

LI5001 Research Project

Modular Credits: 8

Prerequisite(s): Nil

Preclusion(s): Nil

Cross-listing(s): Nil

Host Department: TLI – Asia Pacific

The objective of the industrial research project is to allow students to gain practical experience of working with a logistics/supply chain company and also to be engaged in a practical well-defined project with clear learning objectives. Students must form a team of 3 to work on a real-world industry project. The research project aims to train students in innovative problem-solving using the tools and skills acquired in the coursework. Expected learning outcomes of the module include the following:

- (a) Ability to appreciate the practical problems in logistics/supply chain operations by embarking on a well-defined project;
- (b) Ability to formulate the supply chain problem and to break down its components to derive a systematic action plan;
- (c) Ability to apply the knowledge gained in the course to manage the project and to derive good feasible solutions in logistics/supply chain management;
- (d) Ability to monitor and document the progress of the project; and
- (e) Ability to communicate the findings from the project in a final report and poster presentation.

Students will be assessed on the quality of the project based on the learning outcomes. The scope and nature of the project must be agreed between the student team, the company coordinator/mentor and the supervisor. Supervisors may come from the Departments of Analytics & Operations, Industrial Systems Engineering & Management, or TLI –Asia Pacific.

LI5101 Supply Chain Management Thinking and Practice

Modular Credits: 4

Prerequisite(s): Nil

Preclusion(s): Nil

Cross-listing(s): Nil

Host Department: TLI – Asia Pacific

A good supply chain involves an integrated end-to-end management of material flows from sources of supply through plants to customers, as well as an efficient information system for monitoring the flows and improving operational efficiency. Given the global context in which supply chains are to be managed, there is also a need to appreciate the financial management and operations. The objective of this module is to guide students into developing correct perspectives and thinking skills needed to effectively manage a supply chain. The topics to be covered include evolution of supply chain thinking, components of a supply chain, principles and value of good SCM, SCM operation and coordination, different practices of SCM, and technology in SCM.

LI5202 Supply Chain Management Strategies and Case Studies

Modular Credits: 4

Prerequisite(s): Nil

Preclusion(s): Nil
Cross-listing(s): Nil
Host Department: TLI – Asia Pacific

There are many emerging areas in Logistics and Supply Chain Management. The practice in Supply Chain Management is still evolving to include new technologies and applications, as well as improved methods of solution and algorithms of seeking out solutions. Some areas of immediate interest include Cold Chains, Retail Chains and RFID application in supply chain management. This module enables students to keep abreast with latest developments in some specific areas in supply chain management and to learn a special area or application of supply chain management by qualified senior practitioners to TLI - Asia Pacific.

LI5201 Special Topics in Logistics

Modular Credits: 4
Pre-requisite(s): Nil
Preclusion(s): Nil
Cross-listing(s): Nil
Host Department: TLI – Asia Pacific

There are many emerging areas in Logistics and Supply Chain Management. The practice in logistics is still evolving to include new technologies and applications, as well as improved methods of solution and algorithms of seeking out solutions. Some areas of immediate interest include: humanitarian logistics, logistics security, urban logistics and hospitality logistics. This module enables students to keep abreast with latest developments in some specific areas in logistics and to learn a special area or application of logistics taught by visiting faculties or qualified senior practitioners to TLI - Asia Pacific.

LI5203 Global Logistics & Supply Chain Management

Modular Credits: 4
Prerequisite(s): Nil
Preclusion(s): Nil
Cross-listing(s): Nil
Host Department: TLI – Asia Pacific

This course aims to provide a unique enriching experiential learning opportunity to gain a broader understanding and insight into global logistics and supply chains. It will be delivered via an intensive two-week summer school programme at an international partner university. Adopting a case-based learning approach, students will experience challenging real business cases and workshops designed to combine sophisticated theory with hands-on practical experience in industry. Students will be exposed to educational content with high practical industrial relevance and innovative solutions for companies with state-of-the-art expertise. The cases will follow the logic and lines of a global supply chain: starting with supplier evaluation, to usage of multimodal transport, cold chain logistics, set-up of SCM function in a company from scratch down to customer delivery, customer segmentation, and ending with the challenges of e-commerce and last-mile delivery.

LI5204 Supply Chain Simulation and Optimization

Modular Credits: 4

Prerequisite(s): Nil

Preclusion(s): Nil

Cross-listing(s): Nil

Host Department: TLI – Asia Pacific

This course aims to provide a hands-on learning opportunity through the use of an easy-to-understand tool, such as AnyLogistix, for students to address a wide range of supply chain management (SCM) problems. It allows students to focus on management decision analysis and use KPIs for operational, customer and financial performance measurement and decision-making. The course covers supply chain simulation and optimization examples via developing and building models and evaluating KPIs, and discusses how to use these models and their simulation and optimization results to improve management decision-making.