



# Lectures in English at Leibniz Universität Hannover

Academic Year and 2018/2019



Leibniz  
Universität  
Hannover

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# Faculty of Architecture and Landscape Sciences

## Architecture and Urban Design

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Bachelor Project Urban Design	Project	Quednau/ Schröder/ Rieniets	9
Master Project in History and Theory of Architecture	Project	Buchert/ Zibell/ Jager	12
Master Project Art	Special Offer Project	Haas	12
Master Project Design and Building Construction	Project	Furche/ Bohne	12
Master Project Technology in Architecture	Project	Becker	12
Master Project Architectural Design	Project	Léon/ Turkali/ Friedrich	12
Master Project Urban Design and Planning: Transversal City	Project	Schröder	12
Regional Building and Urban Planning: Sounds of the remote future	Short Project	Schröder	5
Physical Computing	Seminar	Becker/ Sardenberg	5
Digital Environments AR/VR	Seminar	Becker/ Sardenberg	5
Digital Fabrication: Robots in Architecture	Seminar	Becker/ Burger	5
Digital Simulation: Count, Measure, Display	Seminar	Becker/ Sardenberg	5
Crawl, walk, run – construct (Technology in Architecture)	Seminar	Aschmutat	5

### Summer Term 19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Bachelor Project Urban Design	Project	Quednau/ Schröder/ Rieniets	9
Master Project History and Theory of Architecture	Project	Buchert/ Zibell/ Jager	12
Master Project Art	Special Offer Project	Haas	12
Master Project Technology in Architecture	Project	Becker	12
Master Project Design and Building Construction	Project	Furche/ Bohne	12
Master Project Architectural Design	Project	Léon/ Turkali/ Friedrich	12
Master Project Urban Design and Planning	Project	Schröder/ Quednau/ Rieniets	12
Physical Computing	Seminar	Becker/ Sardenberg	5
Digital Environments AR/ VR	Seminar	Becker/ Sardenberg	5
Digital Fabrication: Robots in	Seminar	Becker/ Burger	5

Title/Module	Type	Lecturer/Persons in charge	ECTS
Architecture			
Crawl, walk, run – construct (Technology in Architecture)	Seminar	Aschmutat	5

## Landscape Architecture and Environmental Planning, Territorial Development

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
European spatial development and structural policies	Seminar	Sielker	5
Introduction to Environmental Planning	Lecture	Von Haaren et al.	2.5
Landscape Architecture and Design – Emergent Topics	Seminar	Werthmann	5
Landscape Planning and Ecosystem Services	Seminar	Albert	5
Territorial governance for sustainable rural and urban development	Seminar	Danielzyk/ Othengrafen	5
Digital Fabrication: Robots in Architecture	Seminar	Becker/ Sardenberg	5
Count, Measure, Display - Architectural Data Visualisation	Seminar	Sardenberg	5
Architecture in Augmented Reality and Virtual Reality	Seminar	Becker	5
Project Urban Design	Project	Schröder et al.	5
Territories Research: CITY MAKERS	Project	Schröder et al.	12
Research Oriented Project Spatial Planning	Project	Misc	15
Master Project Landscape Architecture	Project	Misc	15
Master Project Environmental Planning	Project	Misc	15
Territorial governance for sustainable rural and urban development	Seminar	Danielzyk/ Othengrafen	5

### Summer Term 19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Implementation in Environmental Planning	Lecture/ Seminar	Von Haaren/ Herrmann	5
Computer Science in Planning	Lecture/Practical Work	Scholles/ Weller et al.	5
Planning Theory and Sociology	Seminar	Othengrafen/ Zibell	5
Practical Implications of EU cohesion and regional policies	Seminar	Othengrafen	5
Contemporary Issues of Territorial Development	Seminar	Othengrafen/ Snieg	5
Master Project Landscape Architecture	Project	Misc	15
Master Project Environmental Planning	Project	Misc	15

The Faculty of Architecture and Landscape Science usually offers a Master's programme on European Territorial Development (EuMiTD) that is entirely taught in English. Seminars and workshops in Digital Methods in Architecture (DMA) by the persons in charge Sardenberg/Burger are only taught in English. Besides, it is possible to accompany English speaking students in nearly all of the German teaching activities with a portion of practical exercises (eg seminars, workshops, projects, field trips) to guide them and help them to understand the content. Oral assessments or final presentations can be taken in English on demand.

For detailed information about English lectures contact Dr. Frank Scholles for Territorial Development, Landscape Architecture and Environmental Planning ([scholles@umwelt.uni-hannover.de](mailto:scholles@umwelt.uni-hannover.de)) or Kirsten Aleth for Architecture and Urban Design ([international@archland.uni-hannover.de](mailto:international@archland.uni-hannover.de)).

