

	<b>CMS-LM-BAS</b>	<b>Foundations of Logical Modeling</b>		Responsible Lecturer:	Prof. Dr. Markus Krötzsch						M1101-CMS70
	Compulsory Module with Electives Catalogue (Setpoint: 8 SWS)										
Nr.	Course Title	Faculty	Lecturer	SWS Effort	Language	Semester	Examiner	Examination performance	Duration	Weighting according to SWS	Course number Selma
1	Foundations of Knowledge Representation	INF	Sebastian Rudolph Hannes Straß	2V/2Ü	english	Winter	Sebastian Rudolph Hannes Straß	Oral Assessment		4	K1107-MA0057
2	Foundations of Logic Programming	INF	Sebastian Rudolph Sarah Alice Gaggl	2V	english	Winter	Sebastian Rudolph Sarah Alice Gaggl	Written Examination	35 min	2	K1107-MA0048V
3	Tutorial Logic Programming Engineering	INF	Sebastian Rudolph Christel Baier Sascha Klüppelholz	2 SWS Tutorium	english	Winter	Christel Baier Sascha Klüppelholz	Written Examination	35 min	2	K1101-MA0049T

<b>CMS-LM-MOC</b>		<b>Models of Computation</b>		Responsible Lecturer:		Prof. Dr. Markus Krötzsch				M1101-CMS72	
Katalogmodul (Soll: 12 SWS)											
Eine Lehrveranstaltung des Katalogs CMS-LM-MOC kann nicht gewählt werden, wenn diese bereits in einem anderen Pflichtmodul mit wahlpflichtigem Inhalt bzw. in einem Wahlpflichtmodul der Grundlagenausbildung im Masterstudiengang Computational Modeling and Simulation gewählt wurde.											
Please note that any course of the catalogue CMS-LM-MOC cannot be selected if it has been already selected for another CMS-module.											
Die Modulnote ergibt sich aus dem nach Semesterwochenstunden (SWS) gewichteten Durchschnitt der Noten der Prüfungsleistungen. The module grade is the average of the grades of the individual examinations, weighted by course effort (SWS, lecture hours per week).											
Nr.	Course Title	Faculty	Lecturer	SWS Effort	Language	Semester	Examiner	Examination performance	Duration	Weighting according to SWS	Course number Selma
1	Advanced Logics	INF	Christel Baier Simon Jantsch Jakob Piribauer	4V/2Ü	english	Summer	Christel Baier	Oral Assessment	30 min	6	K1101-MA0002
2	Complexity Theory	INF	Markus Krötzsch	4V/2Ü	english	Winter 2021/22	Markus Krötzsch	Oral Assessment	25 min	6	K1101-MA0022
3	Database Theory	INF	Sebastian Rudolph	4V/2Ü	english	Summer	Sebastian Rudolph	Oral Assessment		6	K1107-MA0018
4	Finite and Algorithmic Model Theory	INF	Sebastian Rudolph	2V/2Ü	english	Summer	Sebastian Rudolph	Oral Assessment		4	K1107-MA0019
5	Lab Course Modeling and Automated Verification	INF	Christel Baier Sascha Klüppelholz	2 SWS Übung	english	every	Sascha Klüppelholz	Project Report		2	K1101-MA0020X
6	Model Checking	INF	Christel Baier Sascha Klüppelholz	4V/4Ü	english	Winter	Christel Baier Sascha Klüppelholz	Oral Assessment	30 min	8	K1101-MA0019
7	Rule-Based Paradigms in Knowledge Representation	INF	Markus Krötzsch Stefan Ellmauthaler	2 SWS Seminar	english	Winter	Markus Krötzsch	1. Seminar Paper 2. Oral Presentation		2	K1101-MA0007S
8	Seminar Data Aware Processes	INF	Markus Krötzsch Stephan Mennicke	2 SWS Seminar	german/ english	Summer	Markus Krötzsch	0. Seminar Paper 2. Oral Presentation		2	K1101-MA0030S
9	Seminar Selected Topics in Logic and Verification	INF	Christel Baier Sascha Klüppelholz	2 SWS Seminar	english	every	Christel Baier	1. Seminar Paper 2. Oral Presentation		2	K1101-MA0021S
10	Term Rewriting Systems	INF	Franz Baader	4V/2Ü	english	Winter	Franz Baader	Oral Assessment		6	K1101-MA0025

