Philosophy & Computer Science

Welcome back to Bayreuth!

To help you plan your second semester, we've put together a short overview tailored to your track.

Enclosed you will find:

1) A list of **courses** you can take
2) Sample Schedules for the ***Philosopher's*** and ***Computer Science's Track***

Students that belong to the ***Mixed*** or ***Development Track*** are asked to individually compile a schedule. If you need help with this, you are welcome to contact us!

Philosopher's Track (Summer semester 2025)

Ideally, you have completed the following modules in the first semester:

- **Computational Thinking**
- **Theoretical Computer Science**
- **Data Modeling & Analysis**
- **Mathematical Thinking** (1 or 2 courses, if you took only one course in Mathematical Thinking in the first semester, you should take the second one now in the second semester, e.g.:
    - Mathematical Foundations 2 (Thursday 12:00-14:00)
    - Introduction to Modal Logic (every second week, alternating between Wednesdays 14:00–16:00 and Mondays 10:00–12:00)
- **Advanced Philosophy Seminar**

The courses in the following sample schedule for the summer semester build on these foundations. If you have not yet taken all these courses in the last semester (especially if you only took one Mathematical Thinking course), you will need to adjust your plan accordingly.

In the second semester you should take the following modules:

- **Applied Computer Science**
- **Minds and Machines**
- **Machine Ethics**
- **Advanced Computer Science Seminar** (choose one from the list)
- **Specialization Seminar** (choose one or more Specializations Seminars; we recommend two specialization seminars if you plan to do a 12-week-internship in the third semester, so you can fully focus on that)
- **Independent Study** (we recommend at least attendance of the Interdisciplinary Lecture Series: AI in Science and Society)
- Additionally, we recommend participation in the Philosophy Research Forum (no credit)

IMPORTANT: Many advanced Computer Science courses have specific prerequisites and expect a solid technical background. Please make sure you meet these requirements and, if in doubt, check with the lecturer — CS instructors can be quite strict about this.

List of Courses Philosopher's Track

Module	Course(s)	Time
Applied Computer Science	Intelligent User Interfaces	Wednesday 14:00-16:00
Minds and Machines	Minds and Machines (MA Elective)	Thursday 14:00-16:00
Machine Ethics	Machine Ethics	Thursday 16:00-18:00
(Mathematical Thinking)[1]	Mathematical Foundations 2	Thursday 12:00-14:00
	Introduction to Modal Logic	every second week, alternating between Wednesdays 14:00–16:00 and Mondays 10:00–12:00
Advanced Computer Science Seminar	Information Visualization	Tuesday 14:00-16:00
	Event Processing	Tuesday 14:00-16:00 Wednesday 16:00-18:00
	Graph Processing and Machine Learning (GPML)	Tuesday 16:00-18:00
Specialization Seminars	Seminar Critical Data Studies (Big Data, AI, and informed consent)	Thursday 08:30-10:00
	Seminar Introduction to Computer Assisted Text Analysis	Monday 14:00-16:00
	Human AI Collaboration	Tuesday 16:00-17:30 (lecture) Tuesday 17:30-19:00 (exercise class)
	Causal Inference	Block course on 25.04., 26.04., 23.05., 24.05., 25.05.
	Principles of Entrepreneurship	Irregular rhythm (Kick-off 23.04. 10:00-12:00, other sessions Wednesdays (07.05., 28.05., 18.06., 16.07.) 10:00-13:00)
	Impact Entrepreneurship – Developing Social and Ecological Innovations	Block course on Friday 09.05., 16.05., 11.07.
	International Political Economy (MA Electives)	Irregular rhythm / block course: 24.04., 09.05., 10.05., 21.06., 22.06.
	Emergence and Dynamics of Conventions and Social Norms - Dates	Block course: 25.04., 26.04., 27.04.

