



The Master's Programme in Software Engineering

The University of Innsbruck was founded in 1669 and is one of Austria's oldest universities. Today, with over 28.000 students and 5.000 staff, it is western Austria's largest institution of higher education and research. **For further information visit: www.uibk.ac.at.**

Institut für Informatik

25



Professors

136



Employees

1337



Students

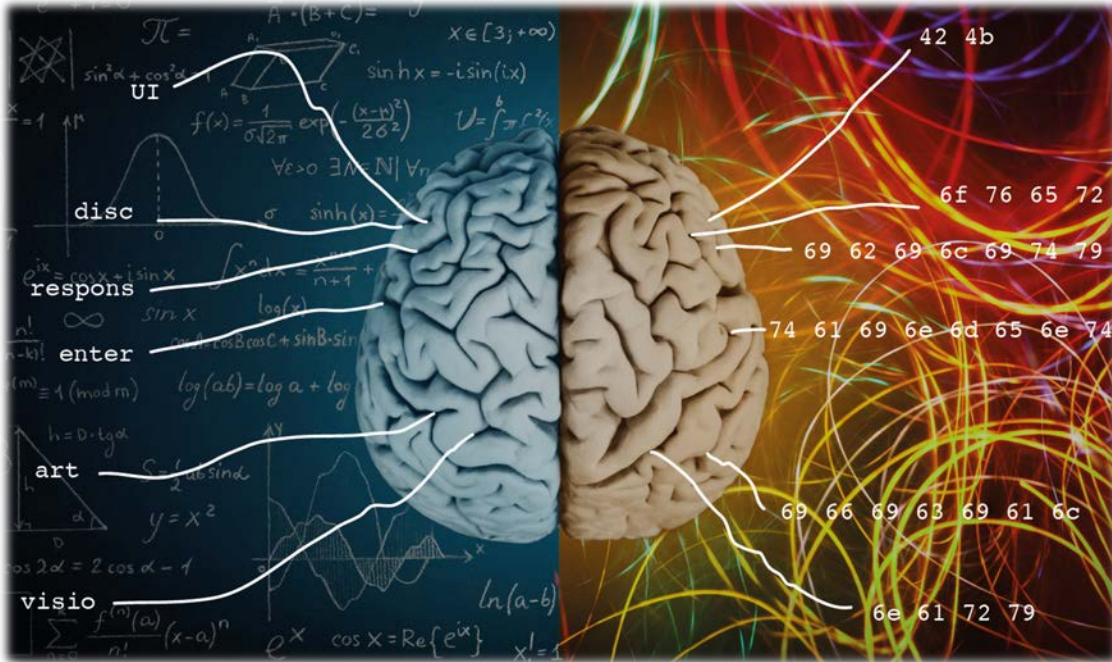
2.81 Mio.