<b>CMS-LM-AI</b>	<b>Artificial Intelligence</b>	Responsible Lecturer:					Prof. Dr. Markus Krötzsch				M1101-CMS73
Katalogmodul (Soll: 12 SWS)											
Eine Lehrveranstaltung des Katalogs CMS-LM-AI kann nicht gewählt werden, wenn diese bereits in einem anderen Pflichtmodul mit wahlpflichtigem Inhalt bzw. in einem Wahlpflichtmodul der Grundlagenausbildung im Masterstudiengang Computational Modeling and Simulation gewählt wurde.											
Please note that any course of the catalogue CMS-LM-AI cannot be selected if it has been already selected for another CMS-module.											
Die Modulnote ergibt sich aus dem nach Semesterwochenstunden (SWS) gewichteten Durchschnitt der Noten der Prüfungsleistungen. The module grade is the average of the grades of the individual examinations, weighted by course effort (SWS, lecture hours per week).											
Nr.	Course Title	Faculty	Lecturer	SWS Effort	Language	Semester	Examiner	Examination performance	Duration	Weighting according to SWS	Course number Selma
1	Database Theory	INF	Sebastian Rudolph	4V/2Ü	english	Summer	Sebastian Rudolph	Oral Assessment		6	K1107-MA0018
2	Description Logic	INF	Franz Baader	4V/2Ü	english	Summer	Franz Baader	Oral Assessment	25 min	6	K1101-MA0016
3	Formal Argumentation for Artificial Intelligence	INF	Marcos Cramer	2V/2Ü	english	Winter	Marcos Cramer	Oral Assessment	20 min	4	K1107-MA0013
4	Fuzzy Description Logic	INF	Stefan Borgwardt	2V/2Ü	english	Winter	Stefan Borgwardt	Oral Assessment	20 min	4	K1101-MA0001
5	Human Reasoning and the Weak Completion Semantics	INF	Steffen Hölldobler Emmanuelle Dietz-Saldanha	4V/2Ü	english	Winter	Steffen Hölldobler	Oral Assessment	30 min	6	K1107-MA0012
6	Integer Programming	INF	Björn Andres	3V/1Ü	english	Winter	Björn Andres	Written Examination	90 min	4	K1107-MA0022
7	Introduction to Non-monotonic Reasoning	INF	Franz Baader Anni-Yasmin Turhan	2V/2Ü	english	Winter	Franz Baader Anni-Yasmin Turhan	Oral Assessment		4	K1101-MA0014
8	Linear Programming	INF	Björn Andres Silvia Di Gregorio	3V/1Ü	english	Summer	Björn Andres	Written Examination / Oral Presentation		4	K1107-MA0011
9	Logic Based Ontology Engineering	INF	Stefan Borgwardt Patrick Koopmann	2V/2Ü	english	Summer	Patrick Koopmann	Oral Assessment	20 min	4	K1101-MA0018
10	Seminar Knowledge Representation and Reasoning	INF	Steffen Hölldobler	2 Seminar	english	every	Steffen Hölldobler	Oral Presentation	30 min	2	K1107-MA0004S
11	Seminar Theoretical Computer Science	INF	Franz Baader Anni-Yasmin Turhan	2 Seminar	english	every	Franz Baader Anni-Yasmin Turhan	1. Seminar Paper 2. Oral Presentation		2	K1101-MA0013S

<b>CMS-LM-ADV</b>	<b>Advanced Logical Modeling</b>	Responsible Lecturer:	Prof. Dr. Markus Krötzsch	M1101-CMS74
Compulsory Module with Electives Catalogue (Setpoint: 8 SWS)				
Eine Lehrveranstaltung des Katalogs CMS-LM-ADV kann nicht gewählt werden, wenn diese bereits in einem anderen Pflichtmodul mit wahlpflichtigem Inhalt bzw. in einem Wahlpflichtmodul der Grundlagenausbildung im Masterstudiengang Computational Modeling and Simulation gewählt wurde.				
Please note that any course of the catalogue CMS-LM-ADV cannot be selected if it has been already selected for another CMS-module.				
Die Modulnote ergibt sich aus dem nach Semesterwochenstunden (SWS) gewichteten Durchschnitt der Noten der Prüfungsleistungen. The module grade is the average of the grades of the individual examinations, weighted by course effort (SWS, lecture hours per week).				

