# **Diploma in Supply Chain and Operations Management**

Why should I choose this program in Supply Chain and Operations Management at McGill University's School of Continuing Studies?

The new Diploma in Supply Chain and Operations Management program prepares students to handle the operational tasks associated with supplying and delivering goods and services to customers. This program is designed for those who have a bachelor's degree. Upon completing the program, the students will acquire an in-depth understanding of global operations and an ability to implement up to date technologies to help their companies adapt to ever demanding global, environmental and operational challenges, thus allowing them to aim at higher level management positions.

The program offers subtle tools of analysis for acquiring an in-depth understanding of supply chain operations while offering opportunities of specialization in areas such as quality management, lean manufacturing, service operations and project management. The courses in quality management provide a comprehensive coverage of the Body of Knowledge of the Lean Six-Sigma Green Belt. The course in project management can lead to a certification in project management provided that the requirements of Project Management Institute are satisfied.

The supply chain domain offers interesting, diverse work opportunities in several areas, such as:

- production management
- logistics management
- warehousing
- transportation
- inventory / material control
- purchasing and sales management

Employers range from manufacturers and retailers to transportation companies, third-party logistics firms, government agencies and consulting companies.

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The Diploma in Supply Chain and Operations Management is a 30 credit program which consists of one co-requisite course and ten required courses\*.

Note: Co-requisite course is not included in the total credit requirements for the program.

### Co-requisite:

CMS2 500 Mathematics for Management (or the Exemption by Examination Test<sup>1</sup>)

# 10 Required courses: (30 Credits)

CGM2 510 Project Management: Tools and Techniques

CMS2 505 Quantitative Analysis Tools in Decision Making

CMS2 515 Operations Management

CMS2 524 Management of Service Operations

CMS2 525 Supply Chain Management

CMS2 530 Simulation Analysis and Modeling

CMS2 531 Re-engineering and Integration of Business Systems

CMS2 532 Lean Operations Systems

CMS2 540 Six-Sigma Quality Management

CMS2 550 Supply Chain Field Project

Note: All courses are 3 credits unless otherwise stated.

#### **IMPORTANT NOTE:**

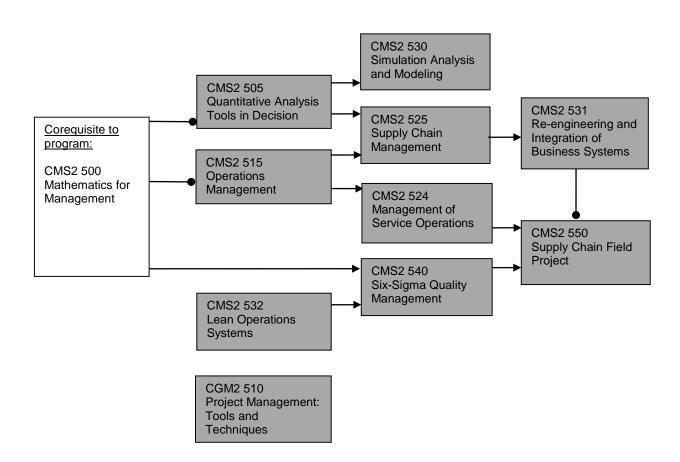
This program is EFFECTIVE as of Fall 2012.

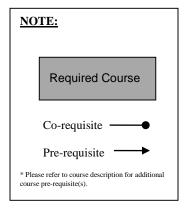
If you were admitted PRIOR to Fall 2012, please follow the STUDY PLAN which you were provided with at the time of your admission.

\* Classes in this program are delivered in a variety of formats. This may include in-class, off-campus and online components. Class schedules and attendance requirements may vary from one course to another. Courses can be taken in the Fall, Winter, Spring and Summer sessions. **Not all courses are offered every semester.** 

<sup>&</sup>lt;sup>1</sup> For more information on how to obtain course exemption by the means of a challenge exam, please consult the Exemption by Examination form available on our website at: <a href="http://www.mcgill.ca/continuingstudies/prospective-students/apply/exemption-examination">http://www.mcgill.ca/continuingstudies/prospective-students/apply/exemption-examination</a>.

