Memorandum

To: Faculty Council

From: Wade Cook, OMIS Area Coordinator

Date: September 2, 2015

Re: Restructuring of OMIS Specializations

**Motion**

That Faculty Council, effective immediately, approve to:

1. Rename the specialization in Operations Management to Supply Chain Management
2. Restructure the course selections in the area’s specializations, as shown in Appendix 2.

Students who have commenced their OMIS specialization in FW 2015 or earlier may complete their specializations under the old structure.

**Rationale**

A review of the area’s existing specializations has revealed that minor updates are in order to keep the specializations contemporary. This proposal aims to rename the specialization in Operations Management to Supply Chain Management while slightly updating the course selection relevant to this specialization. Similarly, the course selections for the Information Systems and Quantitative Methods specializations are updated to provide for a more relevant structure and better guidance.

**Enclosures**

Appendix 1: Existing structure of OMIS specializations
Appendix 2: Proposed structure of OMIS specializations
Operations Management & Information Systems

Operations Management & Information Systems (formerly Management Science) at Schulich embraces three distinct areas of study, all of which prepare graduates to help their organizations operate more efficiently and effectively. Specializations in this area provide an understanding of operations and systems, the ability to deal with complex problems, and the management of information technology. OMIS specialization options are applicable to all sectors of the Canadian and global economies, including service industries, manufacturing, resource industries, and public and nonprofit sector organizations. Schulich graduates specializing in management science can follow a wide range of career paths, including systems analyst, logistics analyst, information systems manager, operations analyst, and operations manager. Graduate students with an OMIS background will often augment their training with courses from other areas such as finance and marketing.

FACULTY
OMIS faculty members come from a wide range of backgrounds, including engineering, business, mathematics, statistics, and information systems. They have extensive experience in business and industry, and regularly act as consultants and advisors to both private and public organizations.

CONCENTRATIONS

Area Coordinator
Wade D. Cook
BSc (Mt. Allison); MSc (Queen’s); PhD (Dalhousie)
Professor of Operations Management & Information Systems

Richard H. Irving
BASc & MASC & PhD (Waterloo)
Associate Professor of Operations Management & Information Systems

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BASc & MASC & PhD (Waterloo)
Associate Professor of Operations Management & Information Systems

John Buzacott
BSc & BE (Sydney, Australia); MSc & PhD (Birmingham, UK); Dr hc (TU Eindhoven)
Professor Emeritus of Operations Management & Information Systems

Markus Biehl
MS (Kaiserslautern, Germany); MS & PhD (Georgia Institute of Technology)
Associate Professor of Operations Management & Information Systems

Associate Dean, Academic

Henry M. Kim
BASC (Toronto); M Eng (Michigan); PhD (Toronto)
Associate Professor of Operations Management & Information Systems

Mehmet Murat Kristal
BSc (METU, Turkey); MBA (Bilkent, Turkey); PhD (North Carolina)
Associate Professor of Operations Management & Information Systems

Program Director,
MSc in Business Analytics

BSUS 6300 3.00
Management Practices for Sustainable Business

MGMT 6700 3.00
Project Management

MKTG 6000 3.00
Models and Applications in Management Science

OMIS 6000 3.00
Management Information Systems

OMIS 6250 3.00
Managing New Technology

OMIS 6350 3.00
Advanced Spreadsheet Modelling and Programming for Business

OMIS 6500 3.00
Global Operations and Information Systems

OMIS 6560 3.00
Advanced Spreadsheet Modelling and Programming for Business

OMIS 6700 3.00
Managing New Technology

OMIS 6710 3.00
Systems Analysis and Design

OMIS 6740 3.00
e-Business Technology

OMIS 6955 3.00
Global Operations and Information Systems

BSUS 6300 3.00
Management Practices for Sustainable Business

MGMT 6250 3.00
Business Marketing

OMIS 6500 3.00
Global Operations and Information Systems

OMIS 6560 3.00
Advanced Spreadsheet Modelling and Programming for Business

OMIS 6955 3.00
Global Operations and Information Systems

Trade area provides an understanding of operations and systems, the ability to deal with complex problems, and the management of information technology. OMIS specialization options are applicable to all sectors of the Canadian and global economies, including service industries, manufacturing, resource industries, and public and nonprofit sector organizations. Schulich graduates specializing in management science can follow a wide range of career paths, including systems analyst, logistics analyst, information systems manager, operations analyst, and operations manager. Graduate students with an OMIS background will often augment their training with courses from other areas such as finance and marketing.