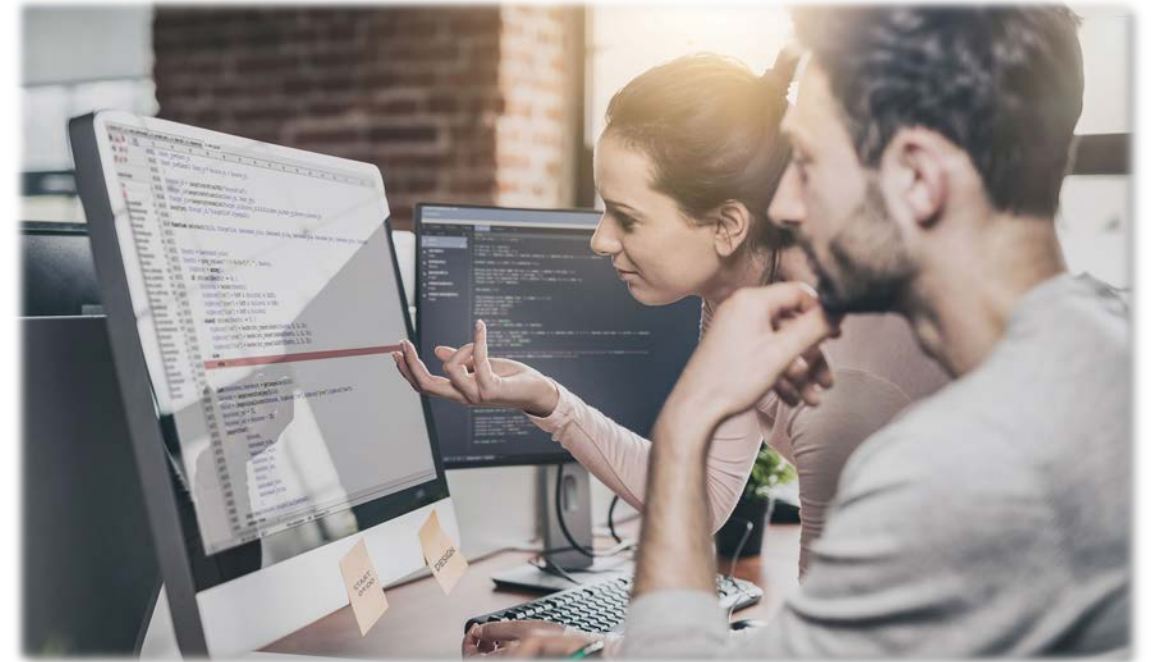
Third-party
funding/year

Options for Master-level Studies in Innsbruck

A Master's Program in Computer Science



A Master's Program in Software Engineering



Positioning of the Two Programs

Master Computer Science

- A modern curriculum covering a variety of specializations in computer science, with a focus on individual choice
- Taking into account feedback from students, a growing number of lecturers, and industry

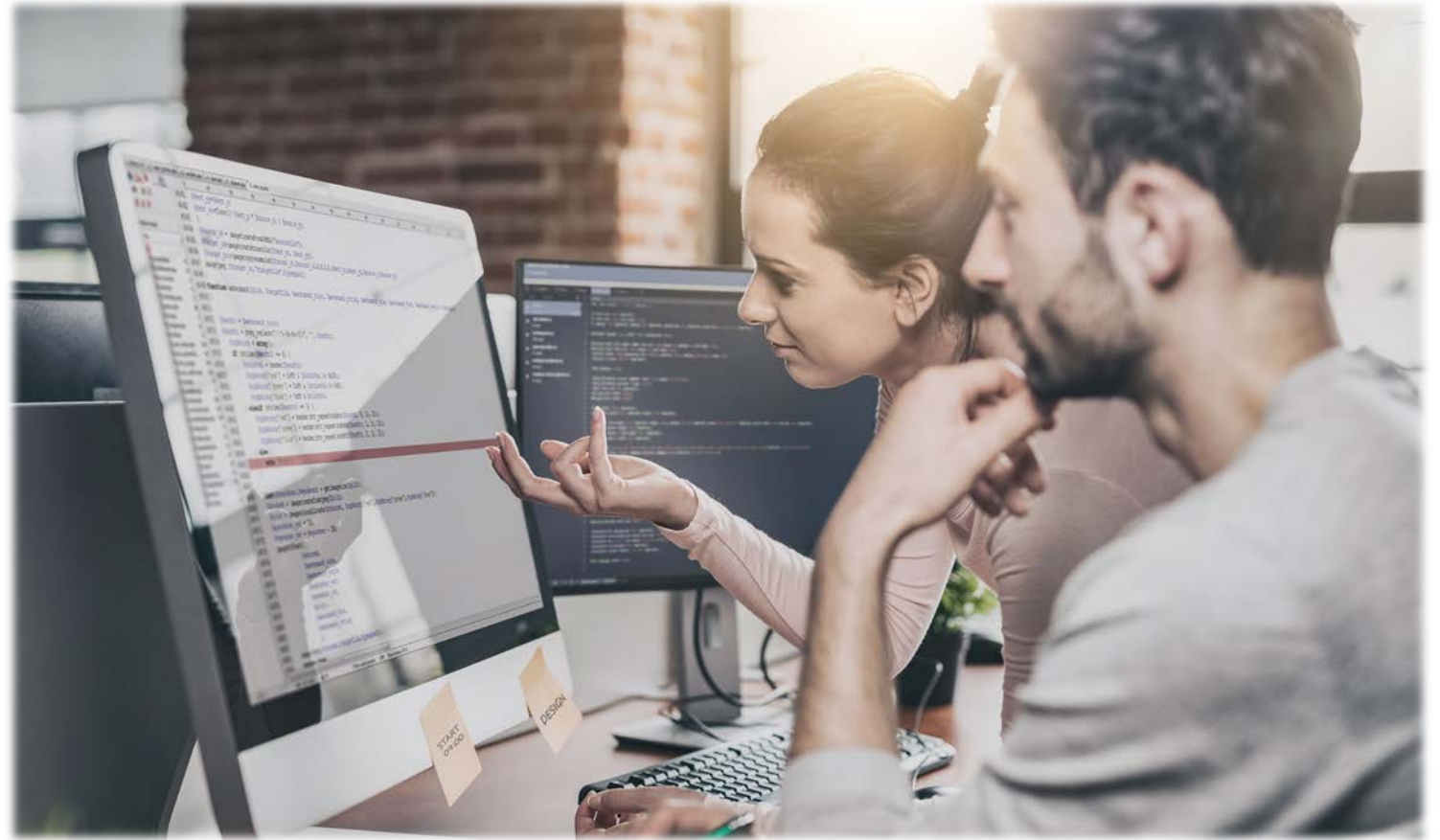
- ✓ research-oriented
- ✓ lots of choice