### Diploma in Supply Chain and Operations Management





# **Course Descriptions**

# CMG2 510 Project Management: Tools and Techniques

(3 credits)

Pre-requisites:

None

Focus on main concepts and theories of project management from initiation to close-out. Topics include: project life cycle, planning, scheduling, implementing, monitoring, controlling, close-out and ethics. The concepts presented apply to projects of various sizes, types and degrees of complexity.

#### **CMSC 000 Foundations for Mathematics**

(12 CE units)

Pre-requisites:

None

Operations with real numbers, polynomials, first-degree equations and applied word problems. Factoring, fractions, exponents, roots and radicals. Absolute values, equations and inequalities. Quadratic equations, applied problems, arithmetic and geometric sequences and series.

# **CMS2 500 Mathematics for Management**

(3 credits)

Pre-requisite:

CMSC 000 Foundations of Mathematics or the Exemption by Examination Test

Basic mathematics needed for business applications, including graphs, series summation, mathematics of finance, annuity, discounted cash flow, internal rate of return, permutations, combinations, maxima and minima functions with business applications in optimization, introductory statistics and probability.

#### CMS2 505 Quantitative Analysis Tools in Decision Making

(3 credits)

Co-requisite:

CMS2 500 Mathematics for Management

This course provides applications-oriented operations research modeling tools, such as: linear programming, integer programming, network modeling, and queuing theory. Use of spreadsheet/modeling software is an integral part of this course.

#### **CMS2 515 Operations Management**

(3 credits)

Co-requisites:

CMS2 500 Mathematics for Management

Introduction to decisions and trade-offs associated with production of goods and services. Topics include technology planning (production process), design of production systems (capacity and location planning), control issues (production planning and inventory control, MRP/JIT, scheduling, quality and reliability and distribution planning), design for manufacturability, management of new technology (FMS, group technology and robotics) and management of services operations.

#### **CMS2 524 Management of Service Operations**

(3 credits)

Last updated: July 2015

Prerequisite:

CMS2 515 Operations Management

The course takes an operations point of view to look at companies and industries in the services sector. It builds on conceptual frameworks and cases from a wide range of service operations, selected from health care, hospitality, internet services, transportation, retailing, financial services, humanitarian services, government services, and others

# **CMS2 525 Supply Chain Management**

(3 credits)

Prerequisites

CMS2 505 Quantitative Analysis Tools in Decision Making and CMS2 515 Operations Management

This is an applications-oriented course in supply chain strategy and macro-processes of supply chain management such as supplier relations management, customer relations management, logistics and distribution. Use of operations research models and computer software will be an integral part of this course.

# CMS2 530 Simulation Analysis and Modeling

(3 credits)

Prerequisite:

CMS2 505 Quantitative Analysis Tools in Decision Making

This course focuses on the theory and practice of simulation modeling and analysis with applications in supply chain manufacturing and service operations. Use of spreadsheets and simulation modeling software is an integral part of this course.

# CMS2 531 Re-Engineering and Integration of Business Systems

(3 credits)

Prerequisite:

CMS2 525 Supply Chain Management

Information systems used in supply chains are presented in the context of enterprise resource planning (ERP) systems with applications in manufacturing, retailing and distribution services sectors. Core business processes and transactions pertaining to supply chain management are identified and discussed in terms of relevant ERP modules.

#### **CMS2 532 Lean Operations Systems**

(3 credits)

Prerequisite:

None

The course focuses on the objectives and ways of the Lean Operations System and provides descriptions of the customer-oriented lean techniques, such as, just-in-time, total quality management, problem solving, materials management and load leveling. Lean management patterns like the Deming's Plan Do Check Act wheel are highlighted.

#### **CMS2 540 Six-Sigma Quality Management**

(3 credits)

Prerequisite:

CMS2 500 Mathematics for Management and CMS2 532 Lean Operations Systems

The course includes a coherent and integrated description of the Six-Sigma methodology, from the problem definition phase to the control phase that demonstrates the stability of the solution. In addition, the course clarifies the relation of Six-Sigma to LEAN and summarizes the patterns to deploy Six Sigma in an organization.

