

## Welcome to the master's program in Computer Science!

### Total expenditure

Sum of credits to be achieved: 120

Duration: 4 semesters resp. 2 years

Degree: Master of Science (M.Sc.)

### Start of courses

Winter term (October - March): 14. October 2024

Summer term (April - September): 23. April 2025

### Language of instruction

Lectures and exercises are in English on demand otherwise in German.

### Structure

The structure of the master program is based on the current recommendations of the German Society for Computer Science (GI). It is subdivided into four sections: A. Informatics, B. Projects, C. Languages and D. Master Thesis.

## Registration

It is necessary that you register in advance for all courses and exams. Please see:

<https://my.uni-bayreuth.de/cmlife/welcome>

## Section A: Informatics

To be achieved: 35 to 45 Credits

More information about all courses will be available online (<https://elearning.uni-bayreuth.de>). Please note that the courses start at quarter past.

### Courses in winter term 2024/25

INF 209: Animation und Simulation (5 Credits)

Lecture: Thu, 12-14, INF-S110, Prof. Guthe

Exercises: Wed, 10-12, NWII-S79, K. Liu

INF 218: Data Analysis and Deep Learning in Python (5 Credits)

Lecture: Tue, 10-12, INF-H33, Prof. Müller

Exercises: to be announced

INF 225: Advanced Software Engineering (5 Credits)

Lecture: Wed, 12-14, INF-S110, Prof. Baltés

Exercises: Mon, 14-16, INF-S112, Prof. Baltés

INF 226: Biomedical Time Series Analysis (5 Credits)

Lecture: Tue, 12-14, NWI-H11, Prof. Leutheuser

Exercises: Thu, 10-12, INF-2.01, Prof. Leutheuser

INF 307: Data Analysis I

(Module: Data Analytics, 8 Credits)

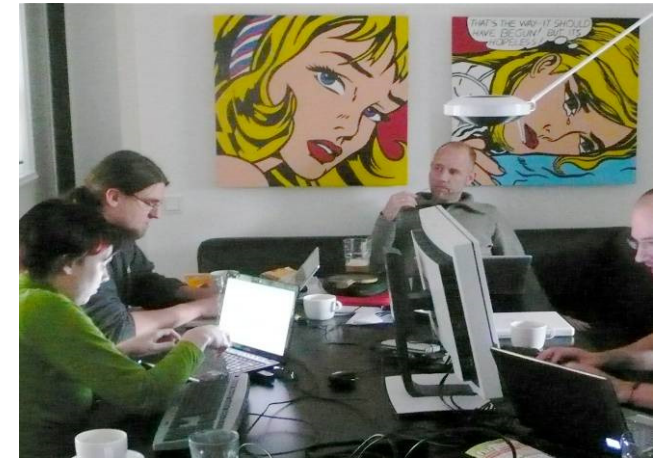
Lecture: Tue, 12-14, INF-H34, Prof. Jablonski

Exercises: Thu, 9-10, INF-S112, Dr. Ackermann

INF 316: Pattern recognition (5 Credits)

Lecture: Thu, 14-16, INF-S110, Prof. Henrich

Exercises: Fr, 12-13, INF-S110, J. Hartwig



INF 328: Process Aware Information System  
(Module: Advanced Information Systems, 5 Credits)

Lecture: Wed, 14-16, INF-S112, Dr. Ackermann

Exercises: to be announced

INF 330: Computational Geometry II (5 Credits)

Lecture: Wed, 10-12, INF-S112, Dr. Stehn

Exercises: Tue, 10-12, INF-S112, Dr. Stehn

### Courses in summer term 2024

INF 202: Computer graphics I (5 Credits)

Lecture: Mon, 14-16, INF-H34, Prof. Guthe

Exercises: Tue, 12-13 + 14-15, INF-S110, K. Liu

Wed, 12-13, INF-S110, K. Liu

INF 218: Data Analysis and Deep Learning in Python (5 Credits)