## Faculty of Civil Engineering and Geodetic Science

### Civil Engineering (Only Master Courses)

#### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Mechanics of Solids (KIB - M. Sc.)	Lecture/ Tutorial	Nackenhorst/ Fleury	6
Hydro Power Engineering (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Achmus/ Abdel-Rahman/ Liebisch/ Goseberg/Jordan	6
Geoinformationsystems and Remote Sensing (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Heipke/ Sester	6
Industrial Water Supply and Water Management (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Rosenwinkel/ Köster/ Feldkämper	6
Contact Mechanics (KIB/Wind - M. Sc.)	Lecture/ Tutorial	Nackenhorst/ Fau/ Fleury	6
Modelling in Sanitary Engineering (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Rosenwinkel/ Obenaus/ Köster/ Pohl	6
Hydrological Modelling (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Haberlandt/ Dietrich/ Beyer/ Plötner	6
Special Topics in Hydrology and Water Resources Management (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Haberlandt/ Dietrich/ Nguyen/ Callau	3
Special Topics in Sanitary Engineering (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Köster/ Hartwig/ Scheer/ Feldkämpfer	3
Advanced Stochastic Analysis (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Beer/ Mitseas/ Comerford	6
Statistics with R (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Haberlandt/ Hirsch	3

## Summer Term 19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Solid Waste Management (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Weichgrebe/ Goletz/ Speier	6
Wind Energy Technology I (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Reuter/ Balzani/ Manousides	6
Finite Element Applications in Structural Analysis (KIB/WUK/Wind- M. Sc.)	Lecture/ Tutorial	Rolfes/ Daum/ Dean/ Unger	6
Finite Elements II (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Wriggers/ Marino/ Soleimani	5
Hydrology and River Basin Management (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Haberlandt/ Dietrich/ Förster/ Nguyen	6
Field Measuring Techniques in Coastal Engineering (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Schlurmann/ Visscher/ Cossu	6
Numerical Modelling in Geotechnical Engineering (KIB - M. Sc.)	Lecture/ Tutorial	Achmus/ Terceros/ Cao	6
Maritime and Port Coastal Engineering (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Schlurmann/ Liebisch/ Visscher/ Jordan	6
Urban Hydrology (KIB/WUK - M. Sc.)	Lecture/ Tutorial	Förster	6
Stochastic Finite Element Methods (KIB - M. Sc.)	Lecture/ Tutorial	Nackenhorst/ Fau	6

## Faculty of Economics and Management

### Economics

#### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Data Analytics	Lecture	Puhani/ Braschke/ Pikos/ Straub	5
Economics of Education	Lecture	Schnitzlein	5
Inequality, Poverty, and Public Policy	Block Course	Toft/ Puhani	5
Econometrics / Advanced Econometrics (Klassische lineare Regression / Advanced Econometrics)	Lecture & Exercise	Parolya/ Parolya	5
Labour and Development	Block course	Jelnov, Pikos/ Puhani	5
Behavioral Finance	Lecture	Sejdiu/ Dierkes	5
Capital Market Theory II: Derivatives	Lecture & Exercise	Prokopczuk, Würsig/ Prokopczuk	5
Controlling and Value Generation	Lecture	Claassen/ Claassen	5