[1] only applies if you have only taken 1 course in Mathematical thinking in the first semester

	The Misinformation Age	Every second week on Tuesday & Thursday 14:00-16:00
	International Cooperation (MA Electives)	Irregular rhythm / block course: 23.04., 10.05., 11.05., 20.06., 21.06.
	Political Polarization: Concepts, Measures, and Data	Every second week on Tuesday & Thursday 10:00-12:00
	AI systems ethics, regulation & certification	Wednesday 10:00-11:00
	Theories of Causation and Scientific Practice	Monday 14:00-16:00
	Epistemic Injustice (MA Electives)	Block course: 11.07., 12.07., 13.07.
	AI Alignment	Wednesday 08:00-10:00
Independent Study	Interdisciplinary Lecture Series: AI in Science and Society **(Attendance recommended for everyone)**	Friday 14:00-16:00
	Philosophy, Computer Science & AI: Contemporary Issues (MA Electives)	Thursday 10:00-12:00
	Forschungsprojekt Data Mining im Marketing mit R und Python (IN GERMAN)	Friday 08:00-10:00
Additionally recommended (no credit)	Philosophy Research Forum (details in the e-learning course)	Every second Tuesday, 16:00-18:00 (see dates in cmlife)

Sample Schedule for the Philosopher's Track (Summer semester 2025)

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00-09:00			AI Alignment		Forschungs-projekt Data Mining mit R und Python
				Seminar Critial Data Studies	
09:00-10:00					
10:00-11:00			AI systems ethics, regulation & certification	Mathematical Foundations 2 OR Contemporary Issues	
11:00-12:00					
12:00-13:00					
13:00-14:00					
14:00-15:00	Introduction to Computer Assisted Text Analysis **OR** Theories of Causation & Scientific Practice	Information Visualization ***OR*** Event Processing	**Intelligent User Interfaces**	**Minds and Machines**	**Lecture Series AI in Science & Society**
15:00-16:00					
16:00-17:00		Human AI Collaboration [Philosophy Research Forum]	Event Processing	**Machine Ethics**	
17:00-18:00					
18:00-19:00		Exercise H-AI Collaboration			
19:00-20:00					

Not listed in this timetable are block courses and courses with irregular / bi-weekly schedule. For the exact timings of those courses please refer to the course schedules on cmlife or in the table above.

Computer Science's Track (Summer semester 2025)

Ideally, you have completed the following modules in the first semester:

- **Analytical Thinking**
  if you didn't take the course in the first semester you can take:
  Introduction to Modal Logic (every second week, alternating between Wednesdays 14:00–16:00 and Mondays 10:00–12:00)
- **Practical Philosophy**
- **Theoretical Philosophy**
  if you didn't take the course in the first semester you can take:
  Epistemology (Thursdays 10:00-12:00)
- **Data Modeling & Analysis**
- **Mathematical Thinking**
  1 or 2 courses, if you took only one course in Mathematical Thinking in the first semester, you should take the second one now in the second semester, e.g.:
    - Introduction to Modal Logic (every second week, alternating between Wednesdays 14:00–16:00 and Mondays 10:00–12:00)

The courses in the following sample schedule for the summer semester build on these foundations. If you have not yet taken all these courses in the last semester (especially if you only took one Mathematical Thinking course), you will need to adjust your plan accordingly.

In the second semester you should take the following modules:

- **Minds and Machines**
- **Machine Ethics**
- **Advanced Computer Science Seminar** (choose one from the list)
- **Advanced Philosophy Seminar** (choose one from the list)
- **Specialization Seminar** (choose one or more Specializations Seminars; we recommend two specialization seminars if you plan to do a 12-week-internship in the third semester, so you can fully focus on that)
- **Independent Study** (we recommend at least attendance of the Interdisciplinary Lecture Series: AI in Science and Society)
- Additionally, we recommend participation in the Philosophy Research Forum (no credit)

IMPORTANT: When taking Philosophy courses, please ensure that you have the necessary background in philosophical methods and concepts. Some courses assume prior experience with reading and discussing philosophical texts, so if you're unsure, it's best to consult the lecturer in advance.

