

Master of Science in

APPLIED ARTIFICIAL INTELLIGENCE

Faculty of Sciences and Technology

Program information

Credits: 90 ETCS

Subjects: 12 courses and 1 capstone

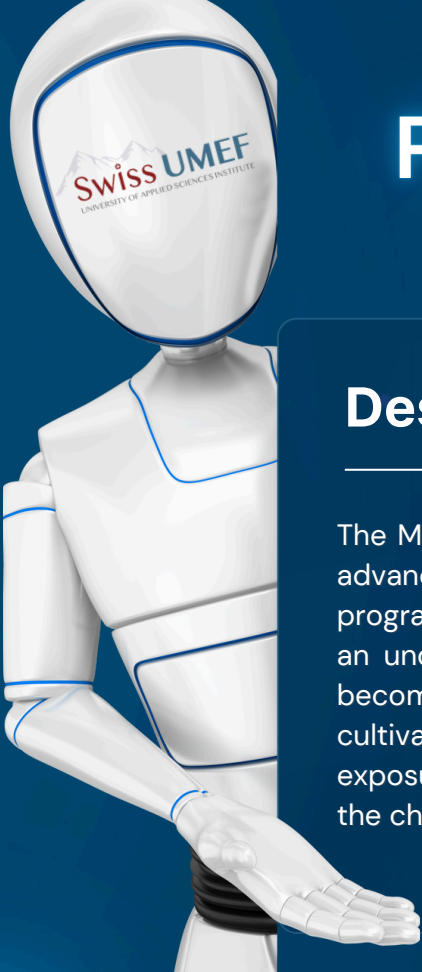
Teaching method: Lessons online via Zoom, seminars, discussions and present

Lecture: Swiss UMEF – International lecture

Language: English



MSc - Swiss UMEF



PROGRAM INFORMATION

Master of Science in Applied Artificial Intelligence (MSc)

Description



The Master's programme in Artificial Intelligence aims to provide students with advanced knowledge of AI concepts, including machine and deep learning. The programme develops the ability to effectively manage AI projects while instilling an understanding of the ethical and societal implications of AI. Students will become familiar with global AI policies and regulatory frameworks, while cultivating entrepreneurial skills. Finally, the programme offers practical exposure through a final project or internship, allowing students to understand the challenges and implementation strategies of AI in different domains.



Objectives



Acquire advanced expertise in artificial intelligence, including machine learning, deep learning, and reinforcement learning techniques.



Develop skills in managing AI projects using agile methodologies such as Scrum for optimal efficiency.



Master Big Data and Cloud technologies, essential for successfully integrating AI solutions into various contexts.



Deepen understanding of the ethical and societal implications of AI, focusing on a responsible and ethical approach in the design and use of AI systems.



Familiarise with international AI policies and regulatory frameworks to adeptly navigate the legal aspects of implementation.



Develop change management skills specifically tailored to the successful implementation of AI in various industrial sectors.

LEARNING OUTCOMES

- ✓ Demonstrate the ability to effectively plan, execute, and control AI projects in complex environments.
- ✓ Exhibit competence in interpreting and using data to develop relevant AI models and solutions.
- ✓ Demonstrate the capacity to identify, evaluate, and resolve ethical dilemmas related to the design and use of AI systems.
- ✓ Communicate clearly and effectively with diverse stakeholders on technical and ethical AI topics.
- ✓ Critically evaluate different AI approaches and solutions to make informed decisions.
- ✓ Adapt quickly to technological advancements and changes in the AI field.



CAREER OPPORTUNITIES



AI Analyst

Chief AI Officer



AI Project Manager

AI Ethicist

Data Governance Expert

AI Strategy Consultant



LENGTH OF STUDIES

The total duration of studies is of a minimum of three semesters and a maximum of five semesters, the latter with the approval of management.

 **720 hours**



First year
600 hours

Second year
120 hours



Grading and credit system

The final grades per subject include not only those of the final examination, but also take into account attendance and answers to the questions of the professor (exercises, essays and other possible assignments).

The final grade is computed as follows:

- 10% for participation (attendance, exercises, practical sessions, etc.).
- 40% for the semester examination.
- 50% for the final examination.

	ECTS Scale	SWISS UMEF Grading System
A	EXCELLENT	6.0, 5.75, 5.5, 5.25
B	VERY GOOD	5.0, 4.75
C	GOOD	4.50
D	SATISFACTORY	4.25
E	PASS	4.00
F	FAIL	< 4.00

4 SEMESTERS | 90 CREDITS

First semester (30 credits)

Code	Title	ETCS Credits	Periods of Courses
MIA 400	Machine Learning and Deep Learning	6	60
MIA 401	Advanced Project Management in AI	6	60
MIA 402	Data Management & Governance	6	60
MIA 403	AI in Business Decision Making	6	60
MIA 404	Advanced study of ethical considerations	6	60

Second semester (30 credits)

Code	Title	ETCS Credits	Periods of Courses
MIA 405	Reinforcement Learning and AI Optimization	6	60
MIA 406	Global AI policies and regulatory frameworks	6	60
MIA 407	Change management strategies for AI transition	6	60
MIA 408	AI Innovation and Entrepreneurship	6	60
MIA 409	Economic Forecasting and AI-Driven Market Dynamics	6	60

Third and Fourth (30 credits)

Code	Title	ETCS Credits	Periods of Courses
MIA 500	Financial Intelligence and Algorithmic Trading	6	60
MIA 503	AI-Driven Marketing Strategies & Communication Systems	6	60
CAP 501	Capstone Project	18	60



Tuesday – Thursday | 20:00 - 23:00 Vietnam Time



8 Lesson per course (Total 24h)

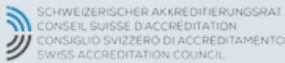


Language: English

ACCREDITATIONS RECOGNITIONS

SWISS UMEF was founded in 1984, in accordance with Swiss Law, as a higher private education institution in Geneva and is institutionally accredited by the Swiss Accreditation Council, in accordance with the Higher Education Act (HEdA).

