English taught courses, winter term 2013/14

Master level

Faculty:	Architecture			
Title	**Type of course**	**Lecture hours per week**	**ECTS credits**	**Language of instruction**
Archives of Migration		2 SWS	3	English

Faculty:	Arts and Humanities			
Title	**Type of course**	**Lecture hours per week**	**ECTS credits**	**Language of instruction**
Advanced Course A (Group 3)	Practical course (Ü)	2	According to study regulations	English
Advanced Course A (Group 4)	Practical course (Ü)	2	According to study regulations	English
Basic Course A (Übung), Group 7	Practical course (Ü)	2		English
Basic Course A (vorlesungsartige Veranstaltung)	Practical course (Ü)		According to study regulations	English
Contrastive Linguistics	Lecture (V)	2		English
Corpus-based translation studies	Introductory seminar (PS)	2	BA English Studies: 8	English
Cultural Studies: An English-speaking World	Seminar (HS)	2	6	English
Cultural Studies: Republic of Ireland and Northern Ireland	Seminar (HS)	2	6	English
Hauptseminar C: 19th Century American Novels and Short Stories	Seminar (HS)	2	According to study regulations	English
Hauptseminar D: American Drama (group 2)	Seminar (HS)	2	MA: LN 15; Master: 9 bzw. 4	English
HS Regional Flavors of the USA	Seminar (HS)	2	6	English
Introduction to English Language Teaching Termin A	Lecture (V)	2	0	English and German
Introduction to English Language Teaching Termin B	Lecture (V)	2	0	English and German
Introduction to English Linguistics I	Lecture (V)	2	According to study regulations	English

Introductory Course Lecture	Lecture (V)	2	According to study regulations	English
Introductory Course Tutorial, Part 1; Group 2	Practical course (Ü)	2	According to study regulations	English
Introductory Course Tutorial, Part 1; Group 3	Practical course (Ü)	2	BA English Studies 5	English
Kolloquium B: The Return of the Reader - New Developments in Cognitive Reception Theory	Research colloquium (FK)	2		English and German
Lecture Course: American Literature and Culture: A Survey	Lecture (V)	2	According to study regulations	English
Linguistic Analysis	Exam colloquium (EK)	2		English and German
Linguistic Methods, Group 2	Practical course (Ü)	2	According to study regulations	English
Literary Theory: A Survey for Advanced Students	Lecture (V)	2	Master: 2	English
Master-Kolloquium: Statistics in linguistics	Colloquium (K)		According to study regulations	English
MK 7 Technical English 3.a	Language course (SK)	2	According to study regulations	English
MK 7 Technical English 3.d	Language course (SK)	2	According to study regulations	English
Principles of Content and Language Integrated Learning	Practical course (Ü)	2	0	English
Proseminar (D): A History of the American Short Story - Periods, Genres, Themes and Form	Introductory seminar (PS)	2	According to study regulations	English
Reading Group: Philosophy of Science		2		English
Technical Writing	Seminar (S)	2	According to study regulations	English
Übung: Poetry Analysis (für StaatsexamenskandidatInnen)	Practical course (Ü)	2	0	English

Faculty:	Business and Economics			
Title	**Type of course**	**Lecture hours per week**	**ECTS credits**	**Language of instruction**
Applied Economic Modeling	Practical course (Ü)	2		English
Applied Economic Modeling	Lecture (V)	2	6	English
Coaching "Corporate Governance"	Working group (AG)	1		English or German
Colloquium Development of IT Standards	Colloquium (K)		6 (V2/Ü2/K1)	English
Colloquium Management of Enterprise Resource Planning and Interorganizational Information Systems	Colloquium (K)		6 (V2/Ü2/K1)	English
Consumer Behavior	Lecture (V)	2	5	English
Consumer-Centric New Product Development I: Generating a Branded Product	Lecture (V)	2		German and English
Development of IT Standards	Lecture (V)	2	5 (V2/Ü1) oder 6 (V2/Ü1/K1)	English
Foundations of Entrepreneurship	Lecture (V)	2	5 (incl. excercise)	English
Foundations of Entrepreneurship (Exercise)	Practical course (Ü)	2	5 (incl. lecture)	English
Growth Theory (Lecture)	Lecture/practical course (VÜ)			English
Growth Theory (Tutorial)	Lecture/practical course (VÜ)			English
Innovation Research Seminar	Seminar (S)	2	5	German and/or English
Interactive Value Creation: The Customer-centric Enterprise	Lecture (V)	2	5	English
International Automobile Management	Practical course (Ü)	1		English
International Automobile Management	Lecture (V)	2		German or English
International Economics	Practical course (Ü)	1	4	English
Management of Enterprise Resource Planning and Interorganizational Information Systems	Lecture (V)	2	5 (V2/Ü2) oder 6 (V2/Ü2/K1)	English
Programming, Algorithms, Data Structures	Practical course (Ü)	4		German or English
Project Module: Innovation, Strategy and Organisation	Working group (AG)	4	10	German and/or English
Prüfung "Innovation Research Seminar"	Exam colloquium (EK)			German and English
Service Design & Engineering	Lecture/practical course (VÜ)	4	5	English
Strategic Technology Management	Lecture/practical course (VÜ)	4	5	English

Success factors and practices of managing innovation and technology	Lecture (V)	4	5	German and English
The Global Economy: Trade and Investment	Practical course (Ü)	2		English
The Global Economy: Trade and Investment	Practical course (Ü)	2		English
The Global Economy: Trade and Investment	Lecture (V)	2	6	English
Tutorial Management of Enterprise Resource Planning and Interorganizational Information Systems (Group 2)	Practical course (Ü)	2	5 (V2/Ü2) oder 6 (V2/Ü2/K1)	English