Title/Module	Type	Lecturer/Persons in charge	ECTS
Chain			
Operations Research	Lecture & Exercise	Helber, Südbeck/ Helber	5
Development Economics Seminar	Seminar, Block course	Grote, Waibel/ Waibel	5
Energy Economics	Lecture	Nguyen/ Grote	5
Environmental Economics	Lecture	Grote, Hübler/ Grote	5
International Competitiveness	Lecture	Grote/ Grote	5
Project Planning and Evaluation	Lecture	Waibel/ Waibel	5
Information Management and Information Systems	Lecture	Breitner/ Breitner	5
Seminar: IT-Sicherheit, Big Data Analytics und Visualisierung (Transformation of IT and Digitalization of the Industry)	Seminar, Block course	Breitner, Guhr/ Breitner	5
Research Project	Block course, Term Paper	Breitner, Guhr/Breitner	5
B2B Marketing and Business Negotiation	Lecture & Exercise	von Mettenheim, Wiedmann/ Wiedmann	5
Statistical Methods / Advanced Statistics	Lecture	Sibbertsen/ Sibbertsen	5
Manufacturing Systems Modeling and Analysis	Lecture & Exercise	Helber/ Helber	5
Optimization Modeling with GAMS	Lecture & Exercise	Bugow, Hoffmann/ Helber	5
Matching Markets	Lecture	Katsenos/ Hoppe-Wewetzer	5
Analytical Accounting	Lecture & Exercise	Kronenberger, Boulakhrif/ Schöndube	5
Seminar Population Economics	Seminar, Block course	Puhani/ Puhani	5
Advanced Macroeconomics	Lecture & Exercise	Gnutzmann-Mkrtyan, Wong/ Gassebner	5
Social Risk Management	Lecture	Wagener/ Wagener	5
Seminar Empirical Economics	Seminar, Block course	Schaudt/ Gassebner	5
Asset Management	Lecture	Bätje/ Meyer	5
Asset Pricing / Financial Markets & Investments I: Asset Pricing	Lecture & Exercise	Prokopcuk, Hollstein/ Prokopcuk	5
Banking and Finance I	Lecture	Claußen/ Dierkes	5
Theory of Health Economics	Lecture	Treskova/ von der Schulenburg	5
Seminar in Information Management and Information Systems	Seminar, Block course	Breitner/ Breitner	5
Operations Management / Development of Web-based Applications Systems	Lecture	Broihan, Schnabel/ Helber	10
Seminar International Economics (Asian Economies)	Seminar, Block course	Grote, Waibel/ Waibel	5
Data Collection	Lecture	Bühler, Krause, Lippe/ Waibel	5
Micro, Macro and Trade Models	Lecture	Hübler, Nguyen, Parvathi/ Grote	5
Qualitative Management Research 1	Lecture	Belte, Ridder/ Ridder	5
Qualitative Management Research 2	Block course	Weber, Weidner/ Weber	5
Quantitative Management Methods 2	Lecture	Albertsen, Wiedmann/ Wiedmann	5

Title/Module	Type	Lecturer/Persons in charge	ECTS
Intercultural Economics and Management	Seminar, Block course	Bettels, Bühler, Grote, Wiedmann/ Grote	5
Marketing / International Strategic Marketing	Lecture & Exercise	Haase, Wiedmann/ Wiedmann	5

More information:

<https://www.wiwi.uni-hannover.de/10409.html>

## Faculty of Electrical Engineering and Computer Science

### Winter Term 18/19

Title/Module	Type	Lecturer/ persons in charge	ECTS
Application-Specific Instruction-Set Processors	Lecture	Blume/ Payá Vayá	5
Artificial Intelligence	Only Exam	N.N.	5
Audio and Speech Signal Processing	Lecture	Nogueira-Vazquez	5
Data Mining I	Only Exam	N.N.	5
Formal Methods in Software Engineering	Lecture	Greenergy	5
Foundations of Human Computation and Crowdsourcing	Lecture	Gadiraju/ Zerr	5
Foundations of Probabilistic Information Retrieval	Lecture	Anand	5
Image Analysis I	Only Exam	N.N.	4
Image Analysis II	Lecture	Rottensteiner	4
Industrial Water Supply and Water Management	Lecture	Köster	5
Introductory Seminar on Computer Science	Lecture	Schneider	3
Laserscanning	Lecture	Brenner	5
Parallel Computing	Only Exam	N.N.	5
Seminar: Data Science & Digital Libraries	Lecture	Auer	3
SLAM (Simultaneous Localization and Mapping) und Routenplanung	Lecture	Brenner	5
Special Topics in Sanitary Engineering	Lecture	Hartwig	3
Statistical Natural Language Processing	Lecture	Fetahu	5
Web Science	Only Exam	N.N.	5
Electrical Energy Storage	N.N.	Hanke-Rauschenbach	5
Electrical Machines and Drives	Lecture	Ponick/ N.N.	5
Electric Power Systems I	Lecture, Exercise, Tutorial	Hofmann/ N.N.	5
Electrothermal Processing (Electrotechnology)	Lecture	Nacke	5
Power Electronics	Lecture	Friebe	5
Power Plant Technology I	Lecture	Scharf/ N.N.	5

## Summer Term 19

Title/Module	Type	Lecturer/ persons in charge	ECTS
Big Geospatial Data	Lecture	Koetsier	3
GIS III	Lecture	Sester	3
Technical Project II	Lecture	N.N.	4