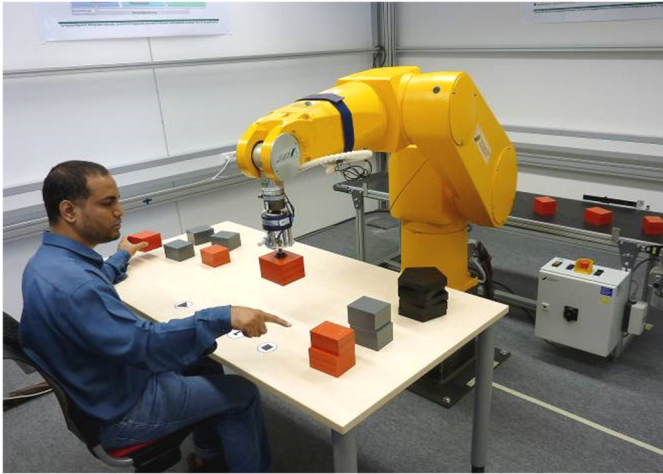
Lecture: Tue, 10-12, INF-H33, Prof. Müller

Exercises: to be announced

INF 219: Intelligent User Interfaces (5 Credits)

Lecture: Tue, 14-16, NWI-H9, Prof. Buschek

Exercises: Tue, 16-18, NWI-H9, Prof. Buschek



INF 321: Foundations of Semi-structured Data (5 Credits)

Lecture: Mon, 16-18, INF-S112, Prof. Martens  
 Exercises: Tue, 12-14, INF-2.40, Prof. Martens

INF 329: Computational Geometry I (5 Credits)

Lecture: Wed, 10-12, INF-S112, Dr. Stehn  
 Exercises: Tue, 10-12, INF-S112, Dr. Stehn

**Section B: Projects**

To be achieved: 30 to 31 Credits

Please contact the computer science chairs directly.

**Projects in both terms**

INF 351: Small Master Project  
 (Kleines Master-Projekt, 8 Credits)

INF 352: Large Master Project  
 (Großes Master-Projekt, 15 Credits)

At least one Big Master Seminar needed.

INF 353: Large Master Seminar  
 (Großes Master-Seminar, 8 Credits)

At most one Big Master Seminar allowed.

**Section C: Languages**

To be achieved: 15 to 24 Credits

The German language courses are provided by the Language Centre (Sprachenzentrum)

Please see: [www.sz.uni-bayreuth.de](http://www.sz.uni-bayreuth.de)

German Level A1 has to be achieved within first year.

**Section D: Master Thesis**

To be achieved: 30 Credits

INF 301: Master Thesis  
 (Masterarbeit, 30 Credits)

Please contact the computer science chairs directly.



**UNIVERSITÄT  
 BAYREUTH**

Valid for **summer term 2024** and **winter term 2024/25**

**Master's program  
 in Computer Science**



[www.ai.uni-bayreuth.de/de/studium/master-computer-science/](http://www.ai.uni-bayreuth.de/de/studium/master-computer-science/)

INF 222: Event Processing (5 Credits)

Lecture: Wed, 14-17, INF-S112, Prof. Mayer  
 Exercises: Wed, 17-18, INF-S112, Prof. Mayer

INF 305: High Performance Computing (8 LP)

Lecture: Mon, 8-10, INF-H34, Prof. Rauber  
 Wed, 8-10, INF-H34, Prof. Rauber  
 Exercises: Mon, 10-11:30, INF-S112, Dr. Werner

INF 307: Data Analysis II

(Module: Data Analytics, 8 Credits)

Lecture: Mon, 12-14, INF-H34, Prof. Jablonski/Dr. Ackermann

Exercises: Tue, 8-10, INF-H34, Dr. Ackermann

*For INF 307 (Data Analytics) both parts (Data Analysis I and Data Analysis II) are necessary*

INF 318: Computer graphics III (5 Credits)

Lecture: Tue, 8-10, Online, Prof. Guthe  
 Exercises: Thu, 13-14 + 14-15, INF-S112, K. Liu

INF 320: Parallel algorithms (5 Credits)

Lecture: Thu, 8-10, INF-S112, Dr. Korch  
 Exercises: Fri, 10-12, INF-S112, Dr. Korch