UNIVERSITÄT BIELEFELD
Faculty of Technology

Onboarding the M.Sc. program „Intelligent Interactive Systems”

Welcome to Bielefeld University!









Welcome to IISY@Faculty of Technology!





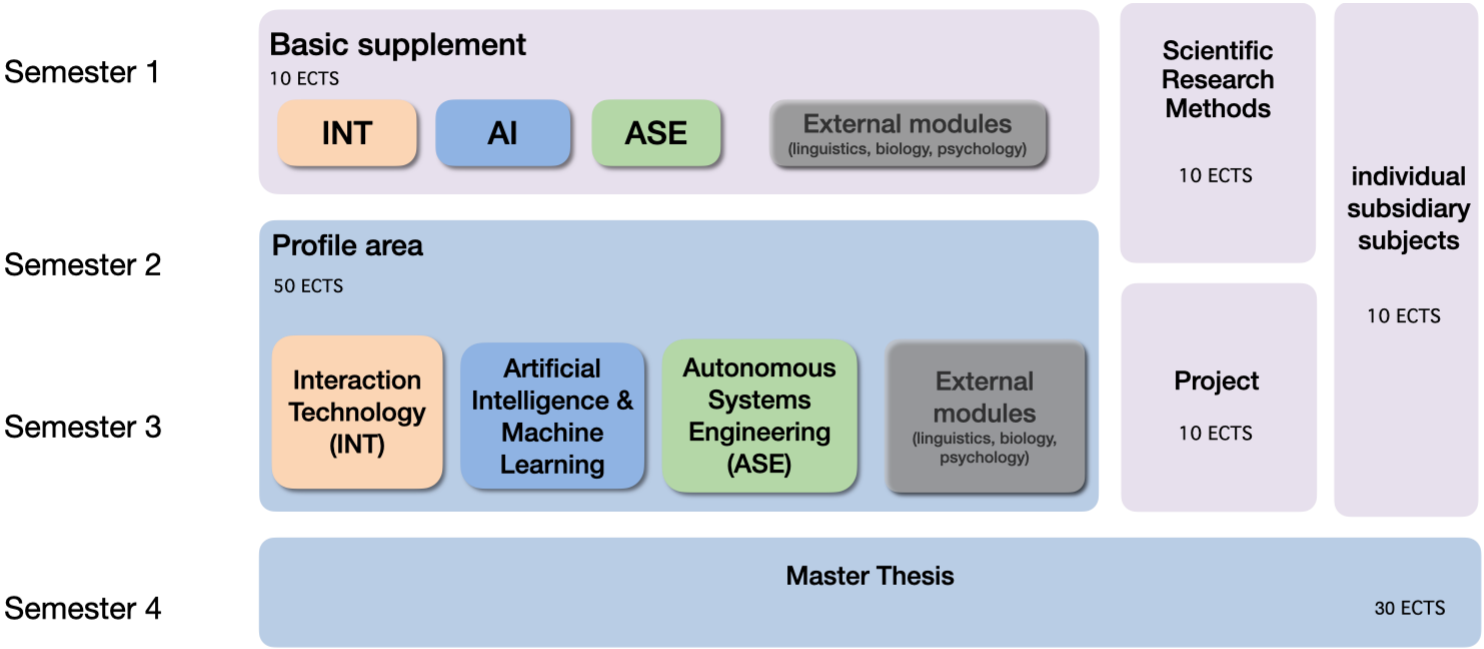






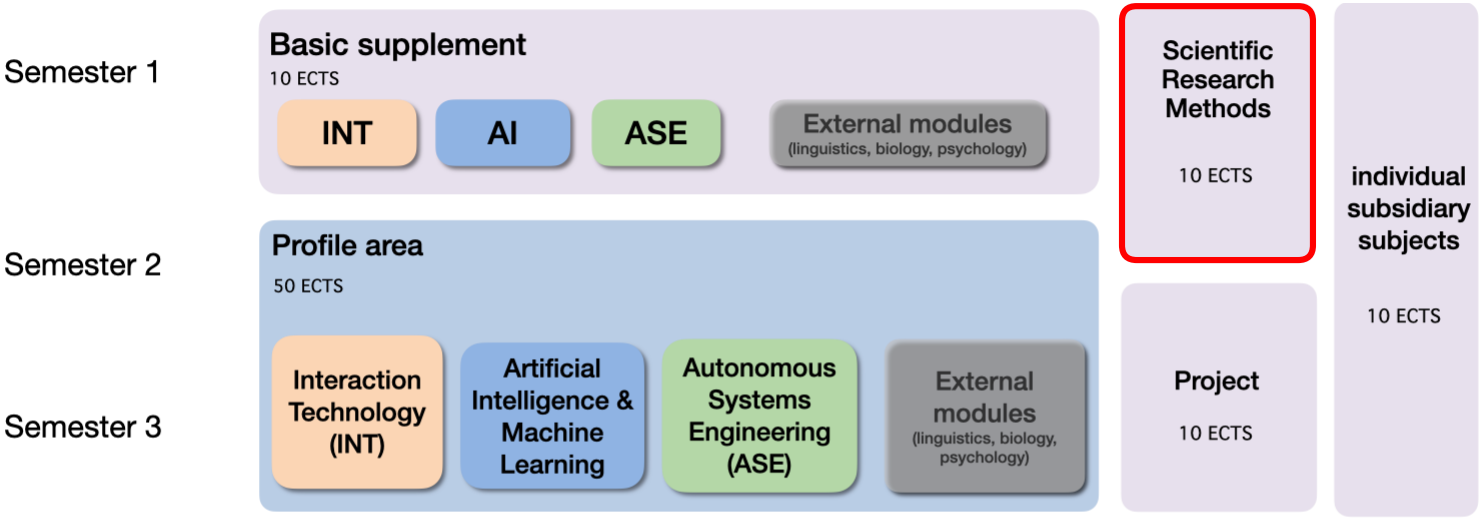


Study Programme - Overview / Areas



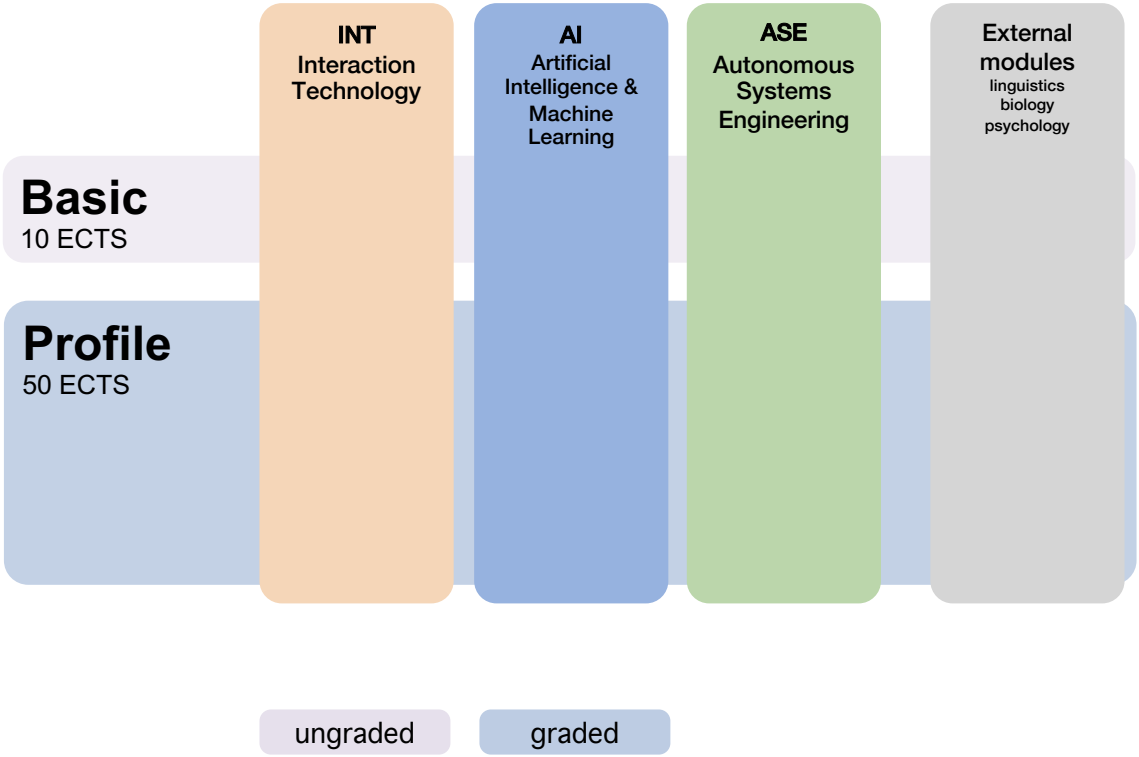
Your task now: setup your custom study plan!

