# Academic and Co-op Work Term Schedule - School of Business

# Business Administration - Materials and Operations Management

This three-year advanced diploma program is designed to prepare the graduate for a professional career in operations and supply chain management. Graduates of this program will find success in the public, industrial, retail/wholesale, service and private sectors of the economy. Further, graduates of this program will assume leadership roles as business professionals in areas such as supply chain management, logistics, purchasing/procurement, resource planning and control, inventory management, warehousing and distribution, and operations management.

Partnerships with professional associations including PMAC (Purchasing Management Association of Canada) and APICS (The Association for Operations Management), afford students in the program the opportunity to network with professionals and work toward recognized professional designations while at school.

The first year of the program is common with the other Business Administration programs at Conestoga College. Years two and three of the program concentrate on the specific career path of the operations and supply chain professional.

# **Program Courses**

### Level One

Introductory Financial Accounting I Introduction to Professional Writing and Presentation Skills

Business Computing Applications I
Business Mathematics I
Burroductory Marketing I
Introduction to Operations Manager

Introduction to Operations Management

#### **Level Two**

Supply Chain Management Interpersonal Communications Skills Professional Report Writing and Presentation Skills Business Computing Applications II Microeconomics Business Mathematics II

## **Level Three**

Career Development I Information Systems I Macroeconomics Statistics Project Management Master Planning Purchasing

## **Level Four**

Applied Managerial Accounting Organizational Behaviour Information Systems II Material Requirements Planning Concepts Manufacturing Processes and Print Interpretation Principles of Buying

# Level Five - Work Term I

# Level Six - Work Term II

## **Level Seven**

Business Law
Industrial Engineering
Transportation and Warehousing
Advanced Purchasing
Execution and Control of Operations
Advanced Material Requirements Planning
Lean Concepts and Continuous Improvement

## Level Eight- Work Term III

#### **Level Nine**

Advanced Purchasing Leadership and Team Building Advanced Production Planning International Logistics Management Applied Execution and Control of Operations Value Stream Mapping

Business Administration - Materials and Operations Management Work/Study Sequence			
	Fall (Sept Dec.)	Winter (Jan Apr.)	Spring/Summer (May - Aug.)
Year 1	Classes	Classes	Summer Vacation
Year 2	Classes	Classes	Work Term I
Year 3	Work Term II	Classes	Work Term III
Year 4	Classes		

# **Work Term Capabilities**

# Work Terms I and II

- Apply project management techniques, including use of Microsoft Project, Excel, Word and Access
- Create a production, material and inventory plan
- Complete requests for quotations and write purchase requisitions and purchase orders
- Undertake product costing
- Source parts and raw materials
- Complete a master production schedule
- Interpret blueprints
- Use forecasting techniques to predict incoming business and shipments
- Maintain inventory records such as receipts and issues
- Apply Statistical Process Control (SPC) techniques and process variation analysis for continuous improvement
- Analyse product costs, contribution margins

#### **Work Term III**

- Apply Statistical Process Control (SPC) techniques and process variation analysis for continuous improvement
- Apply logistics techniques to various trucking and material movement enterprises
- Utilize, as well as, understand terminology, inputs and outputs of Materials Requirement Planning software
- Conduct junior work measurement assignments
- Apply scheduling techniques for shop floor control and loading
- · Apply capacity management techniques
- Perform vendor surveys and qualify vendors
- Execute basic purchasing tasks related to handling purchase requisitions, purchase orders, quotations and other associated purchasing and materials paperwork
- Perform production scheduling, inventory control, and materials planning duties
- Apply Lean Concepts for continuous improvement

# Sample Job Titles

Work Term I and II: Purchasing Data Analyst, Assistant Logistics/Inventory Analyst, Materials Planning Analyst, Materials Inventory Analyst, Buyer, Junior Material Planner, Expediter Work Term III: Distribution Analyst, Production Scheduler, Planner/Buyer, Master Scheduler, Material/Logistics Coordinator, Supply Chain Planner/Analyst

"Transfreight is a strong supporter of the Materials and Operations Management co-op program at Conestoga. The students come to us prepared and are a great fit in our organization due to the link between our business and the course content. A fair number of our current employees are Conestoga grads that work in all areas of our organization."

Kathy Himmelman – Transfreight Integrated Logistics Inc.