#### CMS2 550 Supply Chain Field Project

(3 credits)

Last updated: July 2015

Prerequisites: CMS2 524 Management of Service Operations and CMS2 540 Six-Sigma Quality Management Co-requisite: CMS2 531 Re-Engineering and Integration of Business Systems

This course is built around a team project involving modeling, use of lean/six sigma techniques and/or use of information systems to optimize processes across the entire enterprise/supply chain. The project could be in services (health care, banking/insurance, etc.), logistics (distribution, retailing, 3PL), or manufacturing (sourcing, production/operations planning, inventory deployment, etc).

# **Admission Requirements**

- 1. Bachelor's degree (or equivalent) as approved by the Graduate and Postdoctoral Studies Office, and have a minimum cumulative grade point average (CGPA) of 3.0/4.0 or a CGPA of 3.2/4.0 for the last two full-time academic years.
- **2.** If your CGPA is lower than the above requirement, please submit the following for consideration with your application, official transcript.
  - **a.** Letter of Intent: A letter, 1 to 2 pages in length single-spaced, written in English or French, which addresses the following:
    - basis for interest in the program;
    - your knowledge that would be pertinent to the program;
    - your interest in the field of study and the reasons for applying to our program
    - plans for integrating the training into your current or future career;
    - a description of your professional experience and its relevance, if applicable, to the program
    - awards received or other contributions;
    - any additional information relevant to your application.
  - b. Curriculum Vitae
  - **c.** Two Letters of Reference: At least one should be from a current or former employer.
  - **d. GMAT and/or GRE Test Score Results (optional)**: Submit a copy of the official test score results.

#### How to APPLY to the Diploma in Supply Chain and Operations Management?

#### Please follow the steps below:

#### STEP 1:

Go to <a href="http://www.mcgill.ca/continuingstudies/">http://www.mcgill.ca/continuingstudies/</a>
 Click on "Apply"
 Click on "Graduate Programs"

#### STEP 2:

**Verify** on the "Apply for Admission to a Program" page, the "Application Deadlines" for Canadian/Permanent Residents or International Students to ensure that you submit your application before the term deadline.

#### **STEP 3:**

- **Review your Admission Requirements:** Once you have checked your application against all the requirements, you will be ready to apply to the program.
- Before you proceed you will need: A valid **email address** and a **credit card** (Visa, MasterCard or American Express).

#### **STEP 4:**

- Once you are ready to apply online:
   Click on "Click here now" to bring you to the Application for Admission page.
- Click on the red bold "Apply Now" on the Application for Admission page. (Do **not** apply through "uApply" link).
- Fill in the login information on the "Admissions Login" page and the Biographical Information.
- On the "Apply for Admission" page, fill in the information requested. NOTE: When asked: "What are you applying for at McGill", click on "Continuing Studies"
- Select the program you are applying to on the "Program Choice Selection" page.
- Continue to fill in the remainder of the application. (All sections to be completed are indicated in the textbox on the left hand side of the screen).

#### **STEP 5:**

- Once you have applied online, you will receive a confirmation email providing you with a McGill ID number and a 6-character **PIN** (**Personal Identification Number**).
- You will need to use this information to **log into MINERVA** (<u>www.mcgill.ca/minerva</u>) (McGill's web-based information system for students) so that you can upload documents required for admission and follow-up on your status of your application.

#### STEP 6:

- Once your application has been received and you have access to your Minerva account, you
  will be able to upload your supporting documentation, including a copy of transcripts. (A
  copy of your transcript with confirmation of degree awarded and date of graduation).
- Uploading your documents will speed up your application process and is strongly recommended.
- For instructions on how to proceed, please go to: <a href="www.mcgill.ca/applying/submitting-your-documents/uploadingdocuments/">www.mcgill.ca/applying/submitting-your-documents/</a>

(If you are unable to upload the documents, you can send them by regular mail or bring them in person to our Client Services office at the address above).

#### **STEP 7:**

• Sending official transcripts: All transcripts received via the upload process are considered unofficial. If transcripts are required for your application, you will also need to have any official transcripts sent directly to the School by mail, in a sealed envelope by the educational institution(s) where you studied.

