



LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

MUNICH INTERNATIONAL
SUMMER UNIVERSITY



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

Big Data Analytics and Business Intelligence

July 22 - August 9, 2024

www.ebi-misu.de

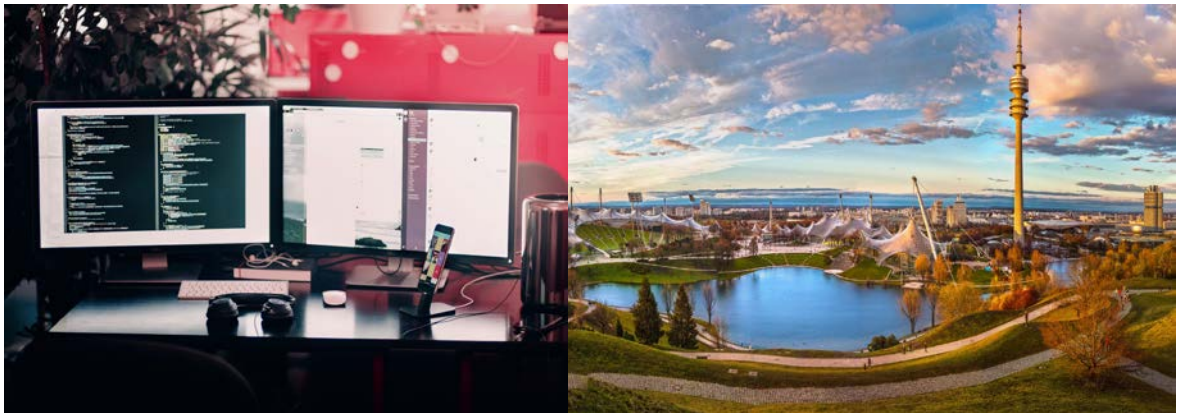


Objectives

The course “Big Data Analytics and Business Intelligence” takes place one week online and two weeks in-class in Munich

- **Online: July 22 – July 27**
- **In-class in Munich: July 29– August 9**

The Munich School of Management at LMU - one of the leading universities for Business Administration and Business Intelligence in Europe - offers a unique summer program for students from around the world. The course “Big Data Analytics and Business Intelligence” takes place in the heart of Munich.



Are you looking to generate and capture greater competitiveness in a data-driven business environment? Big Data Analytics and Business Intelligence refer to a variety of methods and techniques for the analysis of large amounts of business data such as

- (pre-) processing and extracting information from large datasets,
- modeling underlying patterns by means of powerful data models, as well as
- reporting and visualization of corporate information.

From the perspectives of a business analyst, we will apply these data analytics methods to key business topics such as sales analysis, product portfolio analysis, derivation of key cost drivers as well as profitability analysis. Using Microsoft Power BI you will learn to describe, model and explore data and creating dashboards to improve economic decision-making in the today's corporate environment.



The objectives of the course are:

- In this course, you will learn conceptual foundations of Big Data Analytics and Business Intelligence as well as the practical application using Microsoft PowerBI
- To apply Big Data Analytics and Business Intelligence concepts to business topics such as product market analysis, sustainable earnings, cost of capital and investment analysis .
- To develop data models using PowerBI in order to derive key insights in the company's processes. Powerful visualization tools and scenario analysis allow a better understanding of key performance drivers of the underlying business model. These insights are of particular interest for key stakeholders such as managers, analysts and investors.



Content

We put special emphasis on the use of modern business intelligence tools to tackle a wide variety of real-world business problems focusing on corporate decision-making, and big data modelling. Hence, you will learn to consume, analyze and model corporate data based on state-of-the-art data analytics tools. Adopting a user perspective, you will learn how to create data models to inform different corporate decisions building on large amounts of data.

