



MUNICH **MISU**^{LMU}
INTERNATIONAL SUMMER
UNIVERSITY

Machine Learning and Data Analytics in Finance and Accounting (MDA)

Munich, Germany
July 28 – August 14, 2025
www.mda-misu.de



Online-Sessions July 28 – August 1
In-class Sessions August 4 – 14

Tentative Schedule



Munich 2025

Sessions: July 28 – August 14



Patronage

Prof. Dr. Thorsten Sellhorn

Institute for Accounting, Auditing and Analysis
Munich School of Management



Lecturer

Dr. Andreas Woltschläger

Professional expert and former Research Assistant
Institute for Accounting, Auditing and Analysis
at the Munich School of Management at LMU Munich



Dr. Gereon Hillert

Professional expert and former Research Assistant
Institute for Accounting, Auditing and Analysis
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Live seminar sessions

As live online tool for the courses, we will use "Zoom":

<https://lmu-munich.zoom.us/>

It is not mandatory to create a LMU Zoom account. You will receive an invitation by email before the first session for participation in class and the Zoom Client is usable in your browser.

Classroom in Munich

tba

Program

All times are stated in the CEST standard time format

Date	9:00 a.m. - 1:30 p.m.	2:00 p.m. – 6:30 p.m.
Mon, 28.07.2025 ONLINE	Introduction <ul style="list-style-type: none">• Introduction to machine learning and its application in finance and accounting Readings <ul style="list-style-type: none">• MG* - Chapter 1 (p. 1 – 4)	
Tue, 29.07.2025 ONLINE	Introduction to Python (1/3) <ul style="list-style-type: none">• Getting ready• Python Basics for Data Science• Case – Part 1 Readings <ul style="list-style-type: none">• MG* - Chapter 1 (p. 5 – 11)	
Wed, 30.07.2025 ONLINE		
Thu, 31.07.2025 ONLINE	Introduction to Python (2/3) <ul style="list-style-type: none">• Importing, cleaning and merging data• Case – Part 2	Team event <ul style="list-style-type: none">• Bavarian and international culture
Fri, 01.08.2025 ONLINE		
Sat, 02.08.2025 ONLINE	Introduction to Python (3/3) <ul style="list-style-type: none">• Natural language processing• Textual Analysis• Case – Part 3 Readings <ul style="list-style-type: none">• MG* - Chapter 7	
Sun, 03.08.2025	Arrival in Munich	

Date	9:00 a.m. - 1:30 p.m.	2:00 p.m. – 6:30 p.m.
Mon, 04.08.2025 IN-CLASS	Machine Learning <ul style="list-style-type: none"> Unsupervised machine learning Case - Part 4 Readings <ul style="list-style-type: none"> MG* - Chapter 2 (p. 25– 27) 	3:00 p.m. City Tour by bus
Tue, 05.08.2025 IN-CLASS		
Wed, 06.08.2025 IN-CLASS	Machine Learning <ul style="list-style-type: none"> Supervised machine learning I – Basics Readings <ul style="list-style-type: none"> MG* - Chapter 2 (p. 25– 27) 	Machine Learning <ul style="list-style-type: none"> Supervised machine learning II (GH) - Application Case - Part 5 Wrap-up & Q&A Readings <ul style="list-style-type: none"> MG* - Chapter 3 (p. 131-134)
Thu, 07.08.2025 IN-CLASS		
Fri, 08.08.2025 IN-CLASS	Machine Learning <ul style="list-style-type: none"> Supervised machine learning II - Model evaluation Case - Part 6 	Data Analytics I & II <ul style="list-style-type: none"> Data Visualization Data description Statistical analysis Case - Part 7 Selected topics in data analytics Summary of overall content Team event <ul style="list-style-type: none"> Bavarian culture
Sat, 09.08.2025 IN-CLASS	No class <ul style="list-style-type: none"> Time to prepare student presentations 	No class <ul style="list-style-type: none"> Time to prepare student presentations
Sun, 10.08.2025	8:00 a.m. Day Trip Castle Neuschwanstein	

Date	9:00 a.m. - 1:30 p.m.	2:00 p.m. – 6:30 p.m.
Mon, 11.08.2025 IN-CLASS		Presentations & Wrap-up 2 <ul style="list-style-type: none"> • Presentations on supervised and unsupervised machine learning (e.g., prediction of house price)
Tue, 12.08.2025 IN-CLASS	No class <ul style="list-style-type: none"> • Time to prepare exam 	No class <ul style="list-style-type: none"> • Time to prepare exam
Wed, 13.08.2025 IN-CLASS	No class <ul style="list-style-type: none"> • Time to prepare exam 	No class <ul style="list-style-type: none"> • Time to prepare exam
Thu, 14.08.2025 IN-CLASS	Exam: 12:00 – 13:00 Farewell Event	
Fri, 15.08.2025	Departure from Munich	

Note that the agenda is preliminary and may be subject to change.

References:

*** Andreas C. Müller, Sarah Guido: Introduction to Machine Learning with Python: A Guide for Data Scientists, 1st Edition - MG (Main Textbook)**

Bird, Steven; Klein, Ewan; Loper, Edward: Natural Language Processing with Python, First edition, 2009

Géron, Aurélien: Hands-On Machine Learning with Scikit-Learn and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems 1st Edition