Philosophy & Computer Science

We are happy to welcome you in Bayreuth!

To make the start a little easier for you, we have prepared something for you.

Enclosed you will find:

1) Sample Schedules for the *Philosopher's* and *Computer Science's Track*

2) A listing of **further courses** you can take

3) And a Second Semester **Preview**

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!

Sample schedule for the Philosopher's Track (Winter Semester 2024/2025)

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 – 10:00	*"Python and data tools for Non-Programmers"* Rodrigo Queiroz de Albuquerque & Christopher Künneth [Computational Thinking] Room: NW III, S 135			*"AI, Robots, Superintelligence: Philosophy in Fiction"* Lena Kästner [Specialization] Room: GW II, S 6	*"Python and data tools for Non-Programmers"* Rodrigo Queiroz de Albuquerque & Christopher Künneth [Computational Thinking] Room: NW III, S 135
10:00 – 12:00	*"Mathematical Foundations I"* Moritz Zehnder [Mathematical Thinking] Room: NW II, H 20			*"Data Analysis in R"* Kenneth Stiller [Mathematical Thinking]* Room: RW II, S 46	*"Bit, Bytes, and Beyond: Foundations of Computer Science"* Mirco Schönfeld [Theoretical Computer Science] Room: GW I, S 125 *"Data Modelling and Knowledge Generation"* Mirco Schönfeld [Data Modelling and Analysis] Room: GW I, S 125
12:00 – 14:00		*"Introduction to Machine Learning"* Paolo Galeazzi [Mathematical Thinking]* Room: RW II, S 55		*"Explainable Intelligent Systems Research Seminar"* Lena Kästner [Advanced Philosophy]** Room: RW I, S 68 *"Mathematical Foundations I"* Moritz Zehnder [Mathematical Thinking] Room: NW II, H 20	*"Bit, Bytes, and Beyond: Foundations of Computer Science"* Mirco Schönfeld [Theoretical Computer Science] Room: GW I, S 125
14:00 – 16:00		*"Data Modelling and Knowledge Generation"* Mirco Schönfeld [Data Modelling and Analysis] Room: RW II, S 43	*"Philosophy of Emotions"* Gen Eickers [Advanced Philosophy]** (fortnightly, 14:00 – 17:00) Room: RW II, S 45	*"Decision Theory I"* Olivier Roy & Stefan Napel (fortnightly) [Advanced Philosophy]** Room: NW I, H 13	*"AI in Science and Society"* Lecture Series Room: GW II, H 27
16:00 – 18:00				*"Introduction to Machine Learning"* Paolo Galeazzi [Mathematical Thinking]* Room: RW II, S 55 *"AI and the Future of Work"* Timo Speith [Advanced Philosophy]** Room: RW II, S 46	
18:00 – 20:00					

Explanation table:

Courses in the blue boxes are our recommendations – you should take them this semester.

The stated course times are "cum tempore" (c.t.). That means, the courses start 15 min. later and end 15 min. earlier.

* You need two courses for **Mathematical Thinking**. *Mathematical Foundations I* is our recommendation. You can choose between *Introduction to Machine Learning* or *Data Analysis in R* in this semester and *Mathematical Foundations II* or *Introduction to Modal Logic* in the summer semester 2025.

** You need one course for **Advanced Philosophy**. Of course, you can already take more than one. We have listed some of the eligible courses separately, see PDF "Further Courses".

Sample schedule for the Computer Science's Track (Winter Semester 2024/ 2025)

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 – 10:00				*"AI, Robots, Superintelligence: Philosophy in Fiction"* Lena Kästner [Analytical Thinking /Specialization] Room: GW II, S 6	
10:00 – 12:00		1. half of Semester: *"An Introduction to Philosophical Analysis"* Marius Backmann [Analytical Thinking] Room: GEO I, H 6	*"Philosophy of the Social Science"* Patricia Rich [Theoretical Philosophy]** Room: RW I, S 68	*"Data Analysis in R"* Kenneth Stiller [Mathematical Thinking]*** Room: RW II, S 46	*"Data Modelling and Knowledge Generation"* Mirco Schönfeld [Data Modelling and Analysis] Room: GW I, S 125
12:00 – 14:00		*"Ethics"* Johanna Thoma [Practical Philosophy]* Room: GW II, H 27 *"Introduction to Machine Learning"* Paolo Galeazzi [Mathematical Thinking]*** Room: SPORT, S 85	*"Philosophy of Science I"* Uwe Czaniera [Theoretical Philosophy]** Room: RW II, H 21	*"Process Mining I"* Agnes Koschmider [Advanced Computer Science] Room: RW II, S 54	
14:00 – 16:00	*"Logic & Argumentation Theory"* Olivier Roy & Ayse (Sena) Bozdag [Mathematical Thinking] Room: NW I, H 13	*"Data Modelling and Knowledge Generation"* Mirco Schönfeld [Data Modelling and Analysis] Room: RW II, S 43	*"Logic & Argumentation Theory"* Olivier Roy and Ayse (Sena) Bozdag [Mathematical Thinking] Room: INF / AI, H 34		*"AI in Science and Society"* Lecture Series Room: GW II, H 27
16:00 – 18:00	1. half of Semester: *"An Introduction to Philosophical Analysis"* Marius Backmann [Analytical Thinking] Room: INF / AI, H 34		*"Process Mining I"* Agnes Koschmider [Advanced Computer Science] (irregularly) Room: INF / AI, H 34	*"Introduction to Machine Learning"* Paolo Galeazzi [Mathematical Thinking]*** Room: RW II, S 55	
18:00 – 20:00					

Explanation table:

Courses in the blue boxes are our recommendations – you should take them this semester.