The course contains the following building blocks:

1. Introduction

2. Introduction to PowerBI

- PowerBI Basics for Data Analytics
- Importing and cleaning data
- Visualizing data

3. Big Data Analytics

- Big Data in a corporate environment
- Handling large data sets
- Application in Power BI

4. Business Intelligence

- Business intelligence process
- Data-driven company analysis
- Data modelling, exploration and dashboards in the business process

5. Broadening the perspective

- Advanced Analytics and Methods
- Overview machine learning algorithms

Please see the schedule in detail on our website.



Academic Host

Institute for Accounting, Auditing and Analysis at the Munich School of Management at Ludwig-Maximilians-Universität München



Patronage

Prof. Dr. Thorsten Sellhorn

Lecturer



Dr. Gereon Hillert

Gereon is a Manager in EY's Valuation, Modelling and Economics practice based in Munich, Germany. Further he is lecturer in the summer schools financial statement analysis and valuation and machine learning and data analytics.

- He studied business administration with majors in Accounting and Finance at Saint Mary's University Halifax, Canada, Goethe University Frankfurt, Universidad Viña del Mar, Chile and University of Bayreuth.
- Gereon is a Manager in EY's Valuation, Modelling and Economics (VME) practice based in Munich, Germany.
- Further, he got practical experience at PwC AG, KPMG and Deutsche Bank AG in the areas of capital markets, M&A, financial due diligence and financial accounting.
- His current research interests include corporate learning and operating leverage decisions as well as disclosure policy choice and topic modelling using machine learning methods.



Dr. Andreas Woltschläger

Andreas is an Manager in PwC's valuation team based in Hamburg, Germany. Further he is lecturer in the summer schools financial statement analysis and valuation and machine learning and data analytics.

- He studied economics and business administration with majors in Accounting and Finance at the University Paderborn, University of Bayreuth, Ludwig-Maximilians-Universität and University of Lancaster.
- Andreas is an Assistant Manager in KPMG Deal Advisory, Valuation team based in Hamburg, Germany.
- He got practical experience at Commerzbank AG, EY and Wincor Nixdorf AG in the areas of equity research, M&A, financial due diligence, valuation and group accounting.
- His current research interests include financial statement analysis, forecasting using machine learning techniques, business intelligence, corporate learning and valuation.

Course Requirements

General course requirements

The Academic Board of the LMU Munich defines the requirements and contact hours* for successful completion of the courses as follows:

- regular attendance (6 lessons max. absence)
- preparation for and active participation in seminars
- attendance and contribution to lectures
- participation in and contribution to class excursions
- self-study and homework assignments
- written assignments
- Presentations

Course structure

The course takes place in the heart of Munich. Following a one week online preparation students participate on an intensive in-class program complemented by inspiring social and cultural activities.

- Online: July 22 – July 27
- In-class in Munich: July 29 – August 9

Textbooks – This course draws on:

Sabherwal, Becerra-Fernandez, Business Intelligence: Practices, Technologies, and Management. Wiley, 2013.

Imasri/Navathe: Fundamentals of Database Systems, Pearson, 2017

Berk Demarzo, Corporate Finance, Pearson 2019

Student Profile

Target group

We offer this program for Bachelor and Master students from all faculties and young professionals with an interest in big data analytics, corporate analysis and business intelligence.

Prerequisites for participation are a good command of written and spoken English. Lectures, presentations and examinations will be held in English. Even though we do not require students to submit language test results, we urge students with poor language skills to abstain from applying. Knowledge of German is not a prerequisite.

Achievements

Former participants of the MISU Finance, Accounting and Economics programs have evaluated this program very positively and recounted their experience as follows:

- “The course was an engaging way to understand technical concepts used in the industry I’m interested in and I’m thankful for my wonderful lecturers. It was a pleasure meeting my fellow course mates who hailed from all parts of the world and I enjoyed studying with them and learning from them throughout the program. Spending nearly a month in Munich was a fantastic experience as a whole and I’m glad I received the opportunity to experience German culture. I look forward to my next trip!”
- “I'd just like to further touch base after the course and let you know how grateful I am for the quality of the course which you put together. It was greatly satisfying to learn about how finance is being applied in the real world, as well as pick up key skills in Financial Statement analysis which will no doubt prove useful whilst working as a consultant.”
- “The course itself was very nice organized and executed. Gereon and Andreas were extremely knowledgeable on the subject matter. They very approachable for expert consultation”
- “Many thanks to our amazing teachers Dr. Gereon Hillert and Dr. Andreas Woltschläger!”

