

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

A registration for courses is NOT needed. It is necessary that you register in advance for all your 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. Baltes
Exercises: Mon, 14-16, INF-S112, Prof. Baltes

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 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

<u>INF 321: Foundations of Semi-structured Data (5 Credits)</u>

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

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.



Valid for summer term 2024 and winter term 2024/25

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www.ai.uni-bayreuth.de/de/studium/master-computer-science/