Operations Management

REQUIREMENTS
- 12.00 credits of recommended courses

RECOMMENDED COURSES
OMIS 6350 3.00
Advanced Spreadsheet Modelling and Programming for Business

OMIS 6500 3.00
Global Operations and Information Management

OMIS 6700 3.00
Managing New Technology

OMIS 6720 3.00
Systems Analysis and Design

OMIS 6740 3.00
e-Business Technology

Appendix 1
Appendix 2

Operations Management and Information Systems

Overview

- The Operations Management and Information Systems (OMIS) Area represents three distinct areas of study:
  - Information Systems (IS)
  - Operations Management and Supply Chain Management (OM)
  - Quantitative Methods (QM).
- Information Systems investigates how to structure, process and govern information and information systems. Consequently IS supports a variety of organizational processes and decision-making scenarios across all industries.
- Operations Management concerns itself with the organization and structure of production systems, be it in a manufacturing (e.g., mining, automobile, consumer electronics) or service (e.g., governments, airlines, banks), within an organization (e.g., process planning or scheduling) or beyond (e.g., logistics, purchasing, supply networks).
- Quantitative Methods uses stochastic (e.g., regression analysis) or deterministic (e.g., linear or non-linear optimization; game theory) models to analyze otherwise intractable information and support decision-making.
- OMIS specializations are applicable to service industries, manufacturing, resource industries, and public and nonprofit sector organizations.
- Graduates specializing in OMIS can follow a wide range of career paths, including systems analyst, logistics analyst, information systems manager, operations analyst, operations manager management consultant and project manager.

General Specialization

This specialization provides a broad overview of the three fields covered by OMIS and provides a very flexible skill set.

Typical Employment Opportunities
Vary by the types of courses taken.

Course Offerings
Requirements
12.00 credits consisting of any 12 credits of OMIS courses, including

- BSUS 6300 3.0  Management Practices for Sustainable Business
- MGMT 6700 3.0  Project Management and
- MKTG 600 3.0  Marketing Research
- MKTG 6250 3.0  Business Marketing
- SGMT 6800 3.0  Strategic Management of technology Based Firms
Management Information Systems

Students taking this specialization will learn
- How to create Business value with Information Systems
- About the managerial implications of Information Systems

Typical Employment Opportunities

Management (IS) Consultant
IT Project Manager
Information Systems Manager

Course Offerings

Requirements
12.00 credits consisting of
  9.00 credits of required electives
  3.00 credits of recommended electives

Required Electives
OMIS 6710 Management Information Systems
OMIS 6350 Advanced Spreadsheet Modelling
MGMT6700 Project Management

Recommended Electives
OMIS6500 Global Operations and Information Management
OMIS6700 Managing New Technology
OMIS 6720 Systems Analysis and Design
Supply Chain Management

Supply Chain Management involves the design and coordination of effective work between organizations. This specialization is for future managers interested in customer service, business to business selling, purchasing, materials management, manufacturing, new process and product development, supply alliances, transportation and logistics and retail operations. An effective supply chain professional needs to understand how to manage projects and programs that improve the flow of goods and services and information between organizations on a global scale. To achieve sustainable levels of cost and quality of service for all stakeholders in the chain requires a diverse skill set of business analytic, negotiating and people skills.

Typical Employment Opportunities
- Procurement Analyst
- Supply Specialist
- Product Allocation Specialist
- Project Manager
- Sales Operations Business Analyst
- Business Solutions Planner
- Production Planner
- Business Strategy Manager

Course Offerings

Requirements
- 12.00 credits consisting of
  - 3.00 credits of required electives
  - 9.00 credits of recommended electives

Required Elective:
- OMIS 6560 3.00 Supply Chain Management

Recommended Electives
- MGMT 6700 3.00 Project Management
- OMIS 6000 3.00 Models and Applications in Operational Research
- OMIS 6350 3.00 Advanced Spreadsheet Modelling and Programming for Business
- OMIS 6500 3.00 Global Operations and Information Management
- OMIS 6700 3.00 Managing New Technology
- OMIS 6955 3.00 Service Operations Management

Additional Electives of Interest
- BSUS 6300 3.00 Management Practices for Sustainable Business
- MKTG 6250 3.00 Business Marketing
- IBUS 6490 3.00 International Negotiations: Analysis, Strategy and Practice
Quantitative Methods

This specialization focuses on the quantitative (stochastic and deterministic) aspects of management. Quantitative models allow for insights and solutions that are otherwise too complex to solve.

Typical Employment Opportunities
- Product Allocation Specialist
- Sales Operations Business Analyst
- Business Solutions Planner
- Production Planner

Course Offerings

Requirements
- 12.00 credits consisting of
  - 3.00 credits of required electives
  - 9.00 credits of recommended electives

Required Elective
- OMIS 6000 3.00 Models and Applications in Operational Research

Recommended Electives
- MGMT 6700 3.00 Project Management
- MKTG 600 3.0 Marketing Research
- MKTG 6250 3.0 Business Marketing
- OMIS 6350 3.00 Advanced Spreadsheet Modelling and Programming for Business
- OMIS 6560 3.00 Supply Chain Management