Study Programme - Overview / Areas



- Only 1 module is mandatory: SRM
- Everything else is freely configurable (within bounds)
- **Your task now: setup your custom study plan!**

Structural Guidelines



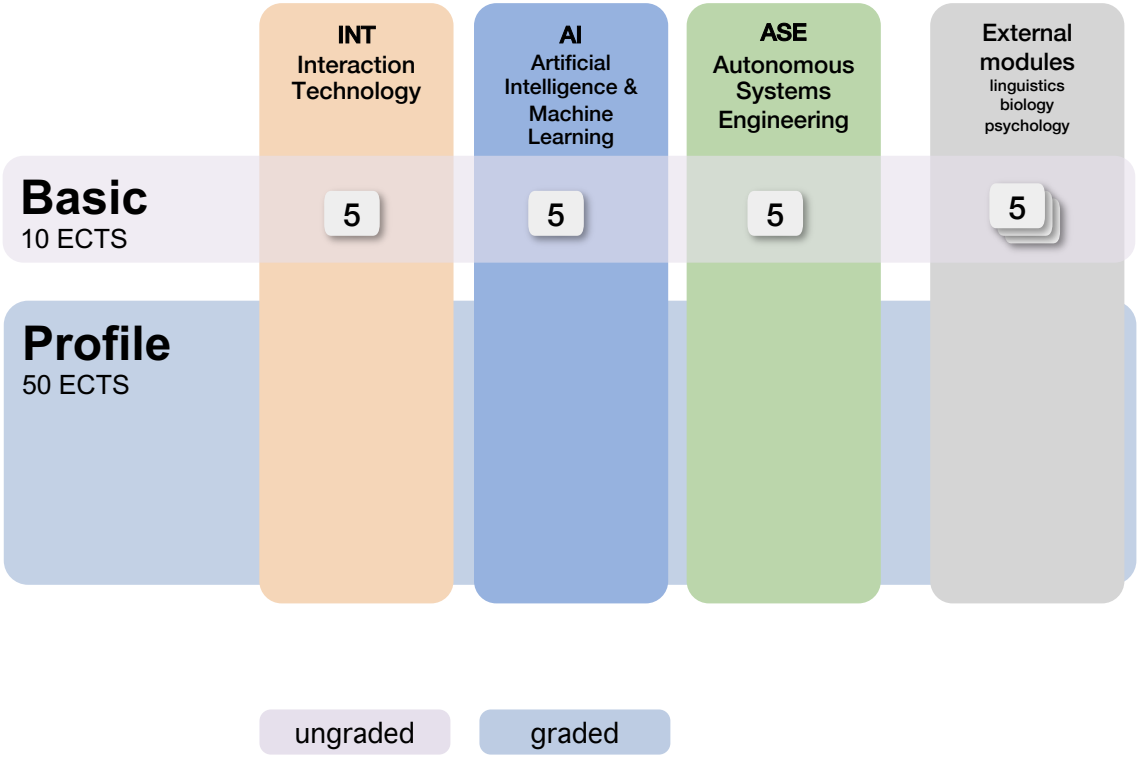
Topic Areas

3 core topic areas:

- Interaction Technology (INT)
- Artificial Intelligence & Machine Learning (AI)
- Autonomous Systems Engineering (ASE)

