SUMMER MODULE COURSE

Business intelligence and data science		
Responsible:	Target group	Number of participants
Prof. Dr. Frederic Thiesse Prof. Dr. Christoph Flath	Business students, information systems students	30
Course period:	Term:	ECTS:
July 21 – July 27, 2021	summer semester 2021	5

Contents & Objectives:

Organizations across the world are struggling to build the know-how to aggregate, analyze, and most importantly operationalize the growing surge of available data. Corporate and government entities point to a shortage of individuals that possess the combined business, analytics, IT, and communications skills required to be leaders in this field. This course presents methods for data acquisition, visual exploration, formal analytical modelling, and developing analytical techniques used in business. The emphasis is on applications in practice. Students will learn to use a leading BI tool (Qlik Sense) as well as basic programming principles with the data science language R. Exemplary data sets will cover topics such as esports, crypto currencies or healthcare challenges.

Prerequisites:

Some introductory statistics or programming could be beneficial.

Course Structure: Zoom Lectures plus Computer Assignments

(# day/ # lecture)	CONTENTS
1	Introduction to Business Intelligence
2	Applied Business Intelligence with Qlik Sense
3	Data wrangling and visualization with R
4	Web scraping and predictive modelling with R
5	Practice sessions

Literature:

Richardson, J., Cronstrom, H., Hand, P., Pagans, F.G., Ilacqua, C., Kharpate, N. *Qlik Sense: Advanced Data Visualization for Your Organization*. Packt Publishing, 2017.

Wickham, Hadley, and Garrett Grolemund. *R for data science: import, tidy, transform, visualize, and model data.* "O'Reilly Media, Inc.", 2016.

Assessment:

Team Assignment – analyze an unknown data set and provide a compelling report using Qlik Sense or R

Contact:

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Application:

- transcript of records (regarding your current degree programme)
- o certificate of secondary school
- o short CV
- o copy of passport
- application form (will be generated in the application process)

APPLY NOW:

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