

Università  
della  
Svizzera  
italiana

**MASHLM**  
**Humanitarian**  
**Logistics and**  
**Management**

# Humanitarian Logistics and Management

## Course Catalogue



Università della Svizzera italiana  
via Giuseppe Buffi 13  
CH-6900 Lugano  
+41 58 666 46 05  
mashlm@usi.ch

CAS | Certificate of Advanced Studies  
DAS | Diploma of Advanced Studies  
MAS | Master of Advanced Studies

**Our participants come from 68 countries and work in multiple fields in humanitarian organizations including logistics, procurement, operations, ICT, HR, transportation, and child protection.**



**Organizations represented  
in our programmes**

Aga Khan Foundation / AISPO / CARE International / CBN / CERN / Danish Refugee Council / EU Environmental Bureau / Fleet Forum / Humedica / International Committee of the Red Cross / International Medical Corps / International Rescue Committee / IOM / Mercy Corps / MSF / NHS / Norwegian refugee Council / Red Crescent Society / Relief International / Road Transport and Safety Agency / Save the Children / Swiss Department of Economics / Swiss Federal Department of Defence / UNAMID / UNDP / UNHCR / UNFPA / UNICEF / UNOPS / USAID / WFP / WHO / World Bank / World Vision / Youth with a Mission

**Nationalities represented**

Afghanistan / Algeria / Angola / Australia / Austria / Belgium / Bosnia and Herzegovina / Burkina Faso / Cameroon / Canada / Colombia / Croatia / Denmark / Democratic Republic of Congo / Egypt / Eritrea / Ethiopia / France / Georgia / Germany / Ghana / Guinea / Honduras / Hungary / India / Indonesia / Iran / Iraq / Ireland / Italy / Ivory Coast / Japan / Jordan / Kenya / Kosovo / Lebanon / Liberia / Macedonia / Malawi / Malaysia / Nepal / Netherlands / Nigeria / Pakistan / Peru / Philippines / Portugal / Russia / Rwanda / Sierra Leone / Somalia / South Africa / South Sudan / Sri Lanka / Sudan / Switzerland / Syria / Tanzania / Thailand / Tunisia / Turkey / Uganda / UK / USA / Yemen / Zambia / Zimbabwe