Master Software Engineering

- Attract a broad target group of young professionals seeking to improve their software engineering skills
- Offers a curated set of modules serving the needs of digital transformation

- ✓ broad appeal
- ✓ streamlined study program

The Master Program Software Engineering



Admission Profile



Sarah, 24

Bachelor Biology with Supplementary Program Computer Science at the University of Innsbruck

Wants to analyze data and develop software to make rural areas greener and smarter

Admission Profile



Sven, 30

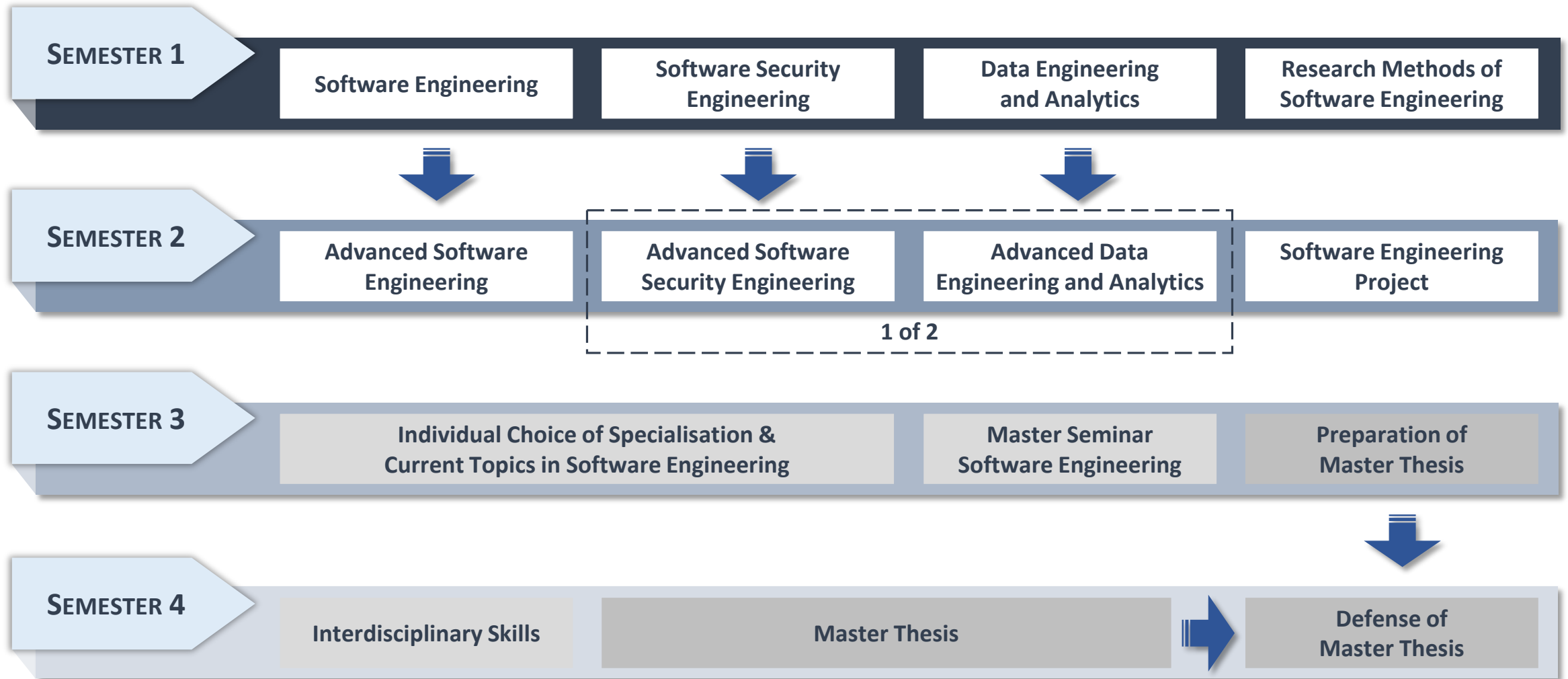
Bachelor Computer Science

TU Hamburg

Seven years full-time working experience in two IT companies

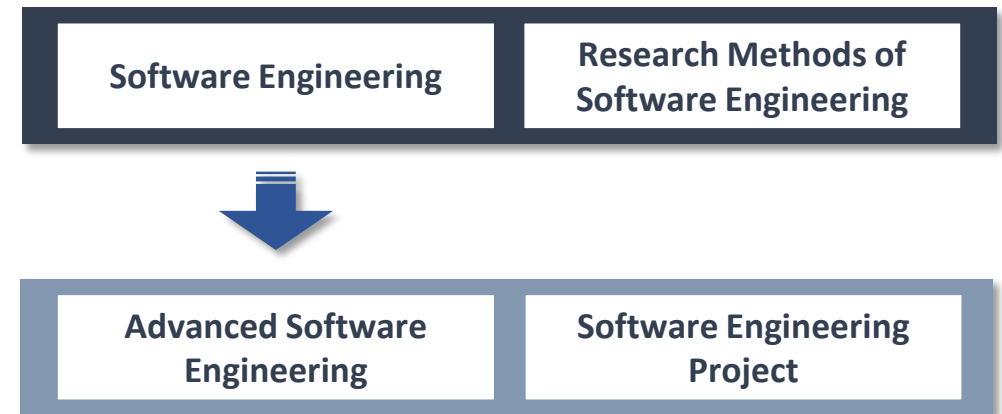
Wants to deepen his knowledge on software engineering to advance his career and live in the Alps

Curriculum Master Software Engineering



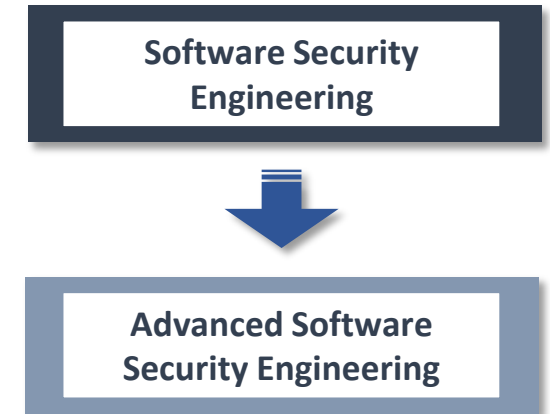
Software Engineering

- Software architectures and technology stacks
- Advanced programming concepts
- Agile and continuous software engineering
- Usability engineering and interaction design
- Requirements engineering