#### What is an Official Transcript?

If you have studied at an institution:

- In Canada or the United States you will need to request a copy of your official transcripts (your marks) from that institution which the institution will mail to the address below in a sealed envelope with the official institution's logo.
- Outside of Canada or the United States, you will need to request a copy of your official transcripts (your marks) from that institution which the institution will mail to the address below in a sealed envelope with the official institution's logo.
- Note: In cases where the language of instruction at the institution is not English or French, you must also send an official translation of the official transcript certified by a representative from the Ordre des traducteurs, terminologues et interprètes agréés du Québec (OTTIAQ <a href="http://ottiaq.org/">http://ottiaq.org/</a>).
- You need to request official transcripts as soon as possible once your application has been submitted to the School of Continuing Studies. Your Educational Institution must then mail these directly to the appropriate office below:

#### Client Services c/o Admissions

McGill University – School of Continuing Studies 688 Sherbrooke Street West, Room 1125 Montreal, QC Canada, H3A 3R1

- Important: You must make sure you apply by the application deadline. However, if you have any outstanding supporting documents at the time of your application, you may upload them as they become available or forward them directly to the School of Continuing Studies as soon as possible. Your admission application will only be completed once the School has received all of the required documents.
- **Note**: All required documents received by McGill University School of Continuing Studies become the property of the university. Official documents and/or transcripts will not be returned to the applicant.
- **Note**: Transcripts received by McGill University's School of Continuing Studies cannot be transferred to any other department or program as it would constitute submitting a new application. Therefore, you must submit a new sealed envelope of your official transcripts for each application made to McGill University's School of Continuing Studies.

# **Language Requirements**

- The **language of instruction** for most courses and programs at McGill is English; however, students may submit any written work that is to be graded in English or French, except in cases where knowledge of the language is one of the objectives of the course.
- Applicants must demonstrate an adequate level of **proficiency in English prior to admission**, regardless of citizenship status or country of origin. McGill University has this language requirement in place to ensure that all students are provided with the opportunity to succeed in their chosen program.
- In all cases, the University reserves the right to require **proof of English** proficiency if it is deemed necessary. For additional information, please click on the link below.

http://www.mcgill.ca/continuingstudies/current-students/academic-policies/language-policy

# **Exemption by Examination**

Students admitted to a Certificate, Graduate Certificate or Diploma program requiring a pre-requisite or co-requisite course, must provide proof that they have taken an equivalent 3 credit course, at the appropriate level elsewhere or successfully completed the Exemption by Examination test. Otherwise the student must register for the course.

- Please note that the Exemption by Examination test is not applicable to required or complementary course(s) within a program.
- You cannot take the Exemption by Examination test if you have already attempted the course (a grade of W is considered as have attempted the course).
- If you are unsuccessful in the Exemption by Examination test(s) you will not be permitted to repeat the test(s) and must instead enroll in the course(s) for which the particular test(s) was taken.

You must be admitted into a program or have applied to a program to be eligible to write the **Exemption by Examination test**. (The test is optional).

For more information on how to obtain a course exemption by means of a challenge exam, please consult the Exemption by Examination form available on our website at:

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http://www.mcgill.ca/continuingstudies/prospective-students/apply/exemption-examination

# Student Awards and Financial Aid

Note: The amount and number of McGill University's School of Continuing Studies Bursaries, Scholarships, and Graduating Prizes issued varies from year to year, depending on funds received and their specifications.

#### McGill University's School of Continuing Studies Bursaries

The School of Continuing Studies will post the application form and eligibility requirements for the active term on its website. Please refer to link below for further information.

http://www.mcgill.ca/continuingstudies/current-students/fees/student-awards-and-financial-aid

#### McGill University's School of Continuing Studies Scholarships

For a list of McGill Scholarships, please consult the McGill School of Continuing Studies website by clicking on the link below.

http://www.mcgill.ca/continuingstudies/current-students/fees/student-awards-and-financial-aid

# McGill University's School of Continuing Studies Graduating Prizes

For a list of McGill SCS Graduating Prizes, please consult the McGill School of Continuing Studies website by clicking on the link below.

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http://www.mcgill.ca/continuingstudies/current-students/graduating-students/awards