## Faculty of Humanities

### English Department

#### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
<b>Linguistics</b>			
Introduction to Linguistics I	Lecture	Paland	5
Introduction to Linguistics II	Lecture	Jalanesch	5
Phonetics and Phonology	Lecture	Altendorf	5
Research Methods (for Teachers)	Seminar	Hohaus	5
Language and Gender	Seminar	Paland	5
Applied Cognitive Linguistics	Seminar	Schulze	5
Grammaticalization	Seminar	Paland	5
Tense and Aspect	Seminar	Paland	5
The History of the English Language	Seminar	Paland	5
Sounds and Society	Seminar	Stuart-Smith	5
Sociolinguistic Typology	Seminar	Altendorf	5
<b>Literature and Culture</b>			
Introduction to Literary Studies	Seminar	Brasch/ Friedrichs/ Gohrisch/ Grünkemeier	5
Pride and Prejudice and its Adaptations	Seminar	Neumann	5
Gender, Race and Class in 18 <sup>th</sup> -Century Fiction	Seminar	Gohrisch	5
A Poem a Week – Spotlights of English Literary History	Seminar	Grünkemeier	5
US-American Short Stories from 1910-2010	Seminar	Oldehus	5
Introduction to Visual Culture	Seminar	Brinker	5
The Archive: Theory, Concept, Medium	Seminar	Brasch	5
Narratives and Media of the American Far Right	Seminar	Brinker	5
Colonizing America	Seminar	Fagan	5
New York City: Emergence of a Modern American Metropolis	Seminar	Groß	5
Ireland: History, Culture, Literature	Seminar	Gohrisch	5
Beginning Postcolonialism	Seminar	Pardey	5
Brexit and Beyond	Seminar	Pardey	5
<b>English Language Teaching</b>			
Introduction to English Language Teaching	Seminar	Blell/ Fuchs	5
Introduction to CLIL	Seminar	Ball	5
Working with Texts – Understanding, Structuring	Seminar	Blanckertz	5

Title/Module	Type	Lecturer/Persons in charge	ECTS
and Adapting Texts for the EFL Classroom			
Teaching Digital Literature in the EFL Classroom?	Seminar	Blell	5
Viewing, Analysing, Producing and Teaching Shorts	Seminar	Blell	5
Using Different Media in the EFL Classroom	Seminar	Fuchs	5
Reflective Practice and Classroom Analysis	Seminar	v. Bremen	5
<b>Language Practice</b>			
Vocabulary and Pronunciation	Exercise	Gans/ Wright	5
Composition	Exercise	Schneller/ Wright	5
Australia	Exercise	Gans	5
Investigating Song Texts	Exercise	Gans	5
English for Professional Use	Exercise	Wright	5
English Theatre Workshop	Workshop	Bennett	5

## German and English Linguistics (Master of Arts)

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Constructions, Frames and (Valency) Grammar	Seminar	Schulze	5
English for Academic Purposes	Seminar	Gans	5
Sociolinguistic Typology	Seminar	Altendorf	5
Sounds & Society	Seminar	Stuart-Smith	5
Applied Cognitive Linguistics	Seminar	Schulze	5
Learner Corpus Research	Seminar	Altendorf	5

## History

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Revolutionaries and Paper Citizens – Liberation and Nation Building in East Africa in the 1960s and 1970s / VT Regionengeschichte / MA African History / MA Atlantic Studies	Seminar (for Advanced BA students and MA students)	Barre	8
Environment and Society in a Global Perspective: The Socio-Ecological Dimension of Modernity / VT Globalgeschichte (Global History); MA Latin American History / MA Atlantic Studies	Seminar (for Advanced BA students and MA students)	Onken/ Goebel McDermott	8

## Philosophy

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Philosophy at the Movies	Block Seminar	Luczak	5
Free Will and Moral Responsibility	Seminar	Stern	5
Feminist Bioethics	Seminar	Büter	5
Scientific Explanation	Seminar	Fischer	5
Introduction to Philosophy of Science	Seminar	Frisch	5
Taxonomy and Concept Formation in Psychology	Seminar	Feest	5
Topics in Philosophy of Psychology and Philosophy of Mind	Lecture	Feest	5
Truth and Understanding	Seminar	Frisch	5
Causation, Deliberation and Agency	Seminar	Stern	5
Modern Deontology	Seminar	Hübner	5
Parfit: Reasons and Persons	N.N.	White	5
Good Academic Practice: Thinking About Responsible Conduct of Research Throughout the University	Seminar	Reydon	5
Fortgeschrittenen-Kolloquium in Philosophie der Physik und allgemeiner Wissenschaftsphilosophie	Seminar	Frisch	5
An Introduction to Medical Ethics	Lecture	Hoppe	5

## Political Science

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Becoming Experts: the role and relevance of knowledge in international organizations	Seminar	Dalmer	6
Gendering International Security: The Women, Peace and Security Agenda	Seminar	Wüstemann	6
Politics und Society in Central and Eastern Europe	Seminar	Köker	6
Theory building in comparative politics Seminar	Seminar	Nyhuis	6

## Special Education

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Inclusive Education from an International Perspective	Seminar	Engelbrecht/ Hummel	3