- Software quality assurance methods
- Conducting and evaluating projects



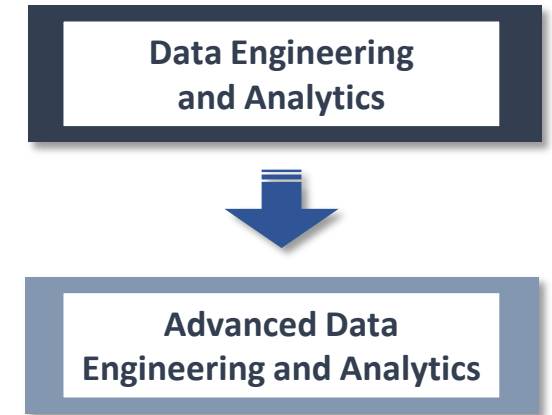
Specialization: Software Security Engineering

- Basic concepts of information security and privacy
- Design and development of secure software systems
- Maintenance of secure software systems
- Secure coding techniques



Specialization: Data Engineering and Analytics

- Data processing and visualization
- Selected data analytics and machine learning techniques
- Engineering data products
- Advanced database concepts



Recommended Elective Modules (with ECTS)

Software Engineering

Data Intensive Applications (5)
Serverless Cloud Applications Automation (5)
Distributed Applications in the Edge-Cloud Continuum (5)

Computer Science

Advanced C++ (5)
Datawarehouse Systems (5)
Recommender Systems (5)

Civil Engineering

Energy-Efficient Buildings 1-1 (5)
Energy-Efficient Buildings 2-2 (5)
Building Services Engineering, Ecology and Construction Management (7.5)

Entrepreneurship

Entrepreneurship 1 (5)
Product & Service Development (7.5)

Scientific Computing (1st semester courses)

