

LEARNING OBJECTIVES

CONTENT & TOOLS

Tools

- Databases and SQL for information management tasks
- Python for programming and automating IM related tasks
- Using public/commercial APIs to enhance your solution

Concepts

- What is information? Why does it need to be managed?
- What is an information system? What are the typical components?
- Why should we, and how can we model information?
- What is a database? What types exist, and for what?
- What is an API, and how can use it to automate information related tasks?



Analytical thinking and problem-solving

- How to abstract away complexity:
 - Data modeling
 - Process modeling
- How to divide a large problem into many smaller ones?
 - Planning and building information systems
 - Writing programs
 - Building SQL queries
- Learn how to solve problems with computers!
 - Design algorithms to solve problems



ORGANIZATIONAL TOOLS

Zoom

■ For hybrid participation and our sessions on Friday (Zoom room for this module)

ILIAS

Central place for all material in a structured manner (goto ILIAS)

Microsoft Teams

Chat group for quick communication



SCHEDULE & EXAM

Sessions

■ Monday: 15:00 - 16:30 in HR 0004 (hybrid)

■ Friday: 11:30 - 13:00 online (Zoom)

Examination

- Oral examination after the end of lectures (if we are a few students only)
- 1 h written examination (if we are a larger group)