## Theology

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Criticism of the World Religions Paradigm	Seminar	Alberts	5
Religion(s) and the Environmental Crisis: Causes and Solutions? A study-of-religions perspective	Seminar	Jensen	5
Still God's Own Country? Religion, Politics, and Society in America from the Puritans to Donald Trump	Seminar	Barb	5
Decolonizing Race and Religion (Block Seminar)	Seminar	Nye	5

## Faculty of Law

### Law

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Legal writing	Lecture	Zeibig	4
German corporate law	Lecture	Blunk	2
European distribution law I	Lecture	Muhl	4
Wettbewerbsrecht in der anwaltlichen Praxis (Competition law in the lawyerly experience)	Lecture	Müller	4
Commercial contracts and dispute resolution	Lecture	Schroeder	4
General principles of international commercial arbitration	Lecture	Wilske	4
The rule of law and the ordinary legislative procedure in EU law	Lecture	Pauling	2
European regulations and comparative legal aspects in the information society	Lecture	Tschohl	4
European copyright law	Lecture	Revolidis	4
Introduction into legal informatics and data protection law	Lecture	Kilian	4
Fundamental aspects of information science, security and computing	Lecture	Ruckermann	4
Media law	Lecture	Markiewicz	4
Legal academic writing	Lecture	Strauch	4
International private law and the internet		Revolidis	4
Alternative licensing	Lecture	Gera	4
European IP Law	Lecture	Hennigs/ Sabellek	4
US-IP Law	Lecture	Woodin	4

## Summer Term 19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Introduction to EU Law I	Lecture	Parashu	5
Legal terminology	Lecture	Bormann	4
European distribution law II	Lecture	Muhl	4
General principles of international commercial arbitration	Lecture	Wilske	4
Jurisdiction and legal protection in EU multi-level system	Lecture	Pauling	2
International business law	Lecture	Suhren	4
International syndicated financing transactions	Lecture	Netzger	4
Introduction to European Law Moot Court	Lecture	Zaprosyan	2
Legal aspects of autonomous driving	Lecture	Stender-Vorwachs	2
Introduction to European IT-Law	Lecture	Heinze	4

## Faculty of Mathematics and Physics

### Mathematics

#### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Advanced numerical methods for stochastic and deterministic PDEs	Seminar	Khodadadian	N.N.
Funktionalanalysis/Functional Analysis	Lecture	Schrohe	10
Übung zu Funktionalanalysis/ Functional Analysis	Exercise		N.N.
Randwertaufgaben/Boundary Value Problems	Lecture	Schrohe	N.N.
Übung zu Randwertaufgaben/Boundary Value Problems	Exercise		N.N.
Quantitative Risk Management	Lecture	Kim	N.N.
Actuarial Mathematics 1	Lecture	Kim	N.N.
Numerical methods for contact problems: application to variational phase-field fracture propagation	Lecture	Wick	N.N.
Übung zu Numerical methods for contact problems: application to variational phase-field fracture propagation	Exercise	Noii/ Mang	N.N.
Finance & Stochastics	Lecture	Weber	N.N.

## Physics

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Low-Dimensional Systems: Quantum Noise and Interactions	Lecture	Haug	N.N.
Übung zu Low-Dimensional Systems: Quantum Noise and Interactions	Exercise	Haug	N.N.
Laserspektroskopie in Life Science	Lecture	Roth	4
Übung zur Laserspektroskopie in Life Science	Exercise	Roth	N.N.
Introductory Biophysics for Physicists	Lecture	Heisterkamp/ Kalies	N.N.
Matter wave interferometry	Lecture/ Exercise	Gaaloul/ Hammerer	3
Laborpraktikum Nanomaterials in energy storage devices	Practical work	Zhang	N.N.
Laborpraktikum Optical characterization of nanostructures	Practical work	Ding	N.N.
Seminar Nanoengineering	Seminar	Chichkov	2
Seminar Quantum Optics meets Quantum Information	Seminar	Santos/ Weimer	N.N.
Seminar Numerische Optik/Numerical optics	Seminar	Roth/ Demircan/ Morgner	3
Publication Club (PubClub) „Entanglement in atomic systems“	Seminar	Klempt	3
Junior Journal Club für MSc Studierende	Seminar	Ospelkaus/ Ospelkaus/ Rasel/ Klempt	3
Journal Club Biomedical	Seminar	Heisterkamp	N.N.
Quantum Machine Learning	Seminar	Osborne	N.N.
Semiconductor optics	Seminar	Oestreich	N.N.
Seminal Papers in Physics	Seminar	Giulini/ Kleiner	N.N.
Seminar Photonik	Seminar	Chichkov	2
Superstring Theory	Seminar	Lechtenfeld	N.N.
Gruppenseminar Quantum Engineering	Seminar	Ding	N.N.
Gruppenseminar Journal Club	Seminar	Rasel	N.N.
Gruppenseminar Interferometric Applications in Space	Seminar	Hewitson	N.N.
Gruppenseminar Monday Morning Science Meeting	Seminar	Lein	N.N.
Gruppenseminar Nanodevices for energy storage	Seminar	Zhang	N.N.

