

Modul CMS-EE-EL1		Computational Modelling in Energy Economics Basics				Responsible Lecturer:		Prof. Dr. Dominik Möst		M1100-CMS51	
Katalogmodul (Soll: 8 SWS)		Catalogue Module (Setpoint: 8 SWS Lecture hours per week)									
Eine Lehrveranstaltung des Katalogs CMS-EE-EL1 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-EE-EL1 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 User Interfaces	INF	Raimund Dachzelt Anke Lehmann	2V/2Ü	German/English	Summer	Raimund Dachzelt Anke Lehmann	Written Examination	90 min	4	K1104-MA0001
2	Applied Power System Economics	Wiwi	Dominik Möst	4 Seminar	English	Winter	Dominik Möst	1. Seminar Paper 2. Presentation		4	K1001-14M607S
3	Data Visualization	INF	Raimund Dachzelt Stefan Gumhold	2V/2Ü	German/English	Winter	Raimund Dachzelt Stefan Gumhold	Written Examination 90 min/Oral Assessment 30 min <=10 Participants		4	K1104-CMS03
4	Design Patterns and Frameworks	INF	Uwe Aßmann Sebastian Götz	2V/2Ü	English	Winter	Uwe Aßmann Sebastian Götz	Written Examination 90 min/Oral Assessment 15 min < 20 Participants		4	K1104-MA0020
5	Digitization and Data Analytics: Architectures, Methods and Consequences	INF	Wolfgang Nagel Sunna Torge	2V/2Ü	English	Summer	Wolfgang Nagel	Written Examination 90 min/Oral Assessment 20 min <= 10 Participants		4	K1102-ZIH03
6	Hochleistungsrechner und ihre Programmierung / High performance computers and their programming	INF	Wolfgang Nagel Robert Schöne	2V/2Ü	English	Winter	Wolfgang Nagel Robert Schöne	Written Examination 90 min/Oral Assessment 30 min <=10 Participants		4	K1102-MA0002
7	Interactive Information Visualization	INF	Raimund Dachzelt Anke Lehmann	2V/2Ü	German/English	Summer	Raimund Dachzelt Anke Lehmann	Written Examination	90 min	4	K1104-MA0004
8	Introduction to Mathematical Biology 1	INF	Andreas Deutsch Lutz Bruschi	2V/1Ü	English	Winter 20/21	Andreas Deutsch Lutz Bruschi	Oral Assessment	30 minutes	3	K1102-ZIH001
9	Introduction to Mathematical Biology 2	INF	Andreas Deutsch Lutz Bruschi	2V/1Ü	English	Winter 21/22	Andreas Deutsch Lutz Bruschi	Oral Assessment	30 minutes	3	K1102-ZIH002
10	Knowledge Graphs	INF	Markus Krötzsch Maximilian Marx	2V/2Ü	English	Winter	Markus Krötzsch	Written Examination 90 min/Oral Assessment 30 min < 10 Participants		4	K1101-MA0024
11	Machine Learning 1	INF	Björn Andres	2V/2Ü	English	Winter	Björn Andres	Written Examination 90 min/Oral Assessment 30 min < 10 Participants		4	K1107-MA0060
12	Machine Learning 2	INF	Björn Andres	2 Seminar	English	Summer	Björn Andres	Oral Presentation	30 min	2	K1107-MA0062S

13	Numerik mit partiellen Differentialgleichungen - Numerical Mathematics of Partial Differential Equations - Further Concepts	MATH	Oliver Sander Patrick Jaap	3V/1Ü	German/English	Summer	Oliver Sander	Oral Assessment (Group Test) 20 min	4	K0108-40545x
14	Numerik partieller Differentialgleichungen / Numerics with partial differential equations	MATH	Oliver Sander Patrick Jaap	3V/1Ü	German/English	Winter	Oliver Sander	Oral Assessment (Group Test) 20 min	4	K0108-40543x
15	Particle Methods	INF	Ivo Sbalzarini	2V/2Ü	English	Summer	Ivo Sbalzarini	Written Examination 90 min/Oral Assessment 30 min <=10 Participants	4	K1107-MA0006
16	Problem Solving and Search in Artificial Intelligence	INF	Lucía Gómez Álvarez Sarah Alice Gaggli	2V/2Ü	English	Winter	Sebastian Rudolph	Written Examination 90 min/Oral Assessment 30 min < 10 Participants	4	K1107-MA0056
17	Scientific Programming - Advanced Aspects	MATH	Wolfgang Walter Simon Praetorius	3V/1Ü	German/English	every	Wolfgang Walter Simon Praetorius	Oral Assessment (Group Test) 20 min	4	K0108-40643x
18	Scientific Visualization	INF	Stefan Gumhold	2V/2Ü	English	Summer	Stefan Gumhold	Written Examination 90 min/Oral Assessment 20 min <=15 Participants	4	K1104-MA0032
19	Transactional Information Systems	INF	Wolfgang Lehner Dirk Habich	2V/2Ü	English	Winter	Wolfgang Lehner Dirk Habich	Written Examination 90 min/Oral Assessment 30 min < 10 Participants	4	K1106-MA0020
20	User Interface Engineering	INF	Raimund Dachzelt Anke Lehmann	2V/2Ü	German/English	Winter	Raimund Dachzelt Anke Lehmann	Written Examination 90 min/Oral Assessment 20 min <=10 Participants	4	K1104-MA0024
21	Wissenschaftliches Rechnen - Fortgeschrittene Aspekte = Scientific Arithmetic - Advanced Aspects	MATH	Axel Voigt Marco Salvalaglio	3V/1Ü	englisch	Summer	Axel Voigt Marco Salvalaglio	Oral Assessment (Group Test) 20 min	4	K0108-40642x