- focus on 1-2 topics
- add relevant courses from other faculties

Structural Guidelines



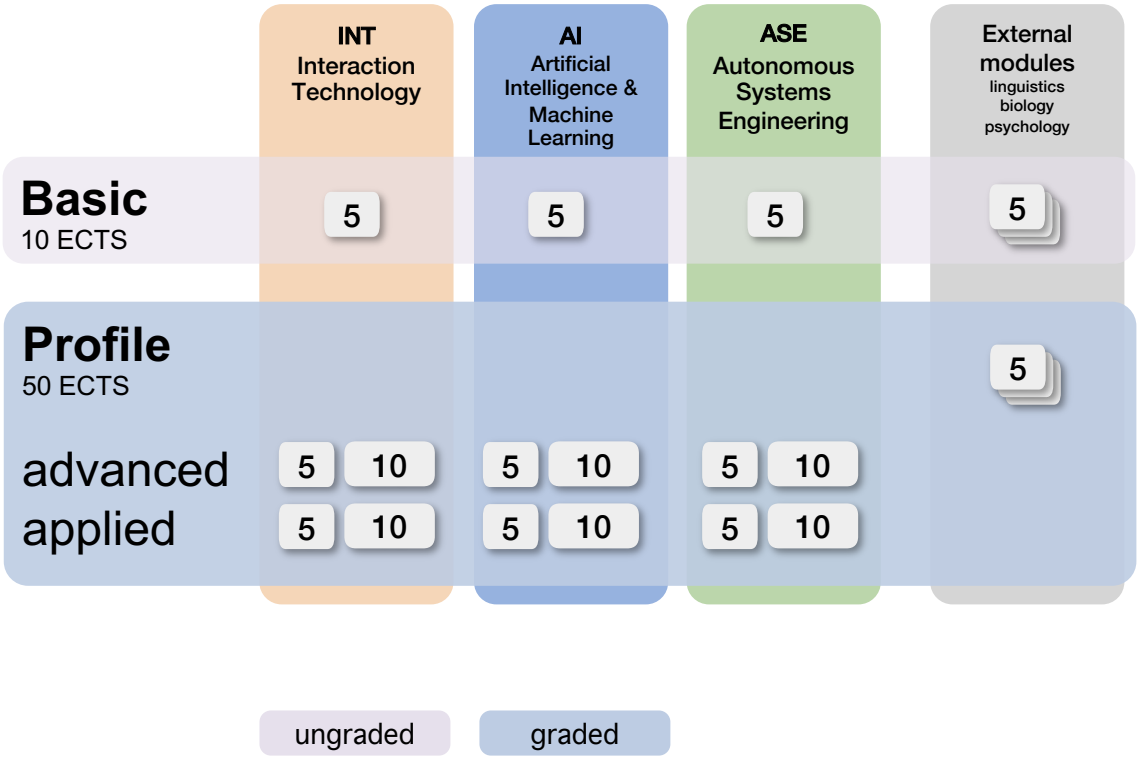
Basic Courses

Modules along 1 axis: topic area

- 39-M-Inf-[INT | AI | ASE]-**bas**
- 23-LIN-Inf
  Foundations of Computational Linguistics
- 23-LIN-BaLinSK1
  Language and Cognition
- 20-NB
  Neuro- and Behavioral Biology
- 27-WKP
  Psychology of Perception and Cognition

- 5 ECTS per module
- 2 modules required = 10 ECTS
- ungraded

Structural Guidelines



Profile Area

Modules along 3 axes:

1. Topic area: INT, AI, ASE
2. Type: Advanced / Applied
3. Size: 5 / 10 ECTS

- 50 ECTS required
  - focus area: max. 30 ECTS
  - add modules from other area(s)
- graded
- Naming scheme of modules:
  39-M-Inf-**TOPIC-TYPE-[foc]**[_a]
  - *39-M-Inf-AI-adv*
  - *39-M-Inf-INT-app-foc_a*

How to fill in modules with courses?

39-M-Inf-*-**bas**	39-M-Inf-*-**adv_a** 39-M-Inf-*-**app**	39-M-Inf-*-**adv-foc**	39-M-Inf-*-**app-foc_a**
Lecture + Tutorial (2) (2) OR Seminar + Tutorial (2) (2)	Lecture + Tutorial (2) (2) OR Seminar + Tutorial (2) (2)	*Introductory* Lecture + Tutorial (2) (2)	*Introductory* Lecture + Tutorial (2) (2)
		Adva Lecture (2) OR Seminar + Tutorial (2) (2)	+ Seminar 2 (2) ungraded presentation OR Project (5)
5 ECTS	5 ECTS	10 ECTS	10 ECTS

Proactively negotiate your custom topic with the lecturer of the introductory course!

Types of Examination by Course Type

- **Lecture + Tutorial**
  - 50% of exercises to be completed (as admission to the exam)
  - oral or written exam
- **Seminar + Tutorial**
  - Oral presentation
  - 50% of exercises to be completed
  - Essay
- **Project**
  - Oral presentation
  - Report

} „*Portfolio mit Abschlussprüfung*“ (Portfolio with final exam)

Available Lectures

winter / summer term
bold: regularly offered

AI & ML

- **Deep Learning**
- **Intro to Machine Learning**
- **Intro to the Semantic Web**
- **Vertiefung Neuronale Netze**

Knowledge Representa
Optimization, Data Mini

- Actionable Knowledge Representation
- **Applied Optimization**
- Information Visualization
- **Introduction to Data Mi**
- **Modern Data Analysis**
- Cognitive Computing: Re
  Under Uncertainty

Language Technology

- **Deep Learning for Natural Language Processing**
- Grundlagen Sprachlicher Interaktion

Mechatronics

- **Embedded Systems**
- **Entwurf mikroelektronischer Systeme**
- **Formale Logik**

Lectures: ~18 per semester

Seminars: ~30 per semester

Projects: ~40 per semester

- **Serial Manipulators**
- **Visuelle Roboternavigation**

Ethical, legal, social issues

- Privacy in Healthcare

Vision & Audio Processing

- **Computer Vision**
- **Visual Computing**
- 3D and 4D Computer Vision
- **Auditory Data Science**
- **ound Synthesis**

mputer Interaction,
and Psychology

- **g in die Wahrnehmungs-**
  itionspsychologie
- nstechnik im Sport
- **al Behavior Processing:**
  Signals
- ne Programming