# Faculty of Mechanical Engineering

## Mechanical Engineering

### Winter Term 18/19

Module/Title	Type	Lecturer/Person in charge	ECTS
Business, Technology & Development of Passenger Car Tires	Lecture	N.N.	3
Engineering Dynamics and Vibration	Lecture/ Exercise	N.N.	5
Automotive Lighting	Lecture	N.N.	5
Continuum Mechanics I	Lecture/ Exercise	N.N.	5
Scientific Research Work: Mechatronics Lessons	Exercise	N.N.	4
Advanced Thermodynamics / ThermoLab	Lecture/ Exercise/ Laboratory	Kabelac/ N.N.	5
Production of Optoelectronic Systems	Lecture/ Exercise	N.N.	5
Aspects of Process Design in Forming Technology	Lecture/ Exercise	N.N.	5
Electrical Drives: Small Electric Motors and Servo Drives	Lecture/ Exercise/ Laboratory	N.N.	5
Micro- and Nanosystems	Lecture/ Exercise	N.N.	5
Fundamentals and Configuration of Laser Beam Sources	Lecture/ Exercise	N.N.	5
Augmented Reality Apps for Mechatronics and Medical Technology	Lecture/ Exercise	N.N.	4
Biophotonics – Imaging and Manipulation of Biological Cells	Lecture	N.N.	4
Laser Spectroscopy in Life Sciences	Lecture/ Exercise	N.N.	5
Optical Measurement Technology	Lecture/ Exercise	N.N.	5
Optical properties of micro and nanostructures	Lecture/ Exercise	N.N.	4
Production of Optoelectronic Systems	Lecture/ Exercise	N.N.	4
Proseminar Biophotonics	Exercise	N.N.	3

### Summer Term 19

Module/Title	Type	Lecturer/Person in charge	ECTS
Finite Elements II	Lecture/ Exercise	N.N.	5
Continuum Mechanics II	Lecture/ Exercise	N.N.	5
Applied elasticity theory in the aviation	Lecture/ Exercise	N.N.	5
Mechanics of Advanced Materials	Lecture/ Exercise	N.N.	5
Scientific Research Work:	Exercise	N.N.	4

Module/Title	Type	Lecturer/Person in charge	ECTS
Mechatronics Lessons			
Desing and Simulation of optomechatronic Systems	Lecture/ Exercise	N.N.	5
Combustion Technology	Lecture/ Exercise/ Laboratory	Dinkelacker	5
Advanced Thermodynamics / ThermoLab	Lecture/ Exercise/ Laboratory	Kabelac/ N.N.	5
Laser Material Processing	Lecture/ Exercise	N.N.	5
Human-Robot-Collaboration	Lecture/ Exercise/ Laboratory	N.N.	5
Numerical Implementation of Constitutive Models	N.N.	N.N.	1
Laser Material Processing II	Lecture/ Exercise	N.N.	5
Laser Measurement Technology	Lecture/ Exercise	N.N.	5
Development of FEM codes via automated computational modelling	N.N.	N.N.	1
Power Plant Engineering I	Lecture	Scharf	5
Augmented Reality Apps for Mechatronics and Medical Technology	Lecture/ Exercise	N.N.	4
Design and Simulation of optomechatronic Systems	Lecture/ Exercise	N.N.	5
Fundamentals and Applications of Medical Imaging Technology	Lecture/ Exercise	N.N.	4
Numerical Methods and Simulation Strategies in Theoretical Physics	Lecture	N.N.	4
Proseminar Biophotonics	Exercise	N.N.	3
Solid State Lasers	Lecture	N.N.	2

## Faculty of Natural Sciences

### Chemistry

Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
NMR spectroscopy	Lecture/ Exercise	Codutti/ Carlomagno	3/1
NMR of biopolymers	Lecture/ Exercise	Codutti/ Carlomagno	3/4
Computational bioorganic chemistry	Lecture/ Exercise	Codutti/ Carlomagno	3/1
Microbial Chemistry - Secondary metabolites, their biogenesis and engineering	Lecture/ Prac. Course on chem. experiments	Cox/ Skellam	N.N.