Nr.	Course Title	Faculty	Lecturer	SWS Effort	Language	Semester	Examiner	Examination performance	Duration	Weighting according to SWS	Course number Selma
1	Advanced Logics	INF	Christel Baier Simon Jantsch Jakob Piribauer	4V/2Ü	english	Summer	Christel Baier	Oral Assessment	30 min	6	K1101-MA0002
2	Complexity Theory	INF	Markus Krötzsch	4V/2Ü	english	Winter 2021/22	Markus Krötzsch	Oral Assessment	25 min	6	K1101-MA0022
3	Database Theory	INF	Sebastian Rudolph	4V/2Ü	english	Summer	Sebastian Rudolph	Oral Assessment		6	K1107-MA0018
4	Description Logic	INF	Franz Baader	4V/2Ü	english	Summer	Franz Baader	Oral Assessment	25 min	6	K1101-MA0016
5	Finite and Algorithmic Model Theory	INF	Sebastian Rudolph	2V/2Ü	english	Summer	Sebastian Rudolph	Oral Assessment		4	K1107-MA0019
6	Formal Argumentation for Artificial Intelligence	INF	Marcos Cramer	2V/2Ü	english	Winter	Marcos Cramer	Oral Assessment	20 min	4	K1107-MA0013
7	Fuzzy Description Logic	INF	Stefan Borgwardt	2V/2Ü	english	Winter	Stefan Borgwardt	Oral Assessment	20 min	4	K1101-MA0001
8	Human Reasoning and the Weak Completion Semantics	INF	Steffen Hölldobler Emmanuelle Dietz-Saldanha	4V/2Ü	english	Winter	Steffen Hölldobler	Oral Assessment	30 min	6	K1107-MA0012
9	Integer Programming	INF	Björn Andres	3V/1Ü	english	Winter	Björn Andres	Written Examination	90 min	4	K1107-MA0022
10	Introduction to Non-monotonic Reasoning	INF	Franz Baader Anni-Yasmin Turhan	2V/2Ü	english	Winter	Franz Baader Anni-Yasmin Turhan	Oral Assessment		4	K1101-MA0014
11	Lab Course Modeling and Automated Verification	INF	Christel Baier Sascha Klüppelholz	2 SWS Übung	english	every	Sascha Klüppelholz	Project Report		2	K1101-MA0020X
12	Linear Programming	INF	Björn Andres Silvia Di Gregorio	3V/1Ü	english	Summer	Björn Andres	Written Examination / Oral Presentation		4	K1107-MA0011
13	Logic Based Ontology Engineering	INF	Stefan Borgwardt Patrick Koopmann	2V/2Ü	english	Summer	Patrick Koopmann	Oral Assessment	20 min	4	K1101-MA0018

14	Model Checking	INF	Christel Baier Sascha Klüppelholz	4V/4Ü	english	Winter	Christel Baier Sascha Klüppelholz	Oral Assessment	30 Minuten	8	K1101-MA0019
15	Rule-Based Paradigms in Knowledge Representation	INF	Markus Krötzsch Stefan Ellmauthaler	2 SWS Seminar	english	Winter	Markus Krötzsch	1. Seminar Paper 2. Oral Presentation		2	K1101-MA0007S
16	Seminar Data Aware Processes	INF	Markus Krötzsch Stephan Mennicke	2 SWS Seminar	german/ english	Summer	Markus Krötzsch	1. Seminar Paper 2. Oral Presentation		2	K1101-MA0030S
17	Seminar Knowledge Representation and Reasoning	INF	Steffen Hölldobler	2 SWS Seminar	english	every	Steffen Hölldobler	Oral Presentation	30 Minuten	2	K1107-MA0004S
18	Seminar Selected Topics in Logic and Verification	INF	Christel Baier Sascha Klüppelholz	2 SWS Seminar	english	every	Christel Baier	1. Seminar Paper 2. Oral Presentation		2	K1101-MA0021S
19	Seminar Theoretical Computer Science	INF	Franz Baader Anni-Yasmin Turhan	2 SWS Seminar	english	every	Franz Baader Anni-Yasmin Turhan	1. Seminar Paper 2. Oral Presentation		2	K1101-MA0013S
20	Term Rewriting Systems	INF	Franz Baader	4V/2Ü	english	Winter	Franz Baader	Oral Assessment		6	K1101-MA0025

<b>CMS-LM-TEA</b>	<b>Logical Modeling Teamproject</b>			Responsible Lecturer:	Prof. Dr. Markus Krötzsch		M1101-CMS75	
Pflichtmodul im Track LM	Compulsory Module for Track LM						<b>PO 2020</b>	
Ein Teamprojekt kann nicht gewählt werden, wenn dieses bereits in einem anderen Pflichtmodul mit wahlpflichtigem Inhalt im Masterstudiengang Computational Modeling and Simulation gewählt wurde.								
Please note that any teamproject of the catalogue CMS-LM-TEA cannot be selected if it has been already selected for another CMS-module.								
<b>Title</b>	<b>Faculty</b>	<b>Supervisor</b>	<b>Effort</b>	<b>Language</b>	<b>Semester</b>	<b>Examiner</b>	<b>Examination performance</b>	<b>Course number Selma</b>
Team Project	any	any	8 SWS Projektbearbeitung	german/ english	Summer	after confirmation Examination Committee CMS	1. Written Project Report 70 hr 2. Oral Presentation 30 min	any
				Projektarbeit / Project Report wird einfach gewertet. Referat / Oral Presentation wird einfach gewertet.				