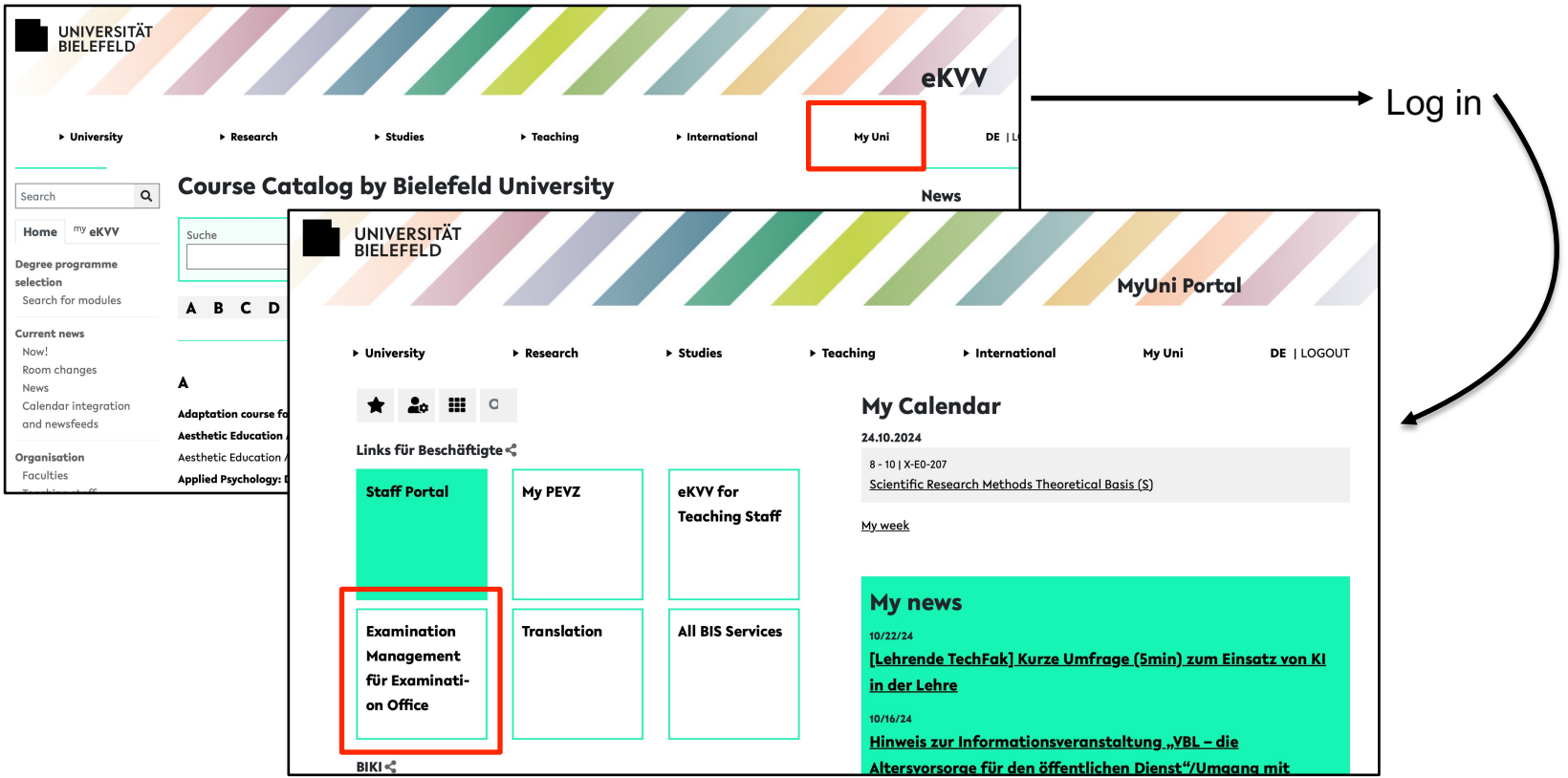
Linguistics

- **Einführung in die Neurolinguistik**
- **Phonetik und Phonologie**
- **Semantik und Pragmatik**
- **Syntax und Morphologie**

Important Resources

- **eKVV**: the electronic lecture repository: https://ekvv.uni-bielefeld.de/
- IISY degree **programme**: https://ekvv.uni-bielefeld.de/sinfo/publ/variante/366747897
- IISY programme **structure**: https://www.uni-bielefeld.de/fakultaeten/technische-fakultaet/studium/master/iisy
- **Modules** overview: https://ekvv.uni-bielefeld.de/sinfo/publ/variante/366747897?m
- **Lectures** grouped by modules: https://ekvv.uni-bielefeld.de/kvv_publ/publ/vvz?id=366747897
- Individual **course** sites (usually Moodle): links on eKVV's course page
- NEW: video explaining the module structure and how to create an individual course plan: https://uni-bielefeld.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=adb72732-878e-432f-b2db-b4ef01365c09

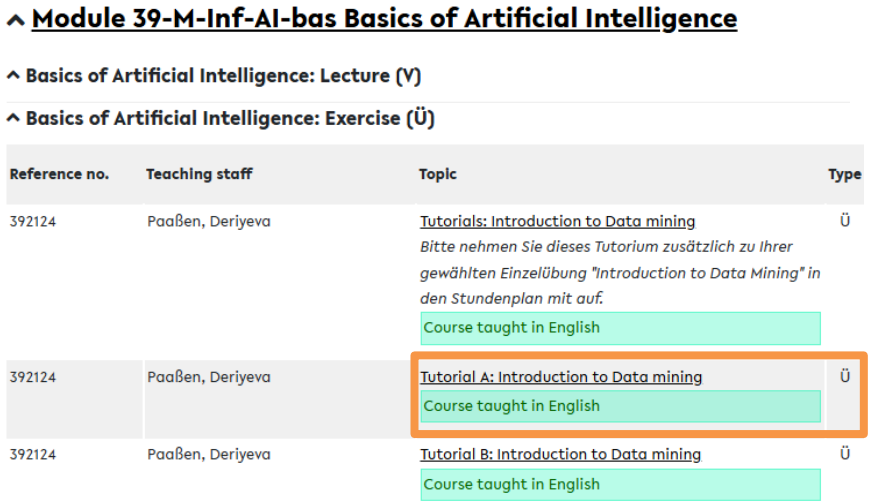
How to get to the transcript view?



Setting up your custom study plan

Coarsely plan your overall studies across all 4 semesters now! Leave room for later modifications.

- Pick basic lectures for 1st semester
- Pick profile lectures for 2nd/3rd semester
- Find matching tutorials
- Order courses topic-wise, check for prerequisites in course descriptions
- Tentatively „fill in“ courses to module containers
- Combine 2-3 courses to fill focus modules
- Use courses and modules *only once*
- Association can be changed at any time
- Actively ask lecturers for projects (or seminars), e.g. for *-app-foc modules



Module 39-M-Inf-AI-bas Basics of Artificial Intelligence

Basics of Artificial Intelligence: Lecture (V)

Basics of Artificial Intelligence: Exercise (Ü)

Reference no.	Teaching staff	Topic	Type
392124	Paaßen, Deriyeva	Tutorials: Introduction to Data mining *Bitte nehmen Sie dieses Tutorium zusätzlich zu Ihrer gewählten Einzelübung "Introduction to Data Mining" in den Stundenplan mit auf.* Course taught in English	Ü
392124	Paaßen, Deriyeva	Tutorial A: Introduction to Data mining Course taught in English	Ü
392124	Paaßen, Deriyeva	Tutorial B: Introduction to Data mining Course taught in English	Ü

Validate + adapt your study plan each semester!