Faculty:	Civil Engineering			
Title	**Type of course**	**Lecture hours per week**	**ECTS credits**	**Language of instruction**
Advanced Structural Analysis	Practical course (Ü)	1		English/German
Advanced Structural Analysis	Lecture (V)	2		English/German
Environmental Sustainability in Transport Engineering	Lecture/practical course (VÜ)	4	6	English
Gender and diversity competence for female and male engineers	Seminar (S)	2		English/German
Gender and diversity studies - An introduction	Lecture (V)	2		English/German

Faculty:	Electrical Engineering and Information Technology			
Title	**Type of course**	**Lecture hours per week**	**ECTS credits**	**Language of instruction**
Acoustic Virtual Reality (AVR)	Lecture/practical course (VÜ)	3	4	English
Advanced Control Systems	Practical course (Ü)	1		English
Advanced Control Systems	Lecture (V)	2		English
Advanced Methods of Cryptography	Lecture (V)	2		English
Antenna Engineering (Master Course Communications Engineering)	Practical course (Ü)	1	0	English
Antenna Engineering (Master Course Communications Engineering)	Lecture (V)	2	0	English
Application of oxide thin films for information technology	Practical course (ÜP)	1	0	German, English on demand
Application of oxide thin films for information technology	Lecture (V)	2	0	German, English on demand

Battery Storage Systems	Lecture/practical course (VÜ)	3		English
Biomedical Sensors and Microsystems: Exercise	Practical course (Ü)	1	2	English
CAD Lab course: Simulation of semiconductor devices	Practical course (P)	4	4	English
Communication Protocols	Lecture/practical course (VÜ)	V2Ü1		English
Communications Engineering Laboratory	Practical course (P)	3	3	German and English
Current Topics of Compound Semiconductor Technology and Devices	Seminar (S)	4	4	English/German
Digital Integrated Circuit Design and Synthesis	Practical course (Ü)	1	1	English
Digital Integrated Circuit Design and Synthesis	Lecture (V)	2	2	English
Electrical Drives	Lecture/practical course (VÜ)	3		English
Electrical Machines 1	Lecture (V)	2	According to study regulations	English
Electrothermal Process Technology - Basics, Materials, High Power Applications	Lecture/practical course (VÜ)	3		English or German
Estimation and Detection Theory	Practical course (Ü)	1	0	English
Exercises High Voltage Engineering - Test Systems and Diagnosis	Practical course (Ü)	1	0	English
Foundations of Computer Science I (exercise group Z)	Practical course (Ü)	1		English/German
High Voltage Lab Course	Practical course (P)	4	0	German and English
Information Theory and Source Coding	Practical course (Ü)	1		English
Information Theory and Source Coding	Lecture (V)	2		English
International Patent Law	Lecture/practical course (VÜ)	3	4	English
Internship Seminar	Seminar (S)	1	18	English/German
IT-Security 1 - Network Security	Lecture/practical course (VÜ)	L3/E1	6	English
Laboratory Acoustic Virtual Reality	Practical course (P)	4	4	English
Low Carbon Energy Convesion Systems	Lecture/practical course (VÜ)			English
Low Power Digital Design	Practical course (Ü)	1	1	English
Low Power Digital Design	Lecture (V)	2	2	English
Medical Acoustics I	Lecture/practical course (VÜ)	3	4 (incl. excercise)	English/German

Modeling and Simulation of Complex Power Systems	Lecture/practical course (VÜ)	V2Ü1	4	English
Multimedia Communication Systems 1	Practical course (Ü)	1	cf. Lecture	English
Multimedia Communication Systems 1	Lecture (V)	2	5 (incl. excercise)	English
Multimedia Content Protection	Lecture (V)	2	5 (incl. excercise)	English
Nanoelectronics Devices	Lecture/practical course (VÜ)	3	4	German, English on demand
Network Regulation in Liberalized Energy Markets	Practical course (Ü)	1		English
Network Regulation in Liberalized Energy Markets	Lecture (V)	2		English
Operation of Interconnected Power Systems	Practical course (Ü)	1	1	English
Optical Communication I: Devices	Lecture/practical course (VÜ)	4	4	English
Power Cable Engineering	Practical course (Ü)	1		English
Power Cable Engineering	Lecture (V)	2	4	English
Power Electronics - Fundamentals, Topologies and Analysis	Lecture/practical course (VÜ)	3		English
Power Systems Dynamics	Lecture/practical course (VÜ)	V2Ü1	4	English
Project "Communications Engineering and Multimedia"	Practical course (ÜP)	4	4	English/German
Project: "Algorithms and Practice in Signal Processing"	Practical course (Ü)	4	4	English/German
Project: "Microelectronic circuits for medical engineering"	Practical course (ÜP)	4	4	English/German
Project: "Microsystem technology in practice"	Seminar (S)	2	2	English/German
Project: "Production processes in microsystem technology"	Seminar (S)	4	4	English/German
Project: Current Topics of Compound Semiconductor Technology and Devices	Practical course (ÜP)	4	4	English/German
Project: Organic Electronics and Optoelectronics	Practical course (ÜP)	4	4	English/German
Project: Planning of Long-term Optimal Medium Voltage Networks	Practical course (Ü)	4	4	English and German
Project: Please seek our Homepage www.isea.rwth-aachen.de for detailed informations !	Practical course (P)	4		English/German

Schutzmaßnahmen und Schutzeinrichtungen in elektