

# Supply Chain Management (SCM & SCMC)

## Supply Chain Management (SCM)

Students in the Supply Chain Management associate's degree program gain the knowledge and skills needed to oversee interconnected businesses by coordinating activities among suppliers, manufacturing, warehousing operations, shipping, and customers. Students also develop understanding of processes for moving, tracking, and distributing raw or in-process materials as well as finished goods.

Students select elective courses from one of two tracks:

- The Operations track focuses on business decisions in Supply Chain Management.
- The Material Handling Technology track focuses on automation and technological advances in the industry.

Graduates earn an Associate of Applied Business degree and are prepared for entry-level employment in areas such as inventory management, material handling, manufacturing resource planning, warehousing, logistics, traffic and transportation, or procurement.

Graduates also are prepared to take the Level One Supply Chain Professional certification exam offered by the Council of Supply Chain Management Professionals.

For more information, please contact the Business Technologies Division at (513) 569-1620.

To apply for this program at Cincinnati State, visit the Admissions (<http://www.cincinnati.edu/academics/admission/>) section of the College website.

## Supply Chain Management Certificate (SCMC)

The Supply Chain Management Certificate prepares students for employment in several key areas of the supply chain field, including purchasing, warehousing, transportation, manufacturing, and order fulfillment.

Graduates of the certificate program also are prepared to take the Level One Supply Chain Professional certification exam offered by the Council of Supply Chain Management Professionals.

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## Supply Chain Management (SCM)

|                                                               |                                             | Lec | Lat | Credits |
|---------------------------------------------------------------|---------------------------------------------|-----|-----|---------|
| <b>Semester 1</b>                                             |                                             |     |     |         |
| FYE 1XX                                                       |                                             | 1   | 0   | 1       |
| First Year Experience Elective (B)                            |                                             |     |     |         |
| XXX XXX                                                       |                                             | 3   | 0   | 3       |
| Computer Elective (B)                                         |                                             |     |     |         |
| XXX XXX                                                       |                                             | 3   | 0   | 3       |
| Track Elective 1 (B)                                          |                                             |     |     |         |
| MAT 1XX                                                       |                                             | 3   | 0   | 3       |
| Mathematics Elective (G)                                      |                                             |     |     |         |
| CIT 105                                                       | OSHA 10 General Industry Safety ( T )       | 1   | 0   | 1       |
| SCM 105                                                       | Principles of Supply Chain Management ( B ) | 3   | 0   | 3       |
| <b>Semester 2</b>                                             |                                             |     |     |         |
| ACC 101                                                       | Financial Accounting ( B )                  | 2   | 2   | 3       |
| BUS 190                                                       | Professional Practices ( B )                | 1   | 0   | 1       |
| XXX XXX                                                       |                                             | 3   | 0   | 3       |
| Track Elective 2 (T)                                          |                                             |     |     |         |
| ENG 101                                                       | English Composition 1 ( G )                 | 3   | 0   | 3       |
| MGT 101                                                       | Principles of Management ( B )              | 3   | 0   | 3       |
| SCM 110                                                       | Warehousing and Distribution ( T )          | 2   | 2   | 3       |
| <b>Semester 3</b>                                             |                                             |     |     |         |
| SCM X9X                                                       |                                             | 1   | 40  | 2       |
| Cooperative Education Elective 1: Supply Chain Management (T) |                                             |     |     |         |
| <b>Semester 4</b>                                             |                                             |     |     |         |
| ENG XXX                                                       |                                             | 3   | 0   | 3       |
| English Elective (G)                                          |                                             |     |     |         |
| XXX XXX                                                       |                                             | 0   | 3   | 3       |
| Track Elective 3 (T)                                          |                                             |     |     |         |
| IT 150                                                        | Logistics and Distribution Technology ( T ) | 2   | 2   | 3       |
| SCM 120                                                       | Transportation Systems ( T )                | 3   | 0   | 3       |
| MGT 130                                                       | Project Management ( T )                    | 3   | 0   | 3       |
| <b>Semester 5</b>                                             |                                             |     |     |         |
| XXX XXX                                                       |                                             | 3   | 0   | 3       |
| Arts/ Humanities Elective (G)                                 |                                             |     |     |         |
| XXX XXX                                                       |                                             | 3   | 0   | 3       |
| Track Elective 4 (T)                                          |                                             |     |     |         |