---

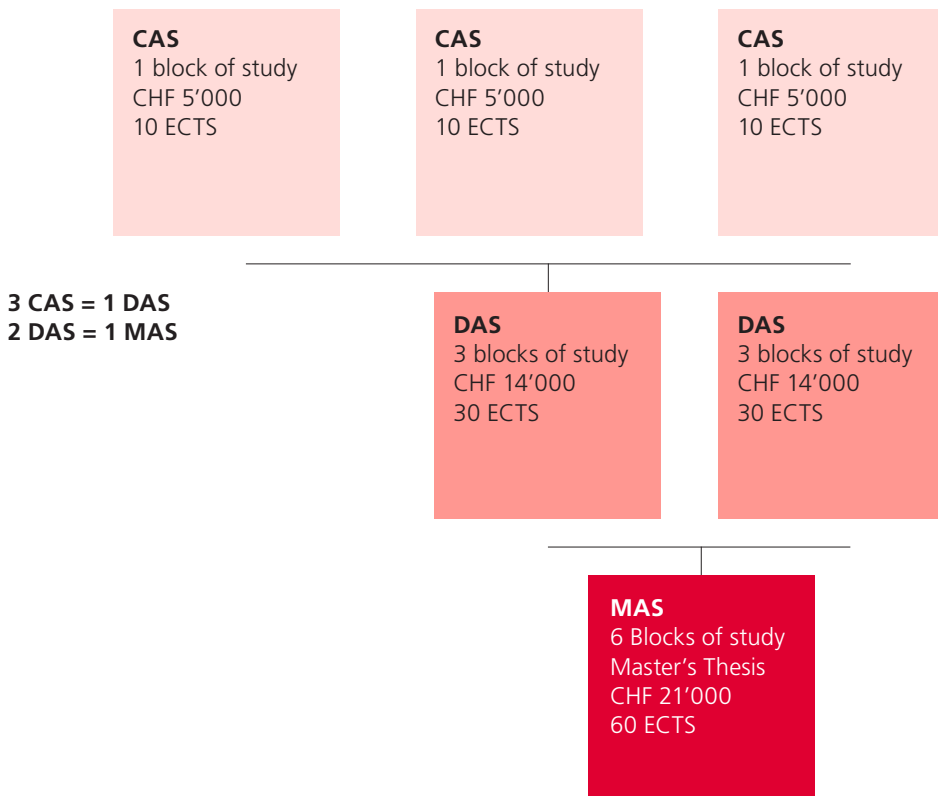
## Description of Programmes

---

The Humanitarian Logistics and Management programmes link the latest academic research with best practices in the field to deliver a balanced mix of academic and practical teaching. Unlike most humanitarian programmes, the HLM curriculum embeds humanitarian supply chain and logistic fundamentals within a managerial setting. This not only creates a well-rounded perspective, but also ensures that the humanitarian practitioner is well-equipped with the necessary tools to become a credible voice during a crisis, or when proposing efficiencies in their organization.

The classes foster an enhanced learning environment by encouraging participants to share their professional experiences. Teaching methods include lectures, case studies, guest speakers, extensive group work, tutorials, and an academic thesis. All lectures, class discussions and exams are conducted in English, the official language of the programme.

All programmes are modular: each CAS can be taken alone or combined to gain a DAS or MAS degree.



**Make an immediate impact in your organization with the globally recognized Lean Six Sigma Green Belt Certification, the performance improving method that systematically removes process defects and waste.**

## **Content**

- Humanitarian Action
- Process Management
- Lean Six Sigma

## **Core Competencies**

- Logistics Procedures and Compliance
- Logistics Set-up and Design
- Quality Management
- Inventory Management
- Quality Control

## **Learning Outcomes**

Upon successful completion of this CAS you will be able to:

- Apply, define, and describe the concepts, tools, and techniques fundamental to Process Management using Lean Six Sigma, including the DMAIC methodology
- Analyze complex processes using suitable process analysis techniques and make sound recommendations for improving processes
- Evaluate performance measures in humanitarian logistics processes in terms of cost, quality, speed, service, and flexibility
- Understand basic concepts of humanitarian action and its relations with international development cooperation, including developments and trends in the world society, and their humanitarian consequences
- Analyze the international response to humanitarian crises and the architecture of humanitarian action including an overview and typology of actors

---

### **Date**

23–29 August  
2020

### **Cost**

CHF 5'000

### **Location**

USI, Lugano

**Gain a solid understanding of the key elements of a supply chain with emphasis on all aspects of procurement and moving goods: sourcing materials, managing suppliers, transportation strategies, optimizing distribution channels.**

## Content

- Supply Chain Principles
- Transportation
- Procurement
- Project Management Principles

## Core Competencies

- Logistics Procedures and Compliance
- Logistics Set-up and Design
- Supply Chain Coordination
- Collaborative Planning
- Purchase
- Market Analysis and Sourcing
- Supplier Management
- Contract Management
- Quality Control
- Import and Export
- Warehousing
- Transport
- Distribution
- Fleet Management and set-up

## Learning Outcomes

Upon successful completion of this CAS you will be able to:

- Understand supply chain management, supply chain elements, supply chain integration from a practical, analytical and strategic perspective
- Develop the basic logistics concepts and frameworks for decision-making in supply chain management settings
- Effectively manage transportation through market analysis, procurement strategies, dynamic planning, and the use of technology
- Articulate a transportation strategy across the organization and within the logistics strategy
- Apply basic principles, methods, and tools for project management to the workplace improving your ability to manage complex development projects
- Utilize the methods and tools of project management and understand the underlying theory
- Appreciate organizational and human aspects in project organizations and project manager soft skills and typical profiles

## Date

18–24 October  
2020

## Cost

CHF 5'000

## Location

USI, Lugano

**Build your capacity in managing stakeholders who work toward common goals. Acquire techniques to establish agreement around intended outcomes, assessing and adjusting the organization's direction in response to a changing environment.**

## Content

- Beer Distribution Game
- Research Methods
- Strategic Planning
- Scenario Planning

## Core Competencies

- Logistics Data Management
- Business Intelligence and Reporting
- Assets Management
- Risk Management
- Forecasting
- Collaborative Planning
- Customer Service Desk
- Inventory Management

## Learning Outcomes

Upon successful completion of this CAS you will be able to:

