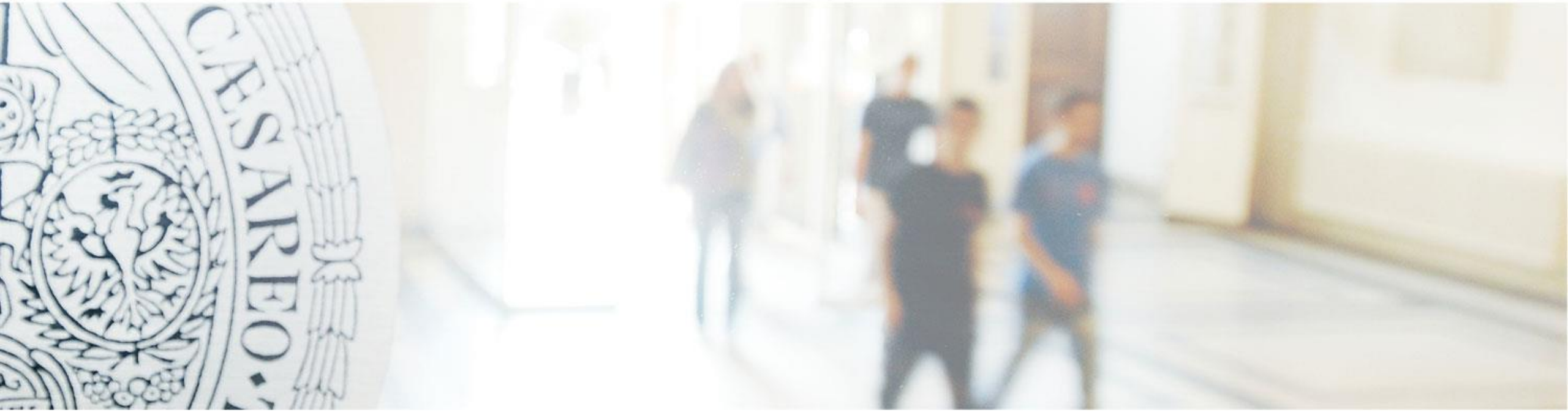
universität innsbruck



Information about the Master Curriculum in Computer Science

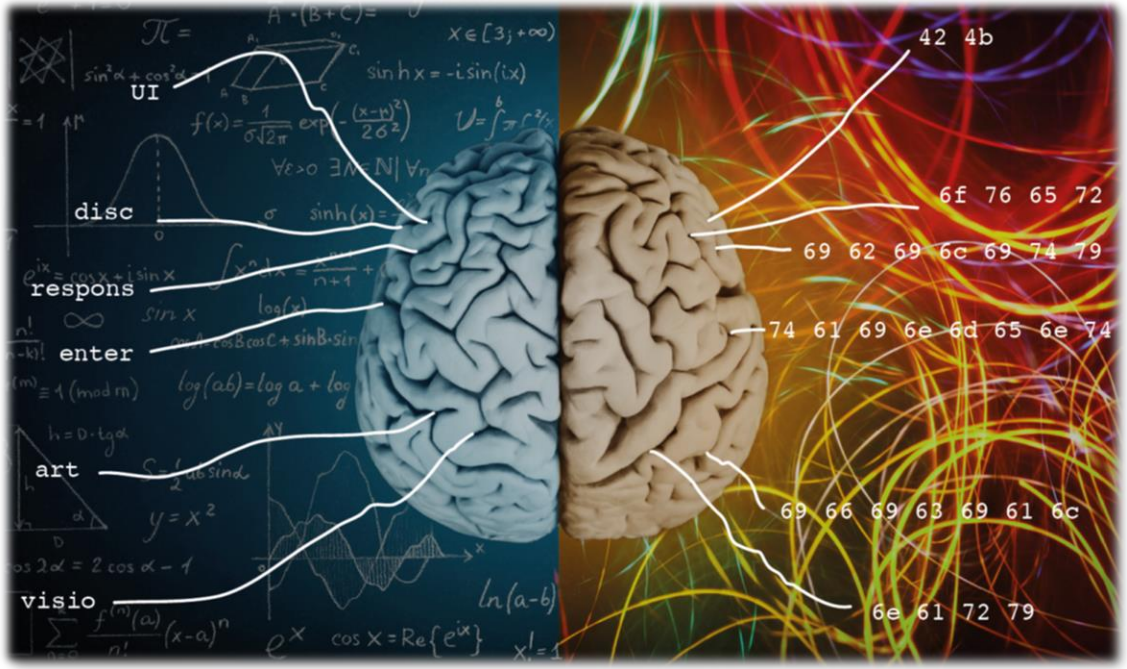
The University of Innsbruck was founded in 1669 and is one of Austria's oldest universities. Today, with over 28.000 students and 5.000 staff, it is western Austria's largest institution of higher education and research. **For further information visit: www.uibk.ac.at.**