SWISS UMEF is proud to have been the first private federally accredited institution as a University of Applied Sciences Institute in the Canton of Geneva.



Institution accredited pursuant
to HEdA for 2022 - 2029

Swiss Accreditation Council

The Swiss Accreditation Council has granted accreditation to SWISS UMEF as a University of Applied Sciences institute. SWISS UMEF proudly stands as the first private higher education institution in Geneva to achieve institutional accreditation from Switzerland's highest federal accreditation authority.



Accreditation Council for Business Schools and Programs

The Accreditation Council for Business Schools and Programs (ACBSP) has awarded Swiss UMEF University of Applied Sciences Institute in Geneva, Switzerland accreditation of its business programs. [ici](#).



CHEA – Council for Higher Education Accreditation

ACBSP and IACBE are recognised by CHEA, which is one of the world's largest institutional organisations for higher education accreditation in the USA.



EduQua

In addition to being accredited by ACBSP and IACBE, SWISS UMEF is certified by eduQua, the Swiss System of Quality and Management organisation.





IDEAS – SUPPORT



Workshop online: these sessions provide students with opportunities to engage in professional sharing from local experts. Students will have access to practical and applicable knowledge that is relevant in real time, and opportunities to share personal knowledge among peers.



Support time: Sunday | Week 2 & Week 4



Language: Vietnamese



LMS parallel add-on system : Learning Management System from IDEAS Institute, students can get access Zoom recordings, Reference documents, Q&A support forums



AI-Chatbox : Support to answer questions about the subject at all times



IDEAS's Assistant : Support reminders of class schedules, assignment deadlines, ect



SCHEDULE PROPOSAL



Foudation Subject (Support by IDEAS)	Date & Time (Sunday)
Economics for Decision Maker (8:30 – 12:00)	01/12/2024
	08/12/2024
	15/12/2024
Strategic Management, Competitiveness & Globalizarion (8:30 – 12:00)	05/01/2024
	12/01/2024
	19/01/2024

Code	Course Name	Start	End
MIA 400	Machine Learning and Deep Learning	25/02/25	20/03/25
MIA 401	Advanced Project Management in AI	25/03/25	17/04/25
Break Term			
MIA 402	Data Management & Governance	13/05/25	05/06/25
MIA 403	AI in Business Decision Making	10/06/25	03/07/25
MIA 404	Advanced study of ethical considerations	08/07/25	31/07/25
MIA 405	Reinforcement Learning and AI Optimization	05/08/25	28/08/25
Break Term			
MIA 406	Global AI policies and regulatory frameworks	16/09/25	09/10/25
MIA 407	Change management strategies for AI transition	14/10/25	06/11/25
MIA 408	AI Innovation and Entrepreneurship	11/11/25	04/12/25
MIA 409	Economic Forecasting and AI-Driven Market Dynamics	09/12/25	15/01/26
MIA 500	Financial Intelligence and Algorithmic Trading	20/01/26	12/02/26
Tet Holiday			
MIA 403	AI-Driven Marketing Strategies and Communication Systems	03/03/26	26/03/26
CAP 501	Capstone Project	02/26	09/26

UMEF CLASS	IDEAS SUPPORT
Tuesday – Thursday 20:00 - 23:00 Vietnam Time Language: English	Sunday Week 2 & Week 4 Language: Vietnamese



ENTRY REQUIREMENT

1. Application form
2. Copies of the official certificate, A Bachelor's degree or equivalent, from an approved University
3. Copies of transcripts
4. Copy of identity card or passport
5. Curriculum vitae (CV)
6. Passport photo
7. Motivation letter
8. English section: IELTS 6.0 / TOEFL 70/ Cambridge exam (official English exam results) or proof of studying previously in an English for a minimum of 3 years.





TUITION FEE

Tuition Fee	CHF	1st Installment	2nd Installment
Tuition Fee – UMEF	11,400	5,700	5,700
Admission Fee TSSAC	500	500	
TOTAL	11,900	6,100	5700

- The Graduation Ceremony participation fee is not covered.
- Tuition is payable in two installments, with a five-month interval.
- Tuition includes a 03 days trip to Switzerland (including round-trip airfare, meals, accommodation and local transport).



PARTNER IN VIETNAM

Academic partner and admission consultant of Swiss UMEF



INSTITUTE DEVELOPMENT AND EXCHANGE FOR APPLIED SCIENCE ACADEMIC PARTNER IN VIETNAM OF UMEF

Address: 224 Dien Bien Phu, Vo Thi Sau Ward, District 3, Ho Chi Minh City

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