Title/Module	Type	Lecturer/Persons in charge	ECTS
Synthesen komplexer Naturstoffe – Engineering natural product pathways	Lecture/ Practical course on chemical experiments	Cox/ Skellam	N.N.
Gruppenseminar Biologie und Chemie von Naturstoffen	Seminar	Cox/ Skellam	N.N.
Organic Chemistry Colloquium	Seminar	All OCI	N.N.
Seminar für Masterabsolventen, Doktoranden und Staatsexamenskandidaten	Seminar	Butenschön	N.N.
Gruppenseminar Biologie und Chemie von Naturstoffen	Seminar	RJC	N.N.
Microbial Chemistry – Secondary Metabolites, their biogenesis and engineering	Lecture	RJC	N.N.
Microbial Chemistry – Secondary Metabolites, their biogenesis and engineering	Practical	RJC	N.N.
Organic Chemistry 1 in English	Lecture	RJC	N.N.
Organic Chemistry 1 Praktikum	Practical	RJC	N.N.
Synthesen Komplexer Naturstoffe – Engineering Natural product Pathways	Lecture	RJC	N.N.
Synthesen Komplexer Naturstoffe – Engineering Natural product Pathways	Practical	RJC	N.N.

### Summer Term 19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Naturstoff und Bioanalytik (Teil 1)	Lecture/ Exercise	Codutti/ Stahl/ Scheper	1.5(3)/1 .5(3)
Computational Chemistry of the Ligands	Lecture	Codutti/Carlomagno	1
Naturstoffchemie und biologisch aktive Substanzen	Exercise	Codutti	3
Biomolecular chromatography	Practical Course	Cox/ Skellam/ Buschmann	N.N.
Biomolecular chromatography	Exercises	Cox/ Skellam / Buschmann	N.N.
Biomolecular chromatography	Lecture	Cox/ Skellam/ Buschmann	N.N.
Spezielle Chemie für Life Science	Lecture	Krings/ Skellam <sup>1</sup>	N.N.
Organic Chemistry 1 Praktikum	Practical	RJC	N.N.
Organic Chemistry 1 Praktikum for Biochemists	Practical	RJC	N.N.
Organic Chemistry 2 in English	Lecture	RJC	N.N.
Organic Chemistry 1 Seminar	Seminar	RJC	N.N.
Naturstoffchemie 2	Lecture	RJC (taken over from AK)	N.N.

<sup>1</sup> Krings section is in German

## Economic Geography (Master of Arts)

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Methods in Economic Geography	Lecture & Exercise	Nolte	10
Socio-Economic Aspects of Development	Lecture	Liefner	3
International Seminar in Economic Geography	Seminar	Mewes	5

### Summer Term 19

Title/Module	Type	Lecturer/Persons in charge	ECTS
International Seminar in Economic Geography	Seminar	Mewes	5

## Geography

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Spatio-temporal ecosystem services analysis and assessment	Seminar/ Exercise	Burkhard/ Rendon	6
Introduction in Python-Scripting using ArcGIS <sup>2</sup>	Computer/ Exercise	Kreklow	6
Landscape System Analysis Northern Finland	Study project (2 Semester, Part 2 Data analysis)	Burkhard/ Steinhoff-Knopp/ Groß	9 (total)
Hydrological Modeling	Lecture/ Seminar	Haberlandt/ Dietric / Plötner/ Shehu Nguyen/ Kasargodu/ Anebagilu	6
Japanese / German Winter School	Excursion (Japan)	Herbst/ Groß	9
Geographic Information Systems GIS B1 (Spatial analysis and geoprocessing of vector data with ArcGIS)	Lecture/ Exercise	Herbst	4 (optional)

### Summer Term 19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Landscape System Analysis Northern Finland	Study project (2 semester, Part 1 Field Course)	Burkhard	9 (total)
Japanese / German Summer School: Subjects of integrative landscape sciences planned	Summer School with field trips	N.N.	8