Modul CMS-EE-SCEE	Case Studies in Energy Economics			Responsible Lecturer:		Prof. Dr. Dominik Möst		M1100-CMS53
Compulsory Module								
Lehrveranstaltung darf nicht im Modul CMS-SEM gewählt werden.								
Course may not be selected in the CMS-SEM module.								
Course title	Faculty	Lecturer	SWS Effort	Language	Semester	Examiner	Examination performance	Course number Selma
Case Studies in Energy Economics	Wiwi	Dominik Möst Christoph Zöphel	2 SWS Seminar	English	Summer	Dominik Möst	1. Seminar Paper 60 Hours 2. Oral Presentation 30 min	K1001-EXM040S

Modul CMS-EE-LSEE	Literature Studies in Energy Economics			Responsible Lecturer:	Prof. Dr. Dominik Möst			M1100-CMS54
Compulsory Module								
Lehrveranstaltung darf nicht im Modul CMS-SEM gewählt werden.								
Course may not be selected in the CMS-SEM module.								
Course title	Faculty	Lecturer	SWS Effort	Language	Semester	Examiner	Examination performance	Course number Selma
Literaturanalyse zu aktuellen Fragestellungen der Energiewirtschaft / Literature Studies in Energy Economics	Wiwi	Dominik Möst Constantin Dierstein Dirk Hladik	2 SWS Seminar	English	Winter	Dominik Möst	1. Seminar Paper 90 Hours 2. ungraded Oral Presentation 30 min	K1001-14M054S

Modul CMS-EE-REEP	Resource Economics and Environmental Policy			Responsible Lecturer:	Prof. Dr. Dominik Möst			M1100-CMS55
Compulsory Module								
Course title	Faculty	Lecturer	SWS Effort	Language	Semester	Examiner	Examination performance	Course number Selma
Ressourcenökonomie und Umweltpolitik / Resource Economics and Environmental Policy	Wiwi	Dominik Möst Matthew Schmidt	2 V/2Ü 2 SWS Project Processing	German (with English slides)	Summer	Dominik Möst	1. Written Examination 90 min/Oral Assessment 45 min <=10 Participants 2. Project Report 150 Hours	K1001-14M040