The stated course times are "cum tempore" (c.t.). That means, the courses start 15 min. later and end 15 min. earlier.

* You need <u>one</u> course for **Practical Philosophy**. You can either take *Ethics* this semester <u>or</u> *Introduction to Practical Philosophy* in the summer semester 2025.

** You need <u>one</u> course for **Theoretical Philosophy**. You can either take *Philosophy of Science I* or *Philosophy of the Social Science* this semester, <u>or</u> you can take *Epistemology* in the summer semester 2025.

*** You need <u>two</u> courses for **Mathematical Thinking**. *Logic & Argumentation* is our recommendation. You can <u>choose</u> between *Introduction to Machine Learning* or *Data Analysis in R* this semester and *Mathematical Foundations II* or *Introduction to Modal Logic* in the summer semester 2025.

Further Courses

LECTURER	TYPE	NAME & DATE	MODULE
MARIUS BACKMANN & SEBASTIAN RIEMER	Block course	"Who's afraid of RGB?". Date: 25.-27.10.2024	Advanced Philosophy
PAOLO GALEAZZI	Block course	"Rational choice: from classic decision theory to behavioral economics". Date: 10.-12.01.2025 & 17.-19.01.2025	Advanced Philosophy
LENA KÄSTNER	Block course	"Australian and European Perspective on AI Governance and Digital Ethics". Date: 16.-18.01.2025	Advanced Philosophy
OLIVIER ROY & STEFAN NAPEL	Seminar	"Decision Theory I". Thursdays from 12:00 – 16:00 o'clock (fortnightly)	Advanced Philosophy
PATRICIA RICH & PAOLO GALEAZZI	Research Seminar	Research Forum (fortnightly)	
DANIEL BAIER	Seminar	"Data Mining im Marketing mit R". Fridays from 8:00 – 10:00 o'clock Language: German	Individual Study
TIMO SPEITH	Seminar	"Machine Explainability". Fridays from 10:00 – 12:00 o'clock	Advanced Philosophy
JÖRG MÜLLER	Lecture	"Computational Thinking". Mondays from 10:00 – 12:00 o'clock. Language: German	Computational Thinking
MARIUS BACKMANN	Crash Course	"Foundations of Philosophical Writing and Argumentation". Wednesdays from 16:00 – 18:00 o'clock	
CHAIYAWAN AUEPANWIRIYAKUL	Seminar	"Hands-on-Exploration with Wearables for Physical and Mental Health". Wednesdays from 13:00 – 15:00 o'clock	Specialization
NIKLAS KÜHL	Lecture & Exercise	"Applied Artificial Intelligence". Tuesdays from 16:00 – 20:00 o'clock	Specialization
RENATO ALONSO MIO ZALDIVAR	Seminar	"Seminar for Bachelor and Master Students on Brain-Computer Interfaces". Wednesdays from 14:00 – 16:00 o'clock	Specialization
CHAIYAWAN AUEPANWIRIYAKUL	Lecture	"Introduction to Programming with Python for Digital Health & AI". Tuesdays from 10:00 – 12:00 o'clock	Computational Thinking
JOHANNA THOMA	Block course	"Famous Philosophical Puzzles and Paradoxes". Date: 08.11., 15.11, 22.11.2024 from 08:00 – 18:00 o'clock & 23.11. 2024 from 09:00 – 13:00 o'clock	Analytical Thinking/ Specialization

Note that *Advanced Philosophy* & *Advanced Computer Science courses* can also be credited as <u>Specialization</u> courses.

Preview of courses for the summer semester 2025

LECTURER	Type	Name & Date	Module
RUBEN MAYER		"Event Processing"	Advanced Computer Science
DANIEL BUSCHEK		"Information Visualization"	Advanced Computer Sicence
WIM MARTENS & RUBEN MAYER		"Graph Processing and Machine Learning (GPML)"	Advanced Computer Science
WIM MARTENS		"Foundations of Data Management"	
AGNES KOSCHMIDER		"Process Mining II"	Advanced Computer Science
	Research Seminar	Research Forum (fortnightly)	
	Lecture	"AI in Society"	
LENA KÄSTNER	Seminar	"Explainable AI"	
MORITZ ZEHNDER		"Mathematical Foundations II"	Mathematical Thinking
OLIVIER ROY		"Introduction to Modal Logic"	Mathematical Thinking
MIRCO SCHÖNFELD & LENA KÄSTNER		"Critical Data Studies"	Specialization
NIKLAS KÜHL		"Human-AI Collaboration"	Specialization
KEN STILLER		"Causal Inference"	Specialization
DANIEL BAIER		"Data Mining im Marketing mit R"	Individual Study

Further Philosophy courses will be announced during this semester.

Note that *Advanced Philosophy* & *Advanced Computer Science courses* can also be credited as <u>Specialization</u> courses.

Second Semester Preview

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 – 10:00					
10:00 – 12:00	*"Mathematical Foundations II"* Moritz Zehnder [Mathematical Thinking]	*"Introduction to Practical Philosophy"* Gabriel Wollner [Practical Philosophy]			
12:00 – 14:00			*"Epistemology"* Christina Borgoni [Theoretical Philosophy]		
14:00 – 16:00		*"Intelligent User Interfaces"* Daniel Buschek [Applied Computer Science]	*"Minds and Machines"* Lena Kästner [Minds & Machines]		
16:00 – 18:00				*"Machine Ethics"* Timo Speith [Machine Ethics]	
18:00 – 20:00					

Please note that the times for the courses are preliminary.