

CMS-LM-MOC		Models of Computation					Responsible Lecturer: Prof. Dr. Markus Krötzsch				M1101-CMS72
Katalogmodul (Soll: 12 SWS)		Catalogue Module (Setpoint: 12 SWS (Lecture hours per week))									
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, semester-week-hours).											
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	4V/2Ü	English	Summer	Christel Baier	Oral Assessment	30 min	6	K1101-MA0002
2	Automata and Logic	INF	Franz Baader	4V/2Ü	English	Winter	Franz Baader	Oral Assessment	25 min	6	K1101-MA0003
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	Foundations of Complexity Theory	INF	David Carral Martinez	2V/2Ü	English	Winter	David Carral	Oral Assessment		4	K1101-MA0021
6	Introduction to Automatic Structures	INF	Anni-Yasmin Turhan	2V/2Ü	English	Winter	Anni-Yasmin Turhan	Oral Assessment	20 min	4	K1101-MA0015
7	Introduction to Formal Concept Analysis	INF	Sebastian Rudolph	2V/2Ü	English	Winter	Sebastian Rudolph	Oral Assessment		4	K1107-MA0055
8	Lab Course Modeling and Automated Verification	INF	Christel Baier Sascha Klüppelholz	2 SWS Exercise	English	every	Sascha Klüppelholz	Project Report		2	K1101-MA0020X
9	Seminar Data-Aware Processes	INF	Markus Krötzsch	2 SWS Seminar	German/ English	Summer	Markus Krötzsch	1. Seminar Paper 2. Presentation		2	K1101-MA0030S
10	Seminar Selected Topics in Logic and Verification	INF	Christel Baier Sascha Klüppelholz	2 SWS Seminar	English	every	Christel Baier	1. Seminar Paper 2. Presentation		2	K1101-MA0021S

CMS-LM-AI		Artificial Intelligence			Modulverantwortlicher Dozent:		Prof. Dr. Markus Krötzsch				M1101-CMS73
Katalogmodul (Soll: 12 SWS)		Catalogue Module (Setpoint: 12 SWS (Lecture hours per week))									
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, semester-week-hours).											
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	Fuzzy Description Logic	INF	Stefan Borgwardt	2V/2Ü	English	Winter	Stefan Borgwardt	Oral Assessment	20 min	4	K1101-MA0001
4	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
5	Introduction to Formal Argumentation	INF	Marcos Cramer	2V/2Ü	English	Winter	Marcos Cramer	Oral Assessment	20 min	4	K1107-MA0013
6	Introduction to Formal Concept Analysis	INF	Sebastian Rudolph	2V/2Ü	English	Winter	Sebastian Rudolph	Oral Assessment		4	K1107-MA0055
7	Logic-Based Ontology Engineering	INF	Stefan Borgwardt Patrick Koopmann	2V/2Ü	English	Summer	Stefan Borgwardt Patrick Koopmann	Oral Assessment	20 min	4	K1101-MA0018
8	Seminar Knowledge Representation and Reasoning	INF	Steffen Hölldobler	2 Seminar	English	every	Steffen Hölldobler	Presentation	30 min	2	K1107-MA0004S
9	Seminar Theoretical Computer Science	INF	Franz Baader Anni-Yasmin Turhan	2 Seminar	English	every	Franz Baader Anni-Yasmin Turhan	1. Seminar Paper 2. Presentation		2	K1101-MA0013S
10	Linear Programming	INF	Björn Andres Silvia Di Gregorio	3V/1Ü	English	Summer	Björn Andres			4	K1107-MA0011

CMS-LM-ADV		Advanced Logical Modeling			Responsible Lecturer: Prof. Dr. Markus Krötzsch		M1101-CMS74				
Katalogmodul (Soll: 8 SWS)		Catalogue Module (Setpoint: 8 SWS (Lecture hours per week))									
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, semester-week-hours).											
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	4V/2Ü	English	Summer	Christel Baier	Oral Assessment	30 min	6	K1101-MA0002
2	Automata and Logic	INF	Franz Baader	4V/2Ü	English	Winter	Franz Baader	Oral Assessment	25 min	6	K1101-MA0003
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	Foundations of Complexity Theory	INF	David Carral Martinez	2V/2Ü	English	Winter	David Carral	Oral Assessment		4	K1101-MA0021
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	Introduction to Automatic Structures	INF	Anni-Yasmin Turhan	2V/2Ü	English	Winter	Anni-Yasmin Turhan	Oral Assessment	20 min	4	K1101-MA0015
10	Introduction to Formal Argumentation	INF	Marcos Cramer	2V/2Ü	English	Winter	Marcos Cramer	Oral Assessment	20 min	4	K1107-MA0013
11	Introduction to Formal Concept Analysis	INF	Sebastian Rudolph	2V/2Ü	English	Winter	Sebastian Rudolph	Oral Assessment		4	K1107-MA0055
12	Lab Course Modeling and Automated Verification	INF	Christel Baier Sascha Klüppelholz	2 SWS Exercise	English	every	Sascha Klüppelholz	Project Report		2	K1101-MA0020X
13	Logic-Based Ontology Engineering	INF	Stefan Borgwardt Patrick Koopmann	2V/2Ü	English	Summer	Stefan Borgwardt Patrick Koopmann	Oral Assessment	20 min	4	K1101-MA0018
14	Seminar Data-Aware Processes	INF	Markus Krötzsch	2 SWS Seminar	German/English	Summer	Markus Krötzsch	1. Seminar Paper 2. Presentation		2	K1101-MA0030S
15	Seminar Knowledge Representation and Reasoning	INF	Steffen Hölldobler	2 SWS Seminar	English	every	Steffen Hölldobler	Presentation	30 min	2	K1107-MA0004S
16	Seminar Selected Topics in Logic and Verification	INF	Christel Baier Sascha Klüppelholz	2 SWS Seminar	English	every	Christel Baier	1. Seminar Paper 2. Presentation		2	K1101-MA0021S
17	Seminar Theoretical Computer Science	INF	Franz Baader Anni-Yasmin Turhan	2 SWS Seminar	English	every	Franz Baader Anni-Yasmin Turhan	1. Seminar Paper 2. Presentation		2	K1101-MA0013S
18	Linear Programming	INF	Björn Andres Silvia Di Gregorio	3V/1Ü	English	Summer	Björn Andres			4	K1107-MA0011

CMS-LM-TEA	Module Logical Modeling Teamproject			Responsible Lecturer:	Prof. Dr. Markus Krötzsch		M1101-CMS75	
Pflichtmodul im Track LM	Compulsory Module for Track LM						PO 2020	
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.								
Title	Faculty	Supervisor	SWS Effort	Language	Semester	Examiner	Examination performance	Course number Selma
Teamproject	chosen freely	chosen freely	8 SWS Project Processing	German/ English	Summer	after confirmation by examination board CMS	1. Project Report 70 Hours 2. Oral Presentation 30 MInutes	any
			Project Report will be single weighted. Oral Presentation will be single weighted.					