Modul CMS-EE-EL2		Computational Modelling in Energy Economics Advanced				Responsible Lecturer:	Prof. Dr. Dominik Möst				M1100-CMS52
Katalogmodul (Soll: 8 SWS)		Catalogue Module (Setpoint: 8 SWS Lecture hours per week)									
Eine Lehrveranstaltung des Katalogs CMS-EE-EL2 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-EE-EL2 cannot be selected if it has been already selected for another CMS-module.											
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Nr.	Course title	Faculty	Lecturer	SWS Effort	Language	Semester	Examiner	Examination performance	Duration	Weighting according to SWS	Course number Selma
1	Advanced User Interfaces	INF	Raimund Dachzelt Anke Lehmann	2V/2Ü	German/ English	Summer	Raimund Dachzelt Anke Lehmann	Written Examination	90 min	4	K1104-MA0001
2	Data Visualization	INF	Raimund Dachzelt Stefan Gumhold	2V/2Ü	German/ English	Winter	Raimund Dachzelt Stefan Gumhold	Written Examination 90 min/Oral Assessment 30 min <= 10 Participants		4	K1104-CMS03
3	Design Patterns and Frameworks	INF	Uwe Aßmann Sebastian Götz	2V/2Ü	English	Winter	Uwe Aßmann Sebastian Götz	Written Examination 90 min/Oral Assessment 15 min < 20 Participants		4	K1104-MA0020
4	Digitization and Data Analytics: Architectures, Methods and Consequences	INF	Wolfgang Nagel Sunna Torge	2V/2Ü	English	Summer	Wolfgang Nagel	Written Examination 90 min/Oral Assessment 20 min <= 10 Participants		4	K1102-ZIH03
5	Hochleistungsrechner und ihre Programmierung / High performance computers and their programming	INF	Wolfgang Nagel Robert Schöne	2V/2Ü	English	Winter	Wolfgang Nagel Robert Schöne	Written Examination 90 min/Oral Assessment 30 min <= 10 Participants		4	K1102-MA0002
6	Interactive Information Visualization	INF	Raimund Dachzelt Anke Lehmann	2V/2Ü	German/ English	Summer	Raimund Dachzelt Anke Lehmann	Written Examination	90 min	4	K1104-MA0004
7	Knowledge Graphs	INF	Markus Krötzsch Maximilian Marx	2V/2Ü	English	Winter	Markus Krötzsch	Written Examination 90 min/Oral Assessment 30 min < 10 Participants		4	K1101-MA0024
8	Machine Learning 1	INF	Björn Andres	2V/2Ü	English	Winter	Björn Andres	Written Examination 90 min/Oral Assessment 30 min < 10 Participants		4	K1107-MA0060
9	Machine Learning 2	INF	Björn Andres	2 Seminar	English	Summer	Björn Andres	Oral Presentation	30 min	2	K1107-MA0062S
10	Particle Methods	INF	Ivo Sbalzarini	2V/2Ü	English	Summer	Ivo Sbalzarini	Written Examination 90 min/Oral Assessment 30 min <= 10 Participants		4	K1107-MA0006
11	Problem Solving and Search in Artificial Intelligence	INF	Lucía Gómez Álvarez Sarah Alice Gaggl	2V/2Ü	English	Winter	Sebastian Rudolph	Written Examination 90 min/Oral Assessment 30 min < 10 Participants		4	K1107-MA0056
12	Scientific Visualization	INF	Stefan Gumhold	2V/2Ü	English	Summer	Stefan Gumhold	Written Examination 90 min/Oral Assessment 20 min <= 15 Participants		4	K1104-MA0032

13	Transactional Information Systems	INF	Wolfgang Lehner Dirk Habich	2V/2Ü	English	Winter	Wolfgang Lehner Dirk Habich	Written Examination 90 min/Oral Assessment 30 min < 10 Participants	4	K1106-MA0020
14	User Interface Engineering	INF	Raimund Dachzelt Anke Lehmann	2V/2Ü	German/ English	Winter	Raimund Dachzelt Anke Lehmann	Written Examination 90 min/Oral Assessment 20 min <= 10 Participants	4	K1104-MA0024
15	Numerik mit partiellen Differentialgleichungen - Numerical Mathematics of Partial Differential Equations - Further Concepts	MATH	Oliver Sander Patrick Jaap	3V/1Ü	German/ English	Summer	Oliver Sander	Oral Assessment (Group Test) 20 min	4	K0108-40545x
16	Numerik partieller Differentialgleichungen / Numerics with partial differential equations	MATH	Oliver Sander Patrick Jaap	3V/1Ü	German/ English	Winter	Oliver Sander	Oral Assessment (Group Test) 20 min	4	K0108-40543x
17	Scientific Programming - Advanced Aspects	MATH	Wolfgang Walter Simon Praetorius	3V/1Ü	German/ English	every	Wolfgang Walter Simon Praetorius	Oral Assessment (Group Test) 20 min	4	K0108-40643x
18	Wissenschaftliches Rechnen - Fortgeschrittene Aspekte = Scientific Arithmetic - Advanced Aspects	MATH	Axel Voigt Marco Salvalaglio	3V/1Ü	englisch	Summer	Axel Voigt Marco Salvalaglio	Oral Assessment (Group Test) 20 min	4	K0108-40642x
19	Computational Fluid Dynamics	MW	Jochen Fröhlich Jordi Ventosa Molina	2V/2Ü	English	Winter	Jochen Fröhlich Jordi Ventosa Molina	Written Examination 120 min/Oral Assessment 20 min < 10 Participants	4	K1302-EX3040
20	Applied Power System Economics	Wiwi	Dominik Möst	4 Seminar	English	Winter	Dominik Möst	1. Seminar Paper 2. Presentation	4	K1001-14M607S