See video: https://uni-bielefeld.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=adb72732-878e-432f-b2db-b4ef01365c09

The IISY chat on Element



- Register for the **Element chat** using your University credentials
- Help page: https://www.uni-bielefeld.de/einrichtungen/bits/services/kommunikation/teamchat/howto/element-desktop/
- Search for „**IISY Chat**“
- Join in :-)

Important persons and contacts

- Coordination of the IISY programme:
  Prof. Stefan Kopp (skopp@techak.uni-bielefeld.de) (Dean of the Faculty)
  Dr. Olga Abramov (oabramov@techfak.uni-bielefeld.de)
- Overall coordination of Computer Science programmes:
  Dr. Thomas Hermann (informatik.techfak@uni-bielefeld.de)
- Examination office / administration:
  Ricarda Brune, Daniela Krause, Kathrin Müller, Kirsten Heinen (pruefungsamttechfak@uni-bielefeld.de)
- Chair of the Examination Board:
  Prof. Benjamin Paaßen (bpaassen@techfak.uni-bielefeld.de)
- Faculty of Technology student association:
  info@fachschaft.techfak.de — https://fachschaft.techfak.de/
- Student counseling service:
  studienberatung.techfak@uni-bielefeld.de
- International Office:
  welcome@uni-bielefeld.de — https://www.uni-bielefeld.de/international/come-in/studium/service/

Whom to ask and how to reach them

- All issues regarding the IISY programme: iisy@techfak.uni-bielefeld.de
- General study counseling: Thomas Hermann
- Formal regulations: Examination Office (German: *Prüfungsamt*)
- Urgent questions & minor issues: Please directly in IISY Chat
- Regarding individual courses/modules: responsible persons per module (see module desctiption in eKVV)
- ERASMUS Exchange: see website
- Double Degree programme with U. Bologna: Prof. Philipp Cimiano

„IISY Excellence“ programme



- **Buddy program**
  - Devarshi Dixit (devarshidixit01@gmail.com)
  - Felix Günther (felix.guenther@uni-bielefeld.de)
- **Welcome Week**
- **Career Programme**:
  - **<perspektive> career fair**
    November 19, 2026 12:00-16:30 in the main university hall, prep sessions in English and German
- **Dedicated contacts**
  - Buddies
  - IISY study program: Ole Pütz (ole.puetz@uni-bielefeld.de)
- **Career Service**:
  - Eva Osterloff (eva.osterloff@uni-bielefeld.de)
- **International Office**:
  - Atahualpa Garcia Ibarra (a.garcia_ibarra@uni-bielefeld.de)

German

English

Join and engage with the Faculty of Technology!

- **Student association** at the Faculty of Technology (Fachschaft)
  - **https://fachschaft.techfak.de/**
  - you can joint, engage, contribute and network!



- Serving in various **Committees**
  - University senate
  - Faculty board
  - Examination board
  - Appointment committees
  - Equal Opportunities Commission
  - etc.

- Engage as **Tutor (Teaching) or Student teaching / research assistant**
  - paid contract
  - ask head of groups or check *https://www.uni-bielefeld.de/fakultaeten/technische-fakultaet/fakultaet/stellen/*

Enjoy studying in Bielefeld!

- Studying is wonderful -- enjoy inspiration, curiosity, understanding, sharing, creating, ...
- Study time is valuable and quality time:
  - we are happy if you develop & unfold your potential
    (...taking good grades rather as welcome side effect)
- Learning is never easier than when being a student
  ⇨ make a firm committed investment
- Appreciate good conditions - and make something out of it!

Team Up, Communicate, Persevere, Succeed!

"Live as if you were to die tomorrow.
Learn as if you were to live forever."
Mahatma Gandhi