Institut für Informatik

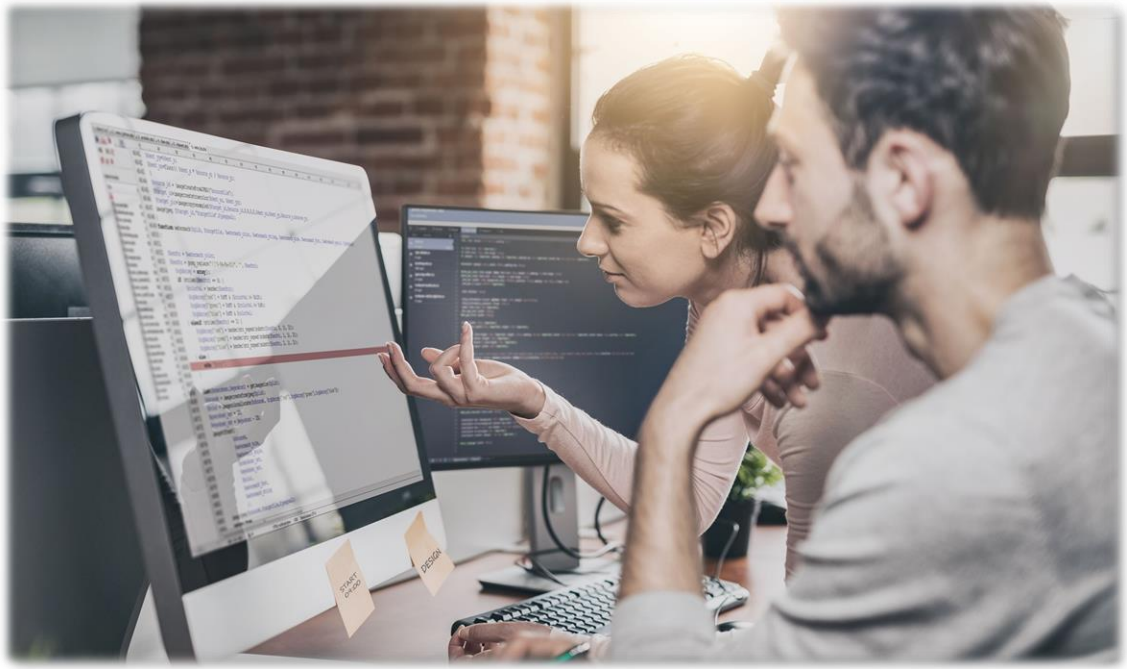
universität innsbruck

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

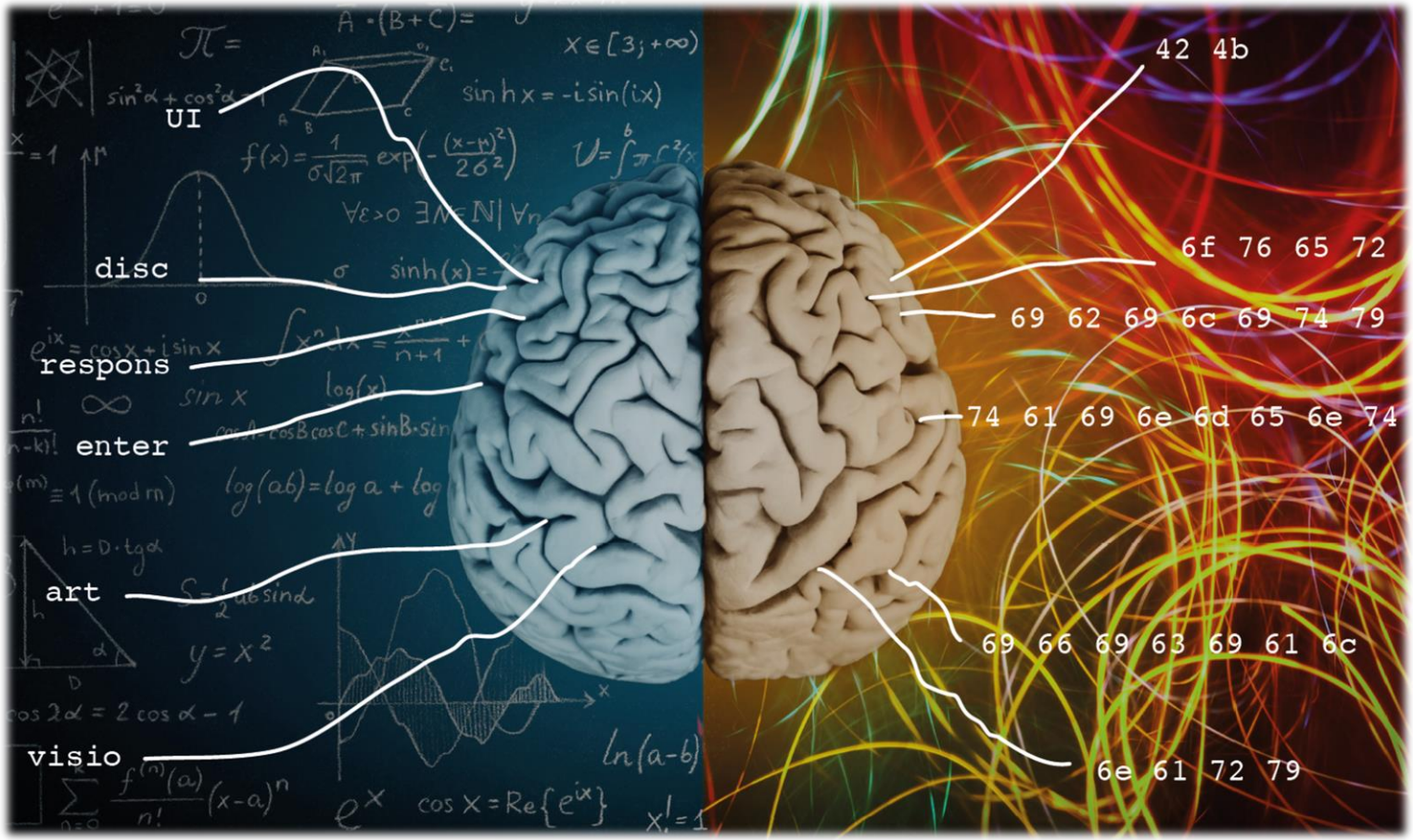
✓ research-oriented
✓ lots of choice