Credits

Contact Hours*: 60 contact/class hours* worth up to 6 ECTS credits

- One contact/class hour comprises 45 minutes.

Credit Transfer

Most international colleges and universities accept credits from the MISU^{LMU}. However, each institution has its own policy regarding credit acceptance from other institutions. We strongly recommend that students consult their academic adviser and/or professor to receive credit transfer approval before applying to the MISU Summer Academy. Students who would like to transfer credits to their home universities should print out all documents contact the professor or study abroad adviser and ask for credit and grade approval.

European Credit Transfer system (ECTS) and ECTS Credits

The ECTS was developed in order to provide common procedures that may guarantee academic recognition for studies abroad. ECTS credits are based on the workload students need in order to achieve expected learning outcomes. The ECTS (European Credit Transfer and Accumulation System) is a standard for comparing the academic level and performance of students in Higher Education across the European Union.

Students will be awarded 1 ECTS credit for 30 hours of work, including attending classes, self-study, examinations and essays. The following chart provides grading information:

LMU Grade	Description	Grade ECTS	US	US	Percentage
1.0	excellent	A	A+	4,0	100 – 97
1.0	very good	A	A	3,9	96 – 93
1,3	very good	A	A-	3,7	92 – 90
1.7	good	B	B+	3,5	89 – 87
2.0		B	B	3,3	86 – 83
2.3		B	B-	3,0	82 – 80
2.7	satisfactory	C	C+	2,7	79 – 77
3.0		C	C	2,3	76 – 73
3.3		D	C-	2,0	72 – 70
3.7	sufficient	E	D+	1,3	69 – 67
4.0		E	D	1,0	66 – 60
> 4.0	insufficient	F	E	0,0	59 – 0
NG	not graded	F		0,0	0

Grading

Grading Scale

Grades are defined from the Academic Board of the LMU in Munich according to its general grading system. The LMU differentiates 6 levels (from 1 to 6), which cover everything from introductory course work to original research. This course is offered for students having successfully completed levels 2 and 3.

Level	Description
1	Introductory course with intensive supervision; no course prerequisites; generally first year courses
2	Introductory course, independent study techniques included; no specific course prerequisites; generally second year courses
3	For advanced students, course prerequisites: successful completion of level 1 or 2; examinations test the students' ability to apply knowledge and insights to new problems; generally third year courses
4	Specialized course, course prerequisites: successful completion of level 2 or 3; extensive use of scientific articles; examination may include a small research project, an oral report or written work. This is a third year Bachelor's or first year Master's level course
5	Scientifically oriented course; course prerequisites: successful completion of level 3 or 4; use of scientific advanced literature. This is a Master's level course
6	Very advanced scientific course; latest scientific developments included; examinations consist of a contribution to an unsolved problem with an oral presentation; Master's or PhD level course

Grading Procedure

There are three grading sections in this course:

- 60% = Written Exam
- 30% = Oral presentation, homework assignments
- 10% = Active participation in class and soft skills

Transcripts

Every student will receive an official transcript after the successful completion of all program requirements. The transcript will show the course name and contact hours, the number of acquired credits as well as the achieved grades.

Fees & Payment

The course takes place one week online and two weeks in-class in Munich.

