

Osnabrück University - Department of Mathematics/Computer Science - Institute of Computer Science

Courses in English

Bachelor

summer term¹

no.	Identifier	German title	English title	Contact hours ⁵	ECTS	Dependencies	Frequency
1.	INF-INF-SYS-RN	Rechnernetze	Computer Networks	6 (L3+T3)	9	expected: Introduction to Algorithms and Data Structures	annually
2.	INF-INF-KI-6-M	Entwurf mikroelektronischer Systeme	Design of Microelectronic Systems	4 (L2+T2)	6	expected: Introduction to Technical Computer Science	annually
3.	INF-ESS-K	Konstruktion eingebetteter Softwaresysteme	Embedded Software System Construction	6 (L4+T2)	9	recommended: Introduction to Embedded Software Systems	annually
4.	CS-BP-NI	<i>Machine Learning</i> ³	<i>Machine Learning</i> ³	6 (L4+T2)	12	recommended: Analysis 1 or Linear Algebra 1 or Mathematics for natural sciences I	annually
5.	INF-INF-SYS-6-B	Betriebssystembau	Operating System Construction	4 (L2+T2) or 6 (L2+T4)	6 or 9	recommended: Operating Systems	annually
6.	CS-BWP-MCS	<i>Scientific Programming in Python</i> ³	<i>Scientific Programming in Python</i> ³	2 (L2)	4	expected: Introduction to Algorithms and Data Structures	annually
7.	INF-ESS-BPG	Bachelor Projektgruppe	Bachelor Project Group	6 (P6)	9	expected: Programming Lab	annually
8.	INF-GI-B-VFG-y	Vertiefung Fernerkundung und Geoinformatik y ⁴	Advanced Remote Sensing and Geoinformatics y ⁴	4 (S2+S2)	6	recommended: Digital Image Analysis	annually
9.	INF-INF-BS1	Informatik-Seminar ²	Computer Science Seminar ²	2 (S2)	3	expected: Introduction to Algorithms and Data Structures, topic dependent	annually

winter term¹

no.	Identifier	German title	English title	Contact hours ⁵	ECTS	Dependencies	Frequency
1.	INF-INF-ALG-6-X	Approximationsalgorithmen	Approximation Algorithms	4 (L2+T2)	6	expected: Introduction to Algorithms and Data Structures desirable: Introduction to Theoretical Computer Science desirable: Combinatorial Optimization	every second year
2.	CS-BWP-INF	<i>Computer Vision</i> ³	<i>Computer Vision</i> ³	6 (L4+T2)	12	strongly recommended: <i>Neuroinformatics</i>	annually
3.	CS-BP-NI	<i>Neuroinformatics</i> ³	<i>Neuroinformatics</i> ³	6 (L4+T2)	12	recommended: Analysis 1 or Linear Algebra 1 or Mathematics for natural sciences I	annually
4.	INF-INF-SYS-6-S	IT- und Netzwerksicherheit	IT and Network Security	4 (L2+T2) or 6 (L3+T3)	6 or 9	none	every second year
5.	INF-INF-MK-9-K	Knowledge-based Systems: Machine Learning and Knowledge Engineering	Knowledge-based Systems: Machine Learning and Knowledge Engineering	6 (L4+T2)	9	expected: Database Systems expected: Artificial Intelligence	annually
6.	INF-GI-B-VFG-y	Vertiefung Fernerkundung und Geoinformatik y ⁴	Advanced Remote Sensing and Geoinformatics y ⁴	4 (S2+S2)	6	recommended: Digital Image Analysis	annually
7.	INF-INF-BS1	Informatik-Seminar ²	Computer Science Seminar ²	2 (S2)	3	expected: Introduction to Algorithms and Data Structures, topic dependent	annually

remarks:

¹ The given semester serves only as a hint when the course was last taught.

² There are multiple seminars with changing topics. One seminar per semester in English. Other seminars can be visited; talk and write-up can be in English.

³ Import from the Institute of Cognitive Science

⁴ There are multiple seminars with changing topics.

⁵ L: lecture, P: practical course, S: seminar, T: tutorial

The **Language Center** offers different courses from level A1 to C1, for example "German as a foreign language".