zh aw **School of Management and Law**

Artificial Intelligence and Data Analysis

Certificate of Advanced Studies (CAS)

Building Competence. Crossing Borders.

In cooperation with

UCDAVIS
GRADUATE SCHOOL
OF MANAGEMENT

Program

Your future. Now.

Boost your career and learn the knowledge of tomorrow in a truly international setting.

SHORT DESCRIPTION

The CAS in Artificial Intelligence and Data Analysis is a truly international executive certificate jointly developed by the ZHAW School of Management and Law in Switzerland and the University of California Davis Graduate School of Management in the United States.

Our mission is to provide managers and executives with what they need to compete and thrive in a fast-paced world revolutionized by data and artificial intelligence.

TARGET AUDIENCE

The program is designed for executives and managers working in data-intensive sectors such as finance, insurance, healthcare, marketing, and customer analytics, as well as in industries affected by the data revolution and the Internet of Things.

The CAS in Artificial Intelligence and Data Analysis will provide them with and strengthen the necessary knowledge to lead data-intensive projects, communicate effectively with data scientists, and seize opportunities arising from the ongoing and accelerating technological revolution.

GOALS AND OBJECTIVES

By completing the program, participants will:
- Acquire the necessary knowledge and develop a clear understanding of the most relevant issues in data competence, data design, and data representation
- Gain the ability to drive insights from different types of data, using a large variety of tools, from linear models to artificial neural networks, while also understanding the rationale behind the use of the different approaches
- Learn the vocabulary and gain insights to be at ease with the latest and future trends in machine learning (e.g., large language models and generative adversarial networks)
- Learn how to improve forecasting in a broad range of application fields

Structure and Content

The perfect combination of theory and practice

From machine learning to business analytics and forecasting, combining theory, practice, and case studies, to help you make the next step.

MODULE OVERVIEW

MODULE 1 (online): 3 ECTS credits	MODULE 2 (ZHAW Campus, Switzerland): 3 ECTS credits
Data Competence for Leaders	**Data Design and Models**
– Types of data – Introduction to supervised and unsupervised machine learning, linear models – Analytical decision-making – A/B experiments	– Classification – Model selection – Neural networks – Data management
MODULE 3 (online): 3 ECTS credits	MODULE 4 (UC Davis Campus, USA): 3 ECTS credits
Driving Insights and Impact	**From Insights to Prediction**
– Causal inference – Business analytics – Forecasting	– Computer vision – Natural language processing – Specialized Applications

MODULE STRUCTURE

The CAS in Artificial Intelligence and Data Analysis has a modular structure with four modules. Two of them are taught online, and two on-site.

Each module has been jointly developed and is taught by faculty members of the ZHAW School of Management and Law and the University of California Davis Graduate School of Management, all of whom are experts in their respective fields.

TEACHING METHODOLOGY

The program relies on a combination of teaching tools and approaches: online asynchronous video lessons, live lessons in an international setting (in California and Switzerland), Q&A sessions, group activities, analysis of case studies, simulations, and study trips.

During the two live weeks, social activities will enrich the course experience, enabling participants to enhance their networks and create a team spirit.

Organizational Matters

Your path to success

Visit us online for further information.

REGISTRATION
For all inquiries and admission requirements and to apply, please visit the program website:
>>> www.zhaw.ch/iwi/casaida/en

REGISTRATION DEADLINE
Start of program.

PROGRAM DATES
The new edition will start in February 2025. For the actual dates of the modules and all updates, please check the official website: >>> www.zhaw.ch/iwi/casaida/en

REQUIREMENTS
The CAS in Artificial Intelligence and Data Analysis is worth a total of 12 ECTS (European Credit Transfer System) credits. For each credit, a workload of 25–30 hours, including classes, joint activities, and self-study, is to be expected. For the entire program, this corresponds to an overall investment of about 300–360 hours.

ASSESSMENT
At the end of each module (online or on-site), there will be performance assessment activities in the form of online tests, written exams, group assignments, and presentations.

LOCATIONS
Besides the online modules, the two live weeks will take place in Winterthur and Davis, respectively. All the logistic details will be provided in due course.

DURATION
The overall program takes five months to complete. Full-time attendance is required only for the live weeks in Winterthur and Davis.

LANGUAGE OF INSTRUCTION
Given the international setting, all course activities and materials are in English.

CERTIFICATE
After the successful completion of the program, the ZHAW School of Management and Law will award the "Certificate of Advanced Studies in Artificial Intelligence and Data Analysis." A second certificate will be jointly issued with the UC Davis Graduate School of Management and will show the logos of both universities.

FEES
CHF 14,800, which includes all course and teaching materials, access to the live weeks and the online modules, as well as all social activities.

Travel and accommodation expenses are not included, but special rates will be arranged with selected hotels.

Contacts

Any questions? We are here to help you!

Prof. Pasquale Cirillo
Data Science, ZHAW School of
Management and Law

Prof. Ashwin Aravindakshan
Business Analytics, University of
California Davis

HEAD OF STUDIES (SWITZERLAND)
Prof. Pasquale Cirillo
ZHAW Institute of Business Information Technology
Phone +41 58 934 44 36
pasquale.cirillo@zhaw.ch

HEAD OF STUDIES (USA)
Prof. Ashwin Aravindakshan
Graduate School of Management, UC Davis
Phone +1 530 752 5767
aaravind@ucdavis.edu

PROGRAM MANAGER
Michael Hönig
ZHAW Institute of Business Information Technology
Phone +41 58 934 44 61
michael.hoenig@zhaw.ch

The Two Universities

ZHAW SCHOOL OF MANAGEMENT AND LAW
The ZHAW School of Management and Law (SML) is an EQUIS and AACSB-accredited business school in Switzerland on the rise, featuring in prestigious international rankings (e.g., #78 in the Financial Times worldwide).
≫ Executive Education Open 2024
It is committed to addressing the social and economic challenges of today's world. Its main principle, "Building Competence. Crossing Borders.", underpins the high quality of its educational programs and research, reflecting its global mindset.
≫ www.zhaw.ch/en/sml/

UC DAVIS GRADUATE SCHOOL OF MANAGEMENT
The UC Davis Graduate School of Management is focused on preparing the next generation of inspired, innovative, and collaborative leaders who are committed to making a positive impact. Its vision as a business school on the rise is to spur new business and job creation, prepare innovative management leaders, and accelerate investment and innovation through strong partnerships with industry. Every day, the UC Davis Graduate School of Management community of faculty, students, alumni, and staff is making an impact at Fortune 500 firms, mid-sized companies, and promising startups by helping to put new ideas into action. ≫ https://gsm.ucdavis.edu

School of
Management and Law