

## Module Description

# International Logistics

**General Information****Number of ECTS Credits**

3

**Abbreviation**

TSM\_Logistic

**Version**

05.05.2011

**Responsible of module**

Prof.Dr.-Ing. Martin Käppner

**Language**

	Lausanne	Bern	Zürich
Instruction	<input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F	<input checked="" type="checkbox"/> D <input checked="" type="checkbox"/> E
Documentation	<input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> D <input checked="" type="checkbox"/> E
Examination	<input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F	<input checked="" type="checkbox"/> D <input checked="" type="checkbox"/> E

**Module category**

- Fundamental theoretical principles
- Technical/scientific specialization module
- Context module

**Lessons**

- 2 lecture periods and 1 tutorial period per week
- 2 lecture periods per week

**Brief course description of module objectives and content**

The focus of the module is on the various logistics strategies and structures in the international environment, especially in the areas of storage and transportation.

**Aims, content, methods****Learning objectives and acquired competencies**

- The module provides the necessary knowledge to understand the variety of possible logistical concepts. The students will be able to derive the correct strategies from given targets, design a possible operating strategy for the planned issue and balance with the capabilities of the found solution
- This will be achieved on the knowledge of strategies, structures and technical elements, based on design principles of different procurement and distribution needs of multiple branches
- Corresponding exercises will be deepen the lecture content by examples and tasks, additionally a large case study dealing with various practical issues has to be executed

**Contents of module with emphasis on teaching content**

- Models and concepts of international logistics
  - Strategies, Risks, Manageability & Controlling, Interfaces internal/external logistics & to 3<sup>rd</sup> parties,
- Structural elements of warehousing & transportation networks (national / regional / global)
  - Warehousing: network design, needed number of warehouses, topology (regional vs. central, national vs. international ...)
  - Transportation: Networks/ Systems, Central Hub, Hub-Spoke, Regional Cluster, Shipment types ( parcel / groupage / full truck load), service levels, freight costs
- Technical elements of warehousing and transport (central point: traffic logistics)
  - Rail, Road, Air, Sea
- Rules & Regulations in international logistics
  - Safety, Regulatory, Dangerous goods, Important international organisations, Customs...

**Teaching and learning methods***Lectures/ presence*

*Tutorial/ presence*

*Case Study/ presence, self study*

**Prerequisites, previous knowledge, entrance competencies**

*Basic knowledge in logistics, SCOR model*

*Basic knowledge in operations management*

*Laptop with Acrobat Reader & MS Excel*

**Literature**

*International Logistics: Global Supply Chain Management, Douglas Long, 2003*

*Exercices, Case Study delivered in course*

**Assessment****Certification requirements for final examinations (conditions for attestation)**

*Executed/ attested case study*

**Written module examination**

Duration of exam : 120 minutes

Permissible aids: *Open Book, no Computers*