|                   |                                                                 |    |    |    |
|-------------------|-----------------------------------------------------------------|----|----|----|
| SCM 205           | Inventory Management and Control ( T )                          | 3  | 0  | 3  |
| SCM 290           | Supply Chain Management Capstone ( T )                          | 2  | 2  | 3  |
| XXX XXX           | Social/ Behavioral Science Elective ( G )                       | 3  | 0  | 3  |
| <b>Semester 6</b> |                                                                 |    |    |    |
| SCM X9X           | Cooperative Education Elective 2: Supply Chain Management ( T ) | 1  | 40 | 2  |
| Total Credits:    |                                                                 | 55 | 91 | 64 |

## Electives

### First Year Experience Elective

|         |                              |   |
|---------|------------------------------|---|
| FYE 100 | College Survival Skills      | 1 |
| FYE 105 | College Success Strategies   | 2 |
| FYE 110 | Community College Experience | 3 |

### Computer Elective

|        |                                  |   |
|--------|----------------------------------|---|
| IM 200 | Information Systems for Managers | 3 |
| IT 105 | Information Technology Concepts  | 3 |

### English Composition Elective

|         |                                                 |   |
|---------|-------------------------------------------------|---|
| ENG 102 | English Composition 2: Contemporary Issues      | 3 |
| ENG 103 | English Composition 2: Writing about Literature | 3 |
| ENG 105 | English Composition 2: Business Communication   | 3 |

### Mathematics Elective

|         |                          |   |
|---------|--------------------------|---|
| MAT 105 | Quantitative Reasoning   | 3 |
| MAT 115 | Pre-Statistics           | 3 |
| MAT 125 | Algebra and Trigonometry | 4 |
| MAT 131 | Statistics 1             | 3 |
| MAT 151 | College Algebra          | 4 |

### Arts/Humanities Elective

Any Transfer Module course from ART, LIT, MUS, PHI, REL, THE, or COMM 130 3

### Social/Behavioral Science Elective

Any Transfer Module course from ECO, GEO, HST, LBR, POL, PSY, SOC 3

### Cooperative Education Electives (4 credit hours required)

|         |                                                            |   |
|---------|------------------------------------------------------------|---|
| SCM 191 | Part-Time Cooperative Education 1: Supply Chain Management | 1 |
| SCM 192 | Part-Time Cooperative Education 2: Supply Chain Management | 1 |
| SCM 193 | Part-Time Cooperative Education 3: Supply Chain Management | 1 |
| SCM 194 | Part-Time Cooperative Education 4: Supply Chain Management | 1 |
| SCM 291 | Full-Time Cooperative Education 1: Supply Chain Management | 2 |

|         |                                                            |   |
|---------|------------------------------------------------------------|---|
| SCM 292 | Full-Time Cooperative Education 2: Supply Chain Management | 2 |
|---------|------------------------------------------------------------|---|

### Track Electives (Meet with an advisor to choose a track and corresponding electives)

#### Operations Track Electives

Must take all three courses listed below

|         |                                                   |   |
|---------|---------------------------------------------------|---|
| LAW 101 | Business Law                                      | 3 |
| SCM 115 | Manufacturing Planning in Supply Chain Management | 3 |
| SCM 210 | Procurement Management                            | 3 |

Must take one of the following courses:

|          |                                                  |   |
|----------|--------------------------------------------------|---|
| ACC 102  | Managerial Accounting                            | 3 |
| CET 115  | Architectural Drafting and Computer Aided Design | 4 |
| EMET 210 | Energy Efficiency and Audits                     | 3 |
| EVT 187  | Materials Transportation Safety and Security     | 2 |
| MGT 130  | Project Management                               | 3 |