- Conduct stakeholder analyses to articulate and critique your organization's mission, vision, and values
- Analyse your organization's external environments, including assessing possible consequences of current trends
- Perform internal analyses of your organization, focusing on resources and capabilities and make actionable recommendations, informed by your analyses, to help your organization be more effective in articulating and implementing its strategy
- Create a plan for engaging relevant stakeholders on work related to one of your organization's strategic objectives
- Construct scenarios scalable to any organizational need
- Define a strategic project's objectives and strategy
- Evaluate alternative projects for resource allocation
- Understand basic and most important knowledge for conducting empirical research
- Use and interpret multivariate methods and results, such as quantitative and qualitative research methods

## Date

6–12 December  
2020

## Cost

CHF 5'000

## Location

USI, Lugano

**Develop entrepreneurial skills for implementing sustainable social innovation with human centred design. Learn advanced tools for conceptualising complex systems to then improve managerial decision making.**

## Content

- Project Development
- Statistics
- Managerial Accounting
- System Dynamics

## Core Competencies

- Logistics Data Management
- Business Intelligence and Reporting
- Assets Management
- Risk Management
- Forecasting
- Collaborative Planning
- Customer Service Desk
- Inventory Management

## Learning Outcomes

Upon successful completion of this CAS you will be able to

- Understand the principles of social innovations adopting a Human Center Design (HCD) approach as a driving force through the different design process stages, such as discover, ideate and prototype
- Generate robust ideas for social innovations by following structured processes
- Apply the principles of statistics to common humanitarian contexts
- Understand concepts in probability and statistics models and their applications
- Use excel to address applied statistical problems
- Understand the mechanics of financial accounting and the various links between operating variables and financial performance
- Evaluate and act upon relevant information from the financial and non-financial reports used in managing modern firms
- Employ the basic language and tools to assess and communicate the impact of logistics on a firm's financial performance
- Assess the impact of a decision in terms of the difference between the various types of costs involved
- Understand the basic theory and practice of system dynamics
- Conceptualize the dynamics of any system, focusing on the dynamics of supply chains and other structures such as epidemics and work-accomplishment
- Gain exposure of the ways in which system performance can be improved

## Date

31 January –  
6 February 2021

## Cost

CHF 5'000

## Location

USI, Lugano

**Create efficiency in your organization with innovative approaches and practical tools that improve the impact of humanitarian operations. Learn systematic processes for determining and addressing needs and managing information effectively.**

**Content**

- Operations and Supply Chain Management
- Optimization Models
- Needs Assessment
- Crisis Information Management

**Core Competencies**

- Logistics Procedures and Compliance
- Logistics Set-up and Design
- Quality Management
- Logistics Data Management
- Forecasting
- Collaborative Planning
- Customer Service Desk
- Inventory Management
- Market Analysis and Sourcing
- Supplier Management
- Warehousing
- Transport
- Distribution
- Fleet Management and set-up
- Car pool and dispatch organization
- Air Operations Management

**Learning Outcomes**

Upon successful completion of this CAS you will be able to

- Analyse and assess various trade-offs present in managing distribution and routing of supplies and incorporate uncertainty in decision-making
- Understand principles and practices of management science models for the analysis and improvement of humanitarian systems
- Develop mathematical models that improving processes and decisions in humanitarian contexts
- Implement models learned in class using excel
- Develop an intuitive understanding of widely-used analytical techniques and their applications (e.g., Linear and Integer Programming)
- Understand methodologies, processes, and planning related to assessing needs in a crisis environment
- Apply methods to assign needs severity to an affected population
- Understand Information Management principles as applied to the humanitarian environment and coordination structures
- Leverage geographic information with user-friendly, free tools available online related to the development of an Information Management Strategy
- Estimate populations through various techniques and to develop a Population Management Strategy
- Analyse humanitarian situations using basic principles of visualization of information

---

**Date**

25 April –  
1 May 2021

**Cost**

CHF 5'000

**Location**

USI, Lugano



**Explore how innovation can contribute to limiting climate related hazards. Integrate humanitarian action with planning and analysis tools during a simulated emergency to experience the changing nature of humanitarian preparedness and response.**

**Content**

- Disaster Risk Reduction
- Innovation in Climate Risk Management
- Capstone Simulation in Humanitarian Assistance

**Core Competencies**

- Disaster Risk Management
- Climate Risk Management
- Integrated Supply Chain Strategy
- Development and Humanitarian Nexus
- Humanitarian Assistance
- Disaster Preparedness

