

# OPERATIONS & SUPPLY CHAIN MANAGEMENT

The Operations and Supply Chain (OSCM) program is designed for students who have completed a Bachelor's degree with industry experience or have a technical or science diploma with a minimum of 5 years related technical, scientific, operational or supply chain industry experience.

The OSCM program consists of five foundational courses (15 credits) that will allow students to develop critical thinking and analytical skills, communication skills, effective project management abilities, teamwork and interpersonal skills. Students will attain a solid understanding of how to interpret and synthesize core business, financial and performance data to make informed decisions.

Six courses (18 credits) of focused OSCM content prepare students to apply best in practice processes and tools to a wide range of operations and supply chain areas, identify and assess performance improvement opportunities in a variety of industries, and competently support informed decision making.

OSCM graduates will:

- Complete successful transportation planning, inventory control, warehouse management, customer service standard design and implementation, product and process design and re-engineering, and development and execution of procurement strategies
- Determine the requirements, selection and plan the implementation of technology and information systems in supporting operations and managing the supply chain
- Utilize effective skills and proven models, tools and techniques for managing service operations
- Design and implement quality control and productivity improvement systems in operations and supply chains
- Assess supply chain management strategies in international settings
- Apply an ethical understanding and perspective to business situations both locally and globally, and apply the newest theoretical and practical approaches with respect to social responsibility and sustainability in operations and supply chain management

Upon completion of the OSCM program, students will have also attained a strong applied operations and supply chain management knowledge base, be able to demonstrate their ability in applying business, operations and supply chain management processes, tools and strategies as part of seeking their professional accreditation or designation in:

- Supply Chain Management Professional (SCMP) designation through the Supply Chain Management Association of Canada [supplychaincanada.com](https://www.supplychaincanada.com/) (<https://www.supplychaincanada.com/>)
- Project Management certification through the Project Management Institute [pmi.org](https://www.pmi.org/) (<https://www.pmi.org/>)
- ASQ certification through the American Society for Quality [asq.org](https://asq.org/) (<https://asq.org/>)

## Programs

- Post-Baccalaureate Diploma in Operations and Supply Chain Management (<https://calendar.kpu.ca/programs-az/business/>)

[operations-supply-chain-management/operations-supply-chain-management-post-baccalaureate-diploma/](https://calendar.kpu.ca/programs-az/business/))

## Courses

Registration in some course sections is restricted to students in particular programs. See Timetables - [kpu.ca/registration/timetables](https://calendar.kpu.ca/registration/timetables/) (<http://www.kpu.ca/registration/timetables/>) - for current section information.

Visit the BC Transfer Guide - [bctransferguide.ca](https://www.bctransferguide.ca/) (<https://www.bctransferguide.ca/>) - for information about course transfer in B.C.

### OSCM 5100 3 credits

#### Operations Management

Students will learn and practice the fundamental design and implementation concepts, tools and techniques used in Operations Management (OM). They will be exposed to leading practices employed by entrepreneurs and managers in organizations of all sizes, both in manufacturing and service industries and will acquire the skillsets required, in the OM function, in any type of organization. Students will apply formal qualitative and quantitative approaches to solve practical problems through exercises, case analyses, and group work with real-world or simulated organizations.

Level: UG

Co-requisite(s): BUSM 5100, BUSM 5130, and BUSM 5140

Attributes: BUSI (<https://calendar.kpu.ca/courses-az/#courseattributestext>), F2A9 (<https://calendar.kpu.ca/courses-az/#courseattributestext>)

### OSCM 5110 3 credits

#### Information Systems for Operations and Supply Chain Management

Students will learn how to identify state-of-the-art developments in information systems and how to adopt advanced information systems to optimize the cost-customer service trade-off, thus safeguarding and enhancing the organization's competitive advantages generated in operations, supply chains and logistics. Students will examine appropriate analysis and implementation tools necessary to match information and communications technologies (i.e., hardware, software, and applications) associated with the sustainable use of equipment, materials, energy, and the workforce on the one hand, with the present and future needs of operations and supply chain management on the other. Students will examine the benefits of current and predicted technologies in areas such as product design, process execution, inventory and quality management, management of supplier and customer relationships, transportation and warehousing, capacity planning, productivity, and an array of related operations and logistics processes everywhere in the end-to-end supply chain.

Level: UG

Prerequisite(s): OSCM 5100

Attributes: BUSI (<https://calendar.kpu.ca/courses-az/#courseattributestext>), F2A9 (<https://calendar.kpu.ca/courses-az/#courseattributestext>)

**OSCM 5120 3 credits**

**Quality Management**

Students will demonstrate advanced understanding of a number of critical components of Quality Management as a conduit to organizational effectiveness. Specific outcomes include demonstrating an understanding of quality management in both manufacturing and service industries, and related concepts including Statistical Quality Control (SQC) and Statistical Process Control (SPC); Six Sigma and Total Quality Management (TQM); measurement of quality in services; and quality systems.

Level: UG

Prerequisite(s): OSCM 5100

Co-requisite(s): BUSM 5130

Attributes: BUSI (<https://calendar.kpu.ca/courses-az/#courseattributestext>), F2A9 (<https://calendar.kpu.ca/courses-az/#courseattributestext>)

**OSCM 5130 3 credits**

**Innovation & Supply Chain Management**

Students will study the fundamentals of productivity and innovation and its relationship to Supply Chain Management. The effects on productivity of organization-level factors will be analyzed in depth. The major importance of innovation (especially incremental innovation) for productivity gains will be examined in the context of understanding the typical processes that ensure the transformation of inputs into outputs both in manufacturing and in services.

Level: UG

Attributes: BUSI (<https://calendar.kpu.ca/courses-az/#courseattributestext>), F2A9 (<https://calendar.kpu.ca/courses-az/#courseattributestext>)

**OSCM 5140 3 credits**

**Supply Chain & Logistics Management**

Students will study the principles of Supply Chain Management, organizational function with a decisive impact in the success of the operations of all organizations, their partners, and the end customer of the goods and services that they provide. Students will learn how to design and implement supply chain and logistics networks, and how to set and monitor relevant and meaningful metrics leading to competitiveness enhancement. Students will examine in depth the evolving concepts and tools of customer service management, transportation, warehousing, reverse flows, humanitarian logistics, sustainability, and the roles of external forces such as technology, globalization, government regulations, and the growing power of informed customers. Students will apply their knowledge and skills to audit, design, or manage real or simulated supply chain and logistics activities.

Level: UG

Co-requisite(s): OSCM 5100

Attributes: BUSI (<https://calendar.kpu.ca/courses-az/#courseattributestext>), F2A9 (<https://calendar.kpu.ca/courses-az/#courseattributestext>)

**OSCM 5150 3 credits**

**Applied Operations & Supply Chain Management Project**

Students will complete an Operations & Supply Chain audit of an organization and submit suggestions destined to improve the existing Operations & Supply Chain metrics. Class work will include interactive sessions on planning and structuring the audits, solving specific Operations & Supply Chain problems and dealing with project management issues, and addressing – in a large group setting – complex problems encountered by groups and their client organizations.

Level: UG

Prerequisite(s): 9 credits from courses in OSCM, including OSCM 5100 and OSCM 5140

Attributes: BUSI (<https://calendar.kpu.ca/courses-az/#courseattributestext>), F2A9 (<https://calendar.kpu.ca/courses-az/#courseattributestext>)