Information Systems

Digital Markets (7.5)
Digital Organizations (10)
Digital Society (10)
Operations Management I: Production and Supply Chain Management (10)
Operations Management II: Optimization, Simulation and Analytics (10)

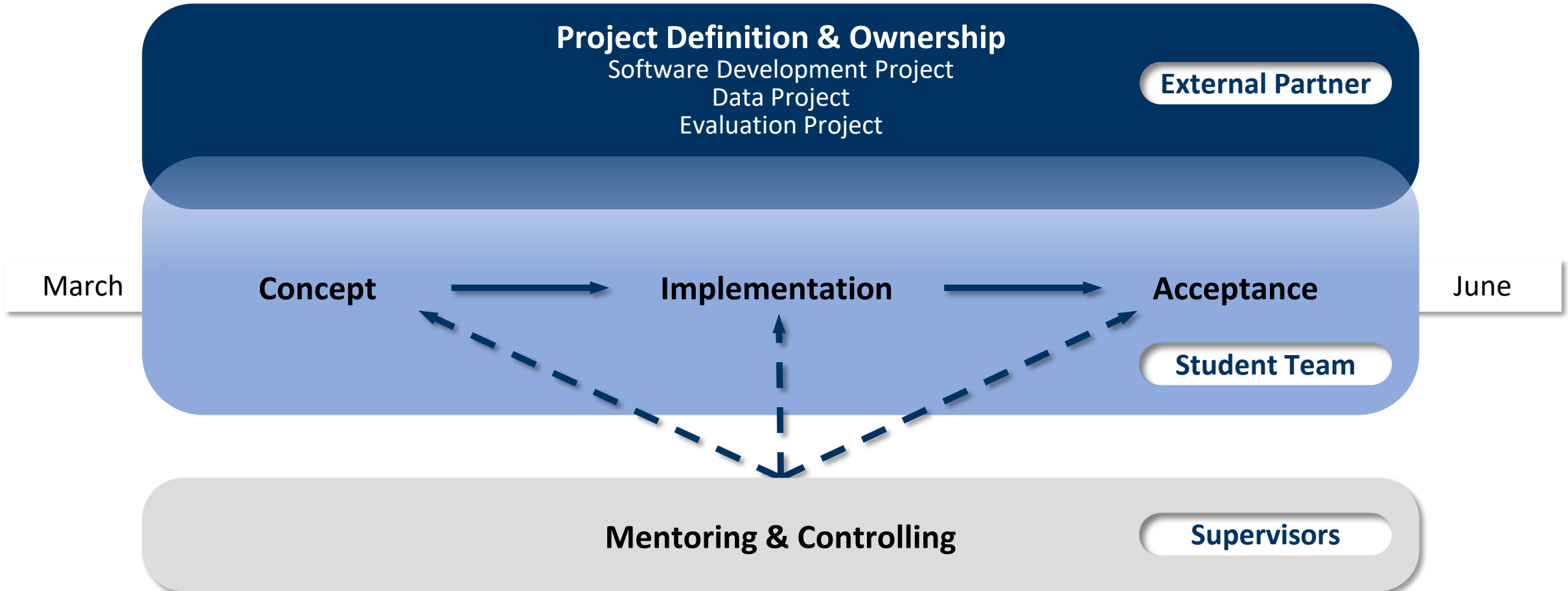
Digital Science Center

Action, Ethics and Knowledge in a Digitalized World (4)
Digital Business (7.5)
Digital Harms, Prevention and Response (5)
Law and Governance of Digital Technology (5)

Biomedical Technology (UMIT)

Technologies for personalized medicine (7.5)
Biomedical modeling and regulation (7.5)
Innovation in biomedical engineering (5)
Sensor technology, electronics and signal processing (10)

Software Engineering Project



Next Steps

1

Admission to Program

Admission period for the winter semester 2024/25: **July 8 to October 31**

Detailed information available online at

<https://www.uibk.ac.at/studium/organisation/termine-und-fristen.html.en>

2

Registration to Courses

Registration period: **September 1 to September 21**

Registration via <https://lfuonline.uibk.ac.at/>

Contacts



StV Informatik

Contact: stv-informatik@oeh.cc



Contact Person Master Software Engineering

Assoz.-Prof. Philipp Zech, PhD,

master-se@uibk.ac.at

Consultation hour: by arrangement

Associate Dean of Studies

Univ.-Prof. Dr. Aart Middeldorp,

lehre-informatik@uibk.ac.at

Consultation hour: Wednesday, 11:30 to 13:00

Thank you for your attention

Questions?

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www.uibk.ac.at