**Learning Outcomes**

Upon successful completion of this CAS you will be able to

- Understand the linkages between development and emergency related concepts of risk, hazards, vulnerability, capacity, assets, governance and discrimination
- Critically review different approaches and tools used in practice in disaster management
- Apply planning and analysis tools and approaches to different types of crises and emergencies
- Understand the basics of how science, technology, and organizational innovations can help the humanitarian sector understand and address climate-related hazards, focusing on the strengths and limitations of forecasts at different time scales
- Work with experts from other disciplines in order to jointly identify the constellation of means, relationships, and processes that can enable forecast-based decisions to save lives and livelihoods
- Understand the humanitarian system and the tools and approaches required to deal with the changing nature of humanitarian preparedness and response in the field and at headquarters
- Discuss the major questions about the future of humanitarian assistance
- Appreciate the need for organizations to be accountable to a wide constituency, including beneficiaries, donors, the public, and the press

**Date**

3–14 October  
2021

**Cost**

CHF 5'000

**Location**

USI, Lugano

---

## Testimonials

---

**Our participants are humanitarian professional who wish to enhance their careers and advance in the key areas of supply chain management, process and project management, strategic management, and humanitarian action.**



"I got a lot out of the program. I feel more mature, the way I approach issues at work is more strategic. Now, I think I'm capable of handling any complex situation in the humanitarian sector."

**Alfred Kashweka,  
Sr. Procurement Expert Save the Children**



"To be recognized as a professional or to compete for jobs in Afghanistan or globally, you need to have a degree, and the MASHLM degree gives me the confidence to do so. You have to work on your capacity, you have to keep learning."

**Abdul Zia Noori,  
Deputy Director Operations Aga Khan Foundation, Afghanistan**



"I am conceptualizing the start-up of schools in rural areas and introducing humanitarian and logistics studies in universities. I would never have thought of all these if I did not pass through MASHLM."

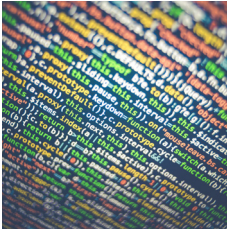
**Anne Ukwuague,  
Procurement Advisory Service Specialist UNOPS, Denmark**  
Anne's work was featured in UNICEF's Nepal Earthquake: Six Months Review.

---

## Thesis Topics From Recent Years

---

**Participants in Swiss Master of Advanced Studies in Humanitarian Logistics and Management Program MASHLM are active professionals working with logistics, operations, and management in the humanitarian sector and they often implement the results of their theses in their place of work. This is a selection of thesis topics.**



### **Data Mining Twitter Feeds to Predict Violence During the Elections in the Congo**

Social media analysis can shed light on a population's sentiments about any political event to anticipate conflict and prioritize protection of the general public.

**Author: Aida Kouidrat (2019)**



### **How Drone Technology Could Revolutionize the Future of Humanitarian Medical Assistance in Tanzania**

This study investigates the feasibility of using drones as an alternative distribution method, complementing the traditional humanitarian medical supply chain.

**Author: Magdolna Suba Pierre (2018)**



### **Online fundraising in Switzerland**

Why are small Swiss social and humanitarian organizations not penetrating the online market in spite of the steady increase in online activity?

**Author: Kabil Nageswarakurukkal (2017)**

---

## Thesis Topics From Recent Years

---



### **Fixing cash distribution to Refugees in Yemen**

Internally displaced refugees in Yemen suffer from hunger and do not have clean water. They rely on cash payments from the United Nations yet are often left waiting. This paper explores ways to reduce waiting periods and suffering.

**Author: Deo Kaziarua Nemes (2017)**



### **Driven out by Drought in Somalia**

More than half of Somalians risk starvation caused by repeated droughts.

To prevent them, the government could examine land use reforms and livestock production patterns and implement regional and national collaborations

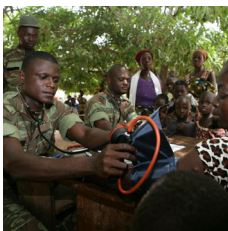
**Author: Mohamed Ahmed Abdi (2017)**



### **Contributing Factors to the Ebola Epidemic in Liberia**

Inadequate reporting procedures and lack of staff training made an effective and rapid response to the Ebola crisis a challenge. Recommendations for collaboration and planning are proposed.

**Author: Pray Gwatinyanya (2017)**



### **Coordinating Military and Humanitarian Action**

How to find a balance between the preservation the humanitarian space and the need for engaging with the military in increasingly complex crises.

**Author: Gianluca Maspoli (2016)**