<sup>2</sup> If necessary

## International Horticulture (Master)

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Intercultural Communication and Leadership Ethics	Seminar	Bodrozic/ Scholz	3
Scientific Research Colloquium, Part 1	Colloquium	Stützel	6
Biostatistics	Lecture	Schaarschmidt/ Menssen	6
Horticultural Economics and Econometrics	Lecture	Waibel/ Grote	6
Analysis of Business and/or Research Operation by Internship	Internship	Stützel	9
Foundations of Sustainable Development	Lecture	Kunze/ Waibel/ Liefner	9
Leadership and Responsibility Management	Lecture	Lentz	3
Physiological Aspects of Ornamental Crop Production	Lecture	Serek	6
Fruit Science: Introduction to Fruit Science and Plant Physiology	Lecture/ Seminar	Knoche/ Grimm	6
Basics in Phytotherapy	Lecture/ Practical Course	Meyhöfer/ Maiß/ N.N.	6
Plant Breeding	Lecture/ Seminar	Linde	9
Horticultural and Environmental Economics and Policy	Lecture/ Exercise	Kunze/ Grote	9
Postharvest Physiology of Fruit	Lecture/ Lab.	Knoche/ Grimm/ Khanal	6
Fruit Surface Biology	Lecture/ Seminar/ Lab.	Khanal	6
Mechanisms and Strategies in Plant Protection	Lecture/ Seminar	Maiß/ Meyhöfer/ N.N.	6
Plant Protection and Environment (Risk Assessment)	Lecture	Maiß	6
Principles of Systems Modelling	Lecture/ Exercise	Stützel	6
International Floriculture	Blockcourse/ Lecture/ Seminar/ Excursion	Serek	6
Molecular Aspects of Plant Metabolism	Lecture/ Seminar/ Lab./ Exercise	Witte/ Herde/ Medina Escobar	12

### Summer Term 19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Scientific Research Colloquium, Part 2	Colloquium	Stützel	6
Specific Research Methods	Individual Instruction	Stützel/ N.N.	18
Evaluation and Interpretation of Research Data	Individual Instruction	Stützel/ N.N	12
Horticultural Economics and Econometrics	Lecture	Waibel/ Grote	6

Title/Module	Type	Lecturer/Persons in charge	ECTS
Foundations of Sustainable Development	Lecture	Kunze/ Waibel/ Liefner	9
Physiological Aspects of Ornamental Crop Production	Lecture	Serek	6
Fruit Science: Introduction to Fruit Science and Plant Physiology	Lecture/ Seminar	Knoche/ Grimm	6
Propagation and Production of Woody Plants	Lecture	Winkelmann/ Bartsch/ Bündig	6
International Vegetable Production	Lecture/ Laboratory Sessions/ Exercises	Stützel/ Fricke	9
Molecular Biology	Practical Course/ Lecture/ Seminar	Schmitz	6
Plant Breeding	Lecture/ Seminar	Linde	9
Horticultural and Environmental Economics and Policy	Lecture/ Exercise	Kunze/ Grote	9
Controlling and Business Analysis in Horticulture	Lecture/ Tutorial/ Seminar	Hardeweg	6
World Fruit Crops: Botany and Production Practices	Lecture/ Seminar	Khanal/ Knoche	6
Physiology of Tree Fruit Crops	Lecture/ Seminar/ Lab./ Field	Knoche/ Grimm/ Khanal	6
Genetic Engineering and Plant Protection	Lecture/ Practical Course	Maiß	6
Crop Modelling	Lecture/ Exercise	Stützel	6
Cropping Systems Modelling	Lecture/ Exercise	Stützel	6
International Floriculture	Blockcourse/ Lecture/ Seminar/ Excursion	Serek	6
Molecular Aspects of Plant Metabolism	Lecture/ Seminar/ Lab. Exercise	Witte/ Herde/ Medina Escobar	12
Methods in molecular plant breeding	Practical/ theoretical exercise/ Seminar	Debener/ Linde	6

## Molecular Microbiology

### Winter Term 18/19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Microbial Chemistry – Secondary metabolites, their biogenesis and engineering (49400)	Lecture	Cox/ Skellam	2
NMR-Spektroskopie (48117)	Lecture	Carlomagno	2
NMR-Spektroskopie (48117a)	Exercises	Codutti	3

Title/Module	Type	Lecturer/Persons in charge	ECTS
Modern methods of molecular- and cellbiology (49302)	Seminar	Turgay	1
Molecular Microbiology (49112a)	Seminar	Brüser/ Stolle	1
Environmental Microbiology (49221)	Seminar	Horn	1
Microbial Chemistry - Secondary metabolites, their biogenesis and engineering engineering (49401)	Seminar	Cox/ Skellam	1
Microbial Chemistry - Secondary metabolites, their biogenesis and engineering engineering (49401)	Practical Course	Cox/ Skellam	3

### Summer Term 19

Title/Module	Type	Lecturer/Persons in charge	ECTS
Molekulare- und Zellbiologie von Bacillus subtilis (49118)	Seminar	Turgay	1
Spezielle Methoden der Umweltmikrobiologie (49421)	Seminar	Horn/ Ho	1
Biomolecular chromatography (48200)	Lecture	Cox	2
Biomolecular chromatography (48200a)	Exercises	Cox/ Skellam	2
Biomolecular chromatography (48200b)	Practical Course	Skellam	2