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 Computer Science



Johannes, 25

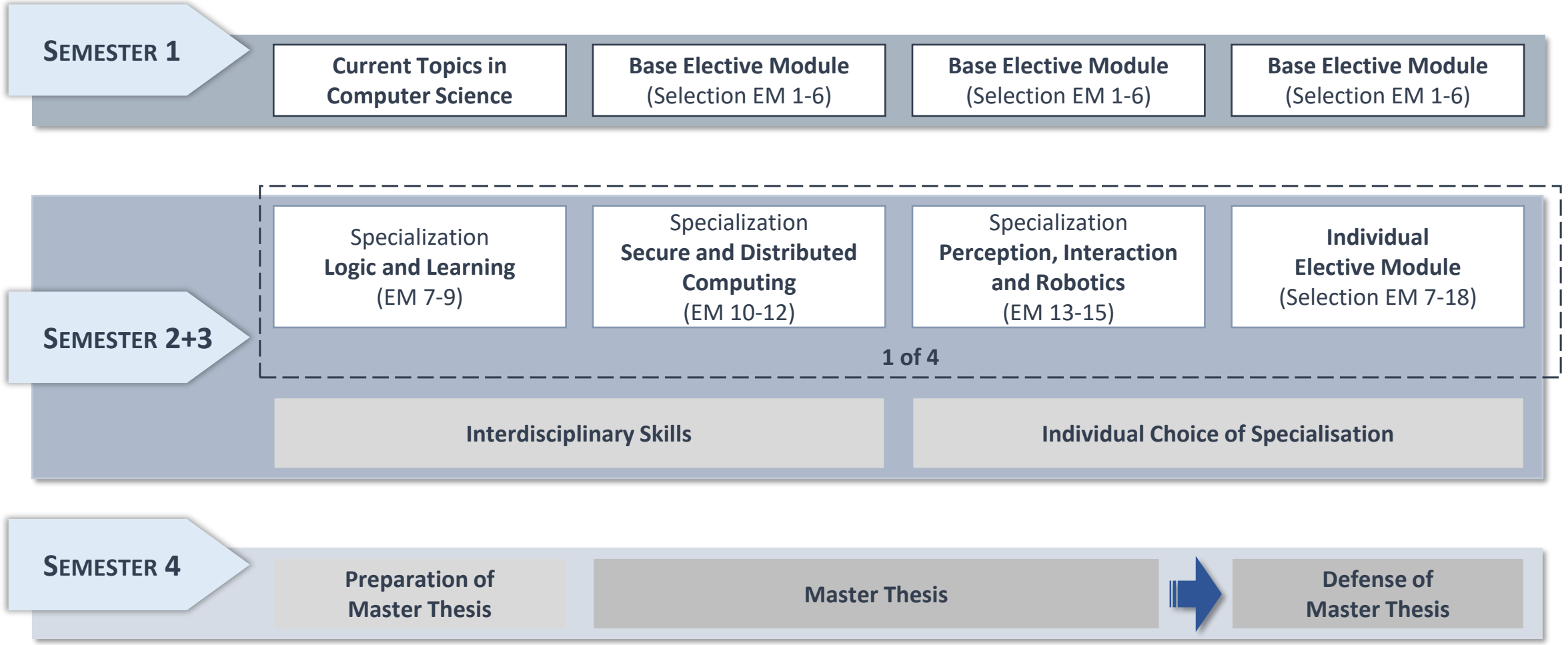
Besides preparing me for a career in research, the specialization logic & learning thaugh me how to tackle hard problems using logic and sophisticated algorithms