List of Courses Computer Science's Track

Module	Course(s)	Time
Minds and Machines	Minds and Machines (MA Elective)	Thursday 14:00-16:00
Machine Ethics	Machine Ethics	Thursday 16:00-18:00
(Mathematical Thinking/ Analytical Thinking)[1]	Introduction to Modal Logic	every second week, alternating between Wednesdays 14:00–16:00 and Mondays 10:00–12:00
(Theoretical Philosophy)[2]	Epistemology	Thursday 10:00-12:00
Advanced Computer Science Seminar	Information Visualization	Tuesday 14:00-16:00
	Event Processing	Tuesday 14:00-16:00 Wednesday 16:00-18:00
	Graph Processing and Machine Learning (GPML)	Tuesday 16:00-18:00
Advanced Philosophy Seminar	Theories of Causation and Scientific Practice	Monday 14:00-16:00
	Epistemic Injustice (MA Electives)	Block course: 11.07., 12.07., 13.07.
	AI Alignment	Wednesday 08:00-10:00
Specialization Seminars	Seminar Critical Data Studies (Big Data, AI, and informed consent)	Thursday 08:30-10:00
	Seminar Introduction to Computer Assisted Text Analysis	Monday 14:00-16:00
	Human AI Collaboration	Tuesday 16:00-17:30 (lecture) Tuesday 17:30-19:00 (exercise class)
	Causal Inference	Block course on 25.04., 26.04., 23.05., 24.05., 25.05.
	Principles of Entrepreneurship	Irregular rhythm (Kick-off 23.04. 10:00-12:00, other sessions Wednesdays (07.05., 28.05., 18.06., 16.07.) 10:00-13:00)
	Impact Entrepreneurship – Developing Social and Ecological Innovations	Block course on Friday 09.05., 16.05., 11.07.

[1] only applies if you have only taken 1 course in Mathematical thinking in the first semester
[2] only applies if you have not taken any course of the module in the first semester

	International Political Economy (MA Electives)	Irregular rhythm / block course: 24.04., 09.05., 10.05., 21.06., 22.06.
	Emergence and Dynamics of Conventions and Social Norms - Dates	Block course: 25.04., 26.04., 27.04.
	The Misinformation Age	Every second week on Tuesday & Thursday 14:00-16:00
	International Cooperation (MA Electives)	Irregular rhythm / block course: 23.04., 10.05., 11.05., 20.06., 21.06.
	Political Polarization: Concepts, Measures, and Data	Every second week on Tuesday & Thursday 10:00-12:00
	AI systems ethics, regulation & certification	Wednesday 10:00-11:00
	Theories of Causation and Scientific Practice	Monday 14:00-16:00
	Epistemic Injustice (MA Electives)	Block course: 11.07., 12.07., 13.07.
	AI Alignment	Wednesday 08:00-10:00
Independent Study	Interdisciplinary Lecture Series: AI in Science and Society **(Attendance recommended for everyone)**	Friday 14:00-16:00
	Philosophy, Computer Science & AI: Contemporary Issues (MA Electives)	Thursday 10:00-12:00
	Forschungsprojekt Data Mining im Marketing mit R und Python (IN GERMAN)	Friday 08:00-10:00
Additionally recommended (no credit)	Philosophy Research Forum (details in the e-learning course)	Intermittent Tuesdays, 16:00-18:00 (see dates in cmlife)

Sample Schedule for the Computer Science's Track (Summer semester 2025)

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00-09:00			AI Alignment		Forschungs-projekt Data Mining mit R und Python
				Seminar Critial Data Studies	
09:00-10:00					
10:00-11:00			AI systems ethics, regulation & certification	(Episte-mology) **OR** Contempo-rary Issues	
11:00-12:00					
12:00-13:00					
13:00-14:00					
14:00-15:00	Introduction to Computer Assisted Text Analysis **OR** Theories of Causation & Scientific Practice	Information Visualization ***OR*** Event Processing		**Minds and Machines**	**Lecture Series AI in Science & Society**
15:00-16:00					
16:00-17:00		Human AI Collaboration [Philosophy Research Forum]	Event Processing	**Machine Ethics**	
17:00-18:00					
18:00-19:00		Exercise H-AI Collaboration			
19:00-20:00					

Not listed in this timetable are block courses and courses with irregular / bi-weekly schedule. For the exact timings of those courses please refer to the course schedules on cmlife or in the above table.