Welcome to the master's program in Computer Science!

Total expenditure
Sum of credits to be achieved: 120
Duration: 4 semester resp. 2 years
Degree: Master of Science (M.Sc.)

Start of courses
Summer term (April - September): 20. April 2020

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
There is no registration for the courses nesseccary, but for each exam.
Please see: campusonline.uni-bayreuth.de

Section A: Informatics
To be achieved: 35 to 45 Credits

Courses in winter term 2019/20

INF 209 Animation and simulation
(Animation und Simulation, 5 Credits)
Lecture: Thu, 12-14, AI - S 110, Prof. Guthe
Exercises: Wed, 10-12, NWII - S 137, D. Müller

INF 214 Foundations of Modelling
(Grundlagen der Modellierung, 5 Credits)
Lecture: Mon, 16-18, NWII – H19, Prof. Westfechtel
Exercises: To be announced, J. Schröpfer

INF 217 Programming, Data Analysis and Deep Learning in Python
(Modul: Mensch-Computer-Interaktion II, 5 Credits)
Lecture: Tue, 10-12, AI - H33, Prof. Müller
Exercises: Tue, 12-14, AI – S 112, A. Fleig

INF 307 Data Analysis I
(Module: Data Analytics, 8 Credits)
Lecture: Tue, 12-14, AI - H34, Prof. Jablonski
Exercises: Tue, 16-18, AI – S 112, L. Ackermann

INF 316 Pattern recognition
(Mustererkennung, 5 Credits)
Lecture: Thu, 14-16, AI – S 110, Prof. Henrich
Exercises: Wed, 14-16, NWII – S 135, N. Höllerich

INF 317 Computer graphics II
(Computergraphik II, 5 Credits)
Lecture: Thu, 8-10, Al - S 110, Prof. Guthe
Exercises: Tue, 12-14, Al – S 110, C. Buchenau
     Thu, 10-12, Al – S 110, C. Buchenau

INF 326 Foundations of Data Management
(Foundations of Data Management, 5 Credits)
Lecture: Thu, 10-12, NWII – S 72, Prof. Martens
Exercises: Thu, 16-18, AI – S 112, M. Newerth

INF 327 Human-Computer Interaction III
(Mensch-Computer-Interaktion III, 5 Credits)
Lecture: Tue, 14-16, AI – H 33, Prof. Müller
Exercises: Wed, 12-14, AI – S 112, F. Fischer
     Wed, 14-16, AI – S 112, F. Fischer

Courses in summer term 2020

INF 218 Programming, Data Analysis and Deep Learning in Python
(Programmieren und Datenanalyse in Python, 5 Credits)
Lecture: Tue, 16-18, AI – S 110, Prof. Westfechtel
Exercises: To be announced, J. Schröpfer

INF 214 Foundations of Modelling
(Grundlagen der Modellierung, 5 Credits)
Lecture: Tue, 16-18, AI – S 110, Prof. Westfechtel
Exercises: Mon, 14-16, AI - S110, A. Fleig
     Tue, 10-12, AI – S110, A. Fleig
INF 305 High Performance Computing (8 Credits)
Lecture: Mon, 8-10, AI – H 34, Prof. Rauber
Lecture: Fr, 8-10, AI – H 34, Prof. Rauber
Exercises: Wed, 16-18, AI – S 112, J. Seiferth
Mon, 12-14, AI – INF 1.03, J. Seiferth

INF 307 Data Analysis II
(Modul: Data Analytics, 8 Credits)
Lecture: Mon, 12-14, AI – H 34, Prof. Jablonski
Exercises: Tue, 8-10, AI – S 112, Dr. Ackermann

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

INF 317 Computer graphics III
(Computergraphik III, 5 Credits)
Lecture: Tue, 8-10, AI – S 110, Prof. Guthe
Exercises: Thu, 13-14, AI – S 110, M. Reischl

INF 320 Parallel algorithms
(Parallele Algorithmen, 5 Credits)
Lecture: Thu, 8-10, AI – S 112, Dr. Korch
Exercises: Fr, 10-12, AI – S 112, Dr. Korch

INF 321 Foundations of Semi-structured Data
(Foundations of Semi-structured Data, 5 Credits)
Lecture: Mon, 16-18, AI – S 112 (Prof. Martens)
Exercises: Wed, 14-16, AI – H33 (Prof. Martens)

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 winter term 2019/20 and summer term 2020

Master’s program in Computer Science

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