Johannes N. was awarded the Honours Award from the Federal Minister for Education, Science and Research for his excellent studies. This prize has been awarded every year since 1990 on the proposal of the universities

Danielle, 25

The small classes offered great opportunities to get to know the professors and work with them on projects outside of the course work as well! And the mountains offer a great backdrop for studying.

Master Program in Computer Science



Base Elective Modules (EM 1-6)

- Three base elective modules should be selected in the first or second semester, from a total of 6 options
- These modules provide an advanced foundation for each topic, and serve as preparation for further specialization
- The following options are available:

Automata and Logic (EM 1)	Cryptography (EM 3)	Optimization and Numerical Computation (EM 5)
Constraint Solving (EM 2)	High Performance Computing (EM 4)	Signal Processing and Algorithmic Geometry (EM 6)

Specialization: Logic and Learning

Specialization
Logic and Learning
(EM 7-9)

- Understand the Limitations of Computation
- Reason Inductively and Deductively
- Verify the Correctness of Hardware, Software and Networks

Suggested Base Elective Modules:

Automata and Logic	Constraint Solving

Specialization: Secure and Distributed Computing

Specialization
Secure and Distributed Computing
(EM 10-12)

- Push the Limits of Computer Architectures
- Anticipate Malicious Behavior
- Reach Massive Scale
- Design for Scientific Computing, Cloud, Edge, and Decentralized Governance

Suggested Base Elective Modules:

- Cryptography
- High Performance Computing

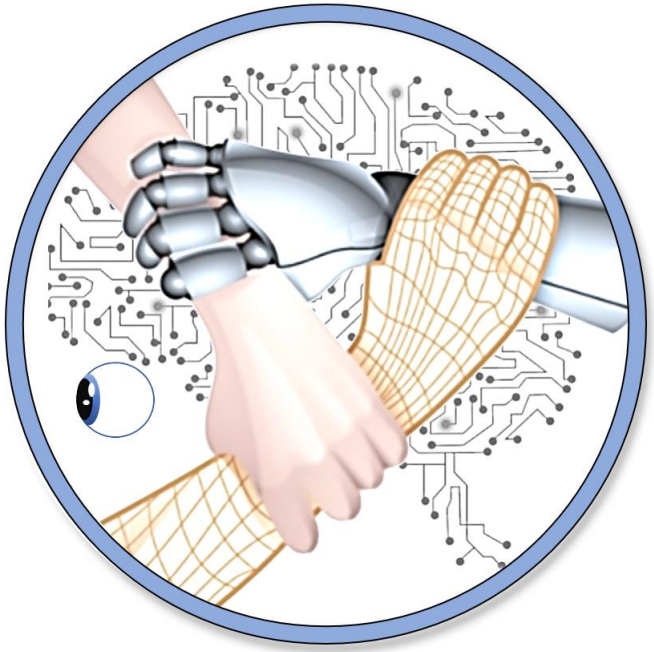
Specialization: Perception, Interaction and Robotics

Specialization
Perception, Interaction and Robotics
(EM 13-15)

- Push the Limits of Interactive Systems in Real and Simulated Worlds
- Pursue Human Levels of Perception by Developing Novel Deep Learning Methods
- Advance Robot Intelligence Using Machine Learning
- Reach the Next Level in Virtual, Mixed, and Augmented Reality Systems

Suggested Base Elective Modules:

Optimization and Numerical Computation	Signal Processing and Algorithmic Geometry



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

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universität innsbruck
Department of Computer Science

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

Associate Dean of Studies
Univ.-Prof. Dr. Aart Middeldorp,
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Consultation hour: Wednesday, 11:30 to 13:00

Thank you for your attention

Questions?

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