- Online: July 22 – July 26
- In-class in Munich: July 29 – August 9

Early bird registration fee: € 150.00 (until March 1, 2024)

Regular registration fee: € 300.00 (until May 1, 2024)

Tuition: € 950.00

Housing fee:

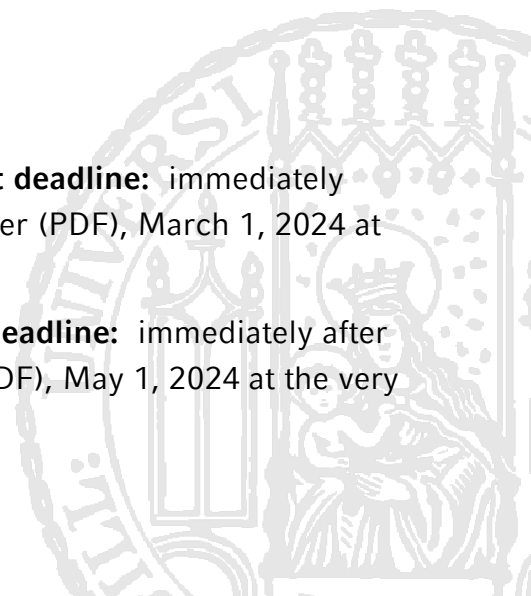
- € 310.00 (double room, with shower and toilet on each floor)
- € 370.00 (double room with shower and toilet)

The complete payment includes the following:

- academic program (60 contact hours in class, 6 ECTS credits)
- course reading materials
- excursions: City Tour Munich, Castle Neuschwanstein
- mensa and cafeteria access
- internet access at the room
- internet access at the university
- library access
- tutors and emergency contact

Deadlines for payment

- **Early bird registration fee and tuition payment deadline:** immediately after receiving the e-mail with the admission letter (PDF), March 1, 2024 at the very latest.
- **Regular registration fee and tuition payment deadline:** immediately after receiving the e-mail with the admission letter (PDF), May 1, 2024 at the very latest.



Cancellation*

Cancellation before the registration deadline:

- The registration fee will not be refunded.
All other deposits will be fully refunded.
- Cancellation after the registration deadline:
- The registration fee will not be refunded.
If accommodation was booked, the rent will not be refunded or have to be paid.

Cancellation 4 weeks before commencement of the course:

- The registration fee will not be refunded.
If accommodation was booked, the deposit for the rent will not be refunded and 50% of the tuition will not be refunded.

Cancellation 3 days before commencement of the course:

- The registration fee will not be refunded.
If accommodation was booked, the deposit for the rent will not be refunded and 80% of the tuition will not be refunded.
- Once the course has started, no refund will be granted.

Cancellation by MISU

- All tuition and fees will be refunded.

* All bank charges are excluded from repayment.



Accommodation

Arrival

- July 29, 2024 (Check-in 02:00 p.m. - 7:00 p.m.)

Departure

- August 10, 2024 (Check-out 11:00 am)

Student Residence

The participants will reside in a student residences in the heart of Munich. The student housing facility is located three subway stations away from the classroom.

For more information, please see our program website.

Board

During your stay, you will be responsible to provide your own meals. You should count on spending approximately 15,00 € per day on food. During the week lunch can be purchased at one of the university's canteens for 5,00 - 8,00 €.



Registration

The selection of participants will be done continuously. The registration takes place on the 'first come, first serve'- principle, given that the application meets the requirements of the program.

In the interest of maintaining the program's high standards, the number of participants will be limited to 25. The application is based on a first come first served basis. The number of students from one university is limited to 4 to ensure an international character of the program.

The online registration starts on the November 1, 2023.

https://www.ebi-misu.de/en/content/ebi_registration

Application materials for the EBI program:

- Curriculum vitae (CV): you may use the Euro Pass format if you do not have your own form: <http://europass.cedefop.europa.eu>
- Statement of motivation: Applicants should write a short statement of no more than one typed page in English as to why they wish to take part in the summer program.

Deadlines for the registration:

- **Early bird application deadline:** March 1, 2024
- **Regular application deadline:** May 1, 2024



Contact

Academic Contact

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Administration / Application Contact

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