of an acquisition practicum with training at an assigned agency and a required seminar at UT Arlington.

**OPMA 5989. INDEPENDENT STUDIES IN MILITARY ACQUISITION. 9 Hours.**

This course is reserved for military officers in the Training with Industry or I-Grade programs at UT Arlington. Studies consist of an acquisition practicum with training at an assigned agency and a required seminar at UT Arlington.

**OPMA 6370. SEMINAR IN OPERATIONS MANAGEMENT. 3 Hours.**

Doctoral seminar that is a comprehensive and integrative study of operations management that focuses on theoretical frameworks, applications of models, and methods of analysis. Prerequisite: Doctoral standing.

**OPMA 6371. INTEGRATED OPERATIONS STRATEGY AND RESEARCH. 3 Hours.**

Linkages between the manufacturing and strategy development functions. Research issues within production/operations management. Current techniques/designs for achieving effective research. Prerequisite: Doctoral standing and previous introductory course in operations management suggested.

**OPMA 6380. RESEARCH IN OPERATIONS MANAGEMENT. 3 Hours.**

Independent research under the supervision of a faculty member. May be repeated for credit. Prerequisite: Doctoral standing.

**OPMA 6382. INDEPENDENT STUDIES IN OPERATIONS MANAGEMENT. 3 Hours.**

Extensive analysis of an operations management topic.

**OPMA 6392. SPECIAL TOPICS IN OPERATIONS MANAGEMENT. 3 Hours.**

Advanced doctoral level topics in Operations Management. May be repeated when topics vary. Prerequisite: Doctoral standing.