#### Material Handling Technology Track Electives

|          |                                          |   |
|----------|------------------------------------------|---|
| EET 101  | Electronic Fundamentals 1                | 3 |
| EMET 150 | Introduction to Controls and Robotics    | 2 |
| MHT 100  | Introduction to Materials Handling and L | 3 |
| MHT 200  | Automation Systems                       | 3 |

Some courses are offered in alternative versions identified with a letter after the course number-- for example, ENG 101 and ENG 101A.

- This curriculum displays only course numbers without the added letter.
- The alternative version, when available, meets the requirements of the course version without the added letter.

The letters G, B, and T (displayed after course titles or elective descriptions) identify types of courses required by the Ohio Department of Higher Education as part of an associate's degree curriculum.

G = General Education course in this curriculum

B = Basic Skills course in this curriculum

T = Technical course in this curriculum

## Supply Chain Management Certificate (SCMC)

| Semester 1 |                                                   | Lec | Lat | Credits |
|------------|---------------------------------------------------|-----|-----|---------|
| SCM 105    | Principles of Supply Chain Management             | 3   | 0   | 3       |
| SCM 110    | Warehousing and Distribution                      | 2   | 2   | 3       |
| Semester 2 |                                                   |     |     |         |
| SCM 120    | Transportation Systems                            | 3   | 0   | 3       |
| SCM 115    | Manufacturing Planning in Supply Chain Management | 3   | 0   | 3       |
| SCM 205    | Inventory Management and Control                  | 3   | 0   | 3       |
| Semester 3 |                                                   |     |     |         |
| SCM 210    | Procurement Management                            | 3   | 0   | 3       |

|                    |    |   |    |
|--------------------|----|---|----|
| XXX XXX            | 3  | 0 | 3  |
| Technical Elective |    |   |    |
| Total Credits:     | 20 | 2 | 21 |

## Electives

### Technical Elective

|         |                                       |   |
|---------|---------------------------------------|---|
| IT 150  | Logistics and Distribution Technology | 3 |
| MGT 140 | Quality Management                    | 3 |
| SCM 290 | Supply Chain Management Capstone *    | 3 |
| CDL 110 | Commercial Driver License Training    | 5 |

\* Students cannot take SCM 290 and SCM 210 in the same semester.

Some courses are offered in alternative versions identified with a letter after the course number-- for example, ENG 101 and ENG 101A.

- This curriculum displays only course numbers without the added letter.
- The alternative version, when available, meets the requirements of the course version without the added letter.

## Supply Chain Management (SCM)

- Demonstrate the major functions of supply chain management: planning, acquisition, flow, and distribution of goods and services.
- Differentiate logistics and supply chain management.
- Describe alternative ways to organize for supply chain management.
- Describe methods of inventory planning.
- Utilize critical thinking in addressing issues.
- Explain how technology has and continues to change logistics and supply chain management.
- Compare modes of transportation and related policies.
- Explain purchasing processes, policies, and procedures.
- Describe warehouse processes, systems, and performance measures.
- Analyze legal and ethical issues from a global awareness perspective within the supply chain management industry.
- Identify improvement opportunities throughout the operations value stream (reduction in operational waste) and develop and implement a plan for acting on these opportunities.
- Use computer simulation to model a supply chain within a cost effective inventory, facility, location, and transportation framework.
- Discuss collaboration and communication skills and leadership styles.
- Demonstrate professionalism specific to the supply chain management industry.

