

# Unit Outline (Higher Education)

**Institute / School:** Institute of Innovation, Science & Sustainability

**Unit Title:** Supply Chain Operations and Management

**Unit ID:** ITECH7413

**Credit Points:** 15.00

**Prerequisite(s):** (ITECH5402)

**Co-requisite(s):** Nil

**Exclusion(s):** Nil

**ASCED:** 029999

**Description of the Unit:**

This course examines how enterprise systems can be developed and integrated into organisations to facilitate the operations, processes and implementation of supply chain management (SCM). We will cover topics such as supply chain management systems, global sourcing and design supply chain management, managerial issues and collaboration in the supply chain, logistics, warehousing, manufacturing, transportation related challenges in the supply chain. We will examine this course through an enterprise systems lens, thus permitting the full benefits of SCM within a realistic and appropriate context. Emphasis is placed on appreciating the critical role that enterprise systems play in supporting the operation and supply chain management and its implications operationally, technologically and strategically for the organisations. We also explore the need for critical correlations between supply chain management and other enterprise systems (i.e. distribution, logistics, manufacturing and retails) with the help of ERP simulation games.

**Grade Scheme:** Graded (HD, D, C, P, MF, F, XF)

**Work Experience:**

No work experience

**Placement Component:** No

**Supplementary Assessment:** Yes

Where supplementary assessment is available a student must have failed overall in the Unit but gained a final mark of 45 per cent or above, has completed all major assessment tasks (including all sub-components where a task has multiple parts) as specified in the Unit Description and is not eligible for any other form of supplementary assessment.

**Course Level:**

Level of Unit in Course	AQF Level of Course					
	5	6	7	8	9	10
Introductory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advanced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Learning Outcomes:**
**Knowledge:**

- K1.** Debate sustainability and managing performance improvements in global supply chains.
- K2.** Summarise recent developments in the Supply Chain Management Systems domain.
- K3.** Compare and discuss the roles of different Supply Chain Management Systems in facilitating logistics, operations and processes.
- K4.** Compare different concepts related to Supply Chain Management Systems implementation.
- K5.** Recommend an original homework problem solution dealing with logistics and supply chain context.

**Skills:**

- S1.** Demonstrate application of various and leading edge Supply Chain Management tools such as ERP simulation games and SAP SCM to manage supply chain operations and processes.
- S2.** Research emerging trends and future issues facing in Supply Chain Management Systems implementation and use in a global context.
- S3.** Evaluate the implementation of Supply Chain Management Systems.
- S4.** Interpret Supply Chain Management Systems documentation.

**Application of knowledge and skills:**

- A1.** Communicate effectively to present a coordinated, coherent and independent exposition of knowledge and ideas in dealing with Supply Chain Management Systems.
- A2.** Design and implement an Enterprise system that incorporates an organizations logistics, operations and supply chain management.
- A3.** Use a Supply Chain Management Systems for operational and strategic decision making.
- A4.** Investigate and critique various Supply Chain Management Systems from different vendors.
- A5.** Analyze and evaluate the effectiveness of Supply Chain Management Systems.

**Unit Content:**

Operations and processes.  
 Global sourcing and design supply chain management.  
 Organisational and managerial issues in logistics and supply chain.  
 Analyzing different SCM theories, managing global supply chain risks.  
 Procurement and SCM.  
 Manufacturing and SCM.  
 Transportation and SCM.  
 Supply network design.  
 Warehousing and SCM.  
 Capacity and inventory management.

Resource planning and control.  
Lean synchronisation.

## FEDTASKS

Federation University Federation recognises that students require key transferable employability skills to prepare them for their future workplace and society. FEDTASKS (**T**ransferable **A**tttributes **S**kills and **K**nowledge) provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Co-operative Learning opportunities. *One or more FEDTASK, transferable Attributes, Skills or Knowledge must be evident in the specified learning outcomes and assessment for each FedUni Unit, and all must be directly assessed in each Course.*

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit	
		Learning Outcomes (KSA)	Assessment task (AT#)
FEDTASK 1 Interpersonal	Students at this level will demonstrate an advanced ability in a range of contexts to effectively communicate, interact and work with others both individually and in groups. Students will be required to display high level skills in-person and/or online in: <ul style="list-style-type: none"> <li>• Using and demonstrating a high level of verbal and non-verbal communication</li> <li>• Demonstrating a mastery of listening for meaning and influencing via active listening</li> <li>• Demonstrating and showing empathy for others</li> <li>• High order skills in negotiating and conflict resolution skills</li> <li>• Demonstrating mastery of working respectfully in cross-cultural and diverse teams.</li> </ul>	Not applicable	Not applicable
FEDTASK 2 Leadership	Students at this level will demonstrate a mastery in professional skills and behaviours in leading others. <ul style="list-style-type: none"> <li>• Creating and sustaining a collegial environment</li> <li>• Demonstrating a high level of self-awareness and the ability to self-reflect and justify decisions</li> <li>• Inspiring and initiating opportunities to lead others</li> <li>• Making informed professional decisions</li> <li>• Demonstrating initiative in new professional situations.</li> </ul>	Not applicable	Not applicable
FEDTASK 3 Critical Thinking and Creativity	Students at this level will demonstrate high level skills in working in complexity and ambiguity using the imagination to create new ideas. Students will be required to display skills in: <ul style="list-style-type: none"> <li>• Reflecting critically to generate and consider complex ideas and concepts at an abstract level</li> <li>• Analysing complex and abstract ideas, concepts and information</li> <li>• Communicate alternative perspectives to justify complex ideas</li> <li>• Demonstrate a mastery of challenging conventional thinking to clarify complex concepts</li> <li>• Forming creative solutions in problem solving to new situations for further learning.</li> </ul>	Not applicable	Not applicable
FEDTASK 4 Digital Literacy	Students at this level will demonstrate the ability to work competently across a wide range of tools, platforms and applications to achieve a range of tasks. Students will be required to display skills in: <ul style="list-style-type: none"> <li>• Mastering, exploring, evaluating, managing, curating, organising and sharing digital information professionally</li> <li>• Collating, managing complex data, accessing and using digital data securely</li> <li>• Receiving and responding professionally to messages in a range of professional digital media</li> <li>• Contributing competently and professionally to digital teams and working groups</li> <li>• Participating at a high level in digital learning opportunities.</li> </ul>	Not applicable	Not applicable

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit	
		Learning Outcomes (KSA)	Assessment task (AT#)
FEDTASK 5 sustainable and Ethical Mindset	Students at this level will demonstrate a mastery of considering and assessing the consequences and impact of ideas and actions in enacting professional ethical and sustainable decisions. Students will be required to display skills in: <ul style="list-style-type: none"> <li>• Demonstrate informed judgment making that considers the impact of devising complex solutions in ambiguous global economic environmental and societal contexts</li> <li>• Professionally committing to the promulgation of social responsibility</li> <li>• Demonstrate the ability to evaluate ethical, socially responsible and/or sustainable challenges and generating and articulating responses</li> <li>• Communicating lifelong, life-wide and life-deep learning to be open to the diverse professional others</li> <li>• Generating, leading and implementing required actions to foster sustainability in their professional and personal life</li> </ul>	Not applicable	Not applicable

**Learning Task and Assessment:**

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K3, K4, K5, S2, S3, A1, A2, A3, A4, A5	Analyse and implement a supply chain system.	Assignments	60-80%
K2, K3, K4, S1, S4, A4, A5	Demonstrate use and application of Supply Chain Management tools.	Written Tests (Mid-Semester & Final Tests)	20-40%

**Adopted Reference Style:**

APA ()

 Refer to the [library website](#) for more information

 Fed Cite - [referencing tool](#)