## Faculty

### Program Chair

Paula Kirch-Smith M.Ed., CHE  
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### Co-op Coordinator

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## Advisor

Eimee Donbar, MA  
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## Courses

### SCM 105 Principles of Supply Chain Management 3 Credits. 3 Lecture Hours. 0 Lab Hour.

A course on fundamentals of supply chain management and operations. Topics include: logistics, distribution, warehousing, material handling, material flow, transportation, procurement, and tracking. Prerequisites: ENG 080 or appropriate placement

### SCM 110 Warehousing and Distribution 3 Credits. 2 Lecture Hours. 2 Lab Hours.

A course on warehouse management and distribution skills, including OSHA General Industry Training and forklift operator safety training. Topics include: material handling equipment, information technology tools, receiving, order picking, shipping, inventory management, and storage. Prerequisites: None

### SCM 115 Manufacturing Planning in Supply Chain Management 3 Credits. 3 Lecture Hours. 0 Lab Hour.

A course on operational frameworks, challenges, and opportunities posed by supply chain management and sustainability trends. Topics include: demand forecasting, master production planning, lean production, push and pull production systems, capacity requirements planning, and inventory management. Prerequisites: SCM 105

### SCM 120 Transportation Systems 3 Credits. 3 Lecture Hours. 0 Lab Hour.

A course on laws, policies, and procedures related to transportation by ground, rail, air, and water. Topics include: planning, traffic management, environmental compliance, and relationships among suppliers, producers, and consumers. Prerequisites: None

### SCM 191 Part-Time Cooperative Education 1: Supply Chain Management 1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking an associate's degree participate in their first part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory. Prerequisites: BUS 190 (minimum grade C)

### SCM 192 Part-Time Cooperative Education 2: Supply Chain Management 1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking an associate's degree participate in their second part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory. Prerequisites: SCM 191

**SCM 193 Part-Time Cooperative Education 3: Supply Chain Management****1 Credit. 1 Lecture Hour. 20 Lab Hours.**

Students seeking an associate's degree participate in their third part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: SCM 192

**SCM 194 Part-Time Cooperative Education 4: Supply Chain Management****1 Credit. 1 Lecture Hour. 20 Lab Hours.**

Students seeking an associate's degree participate in their fourth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: SCM 193

**SCM 195 Part-Time Cooperative Education 5: Supply Chain Management****1 Credit. 1 Lecture Hour. 20 Lab Hours.**

Students seeking an associate's degree participate in their fifth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: SCM 194

**SCM 196 Part-Time Cooperative Education 6: Supply Chain Management****1 Credit. 1 Lecture Hour. 20 Lab Hours.**

Students seeking an associate's degree participate in their sixth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: SCM 195

**SCM 205 Inventory Management and Control****3 Credits. 3 Lecture Hours. 0 Lab Hour.**

A course on inventory management and movement of materials. Topics include: independent and dependent demand methods, material management, manufacturing principles, predicting demand, just-in-time operations, quality control, and tracking and logistics technologies.

Prerequisites: SCM 105

**SCM 210 Procurement Management****3 Credits. 3 Lecture Hours. 0 Lab Hour.**

A course on procurement principles and practices. Topics include: strategic planning, quality control, purchasing laws and ethics, cost estimating, contract management, inventory control, and risk management.

Prerequisites: SCM 105

**SCM 290 Supply Chain Management Capstone****3 Credits. 2 Lecture Hours. 2 Lab Hours.**

Students use case studies and simulations to examine the entire scope of Supply Chain Management, including functional and decision-making areas such as distribution, transportation, inventory management, procurement, and logistics.

Prerequisites: SCM 210

**SCM 291 Full-Time Cooperative Education 1: Supply Chain Management****2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in their first full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: BUS 190 (minimum grade C)

**SCM 292 Full-Time Cooperative Education 2: Supply Chain Management****2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in their second full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: SCM 291

**SCM 293 Full-Time Cooperative Education 3: Supply Chain Management****2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in their third full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: SCM 292

**SCM 294 Internship 1: Supply Chain Management****2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in their first unpaid field learning experience related to their degree. Students must follow applicable policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: BUS 190

**SCM 295 Internship 2: Supply Chain Management****2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in their second unpaid field learning experience related to their degree. Students must follow applicable policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: SCM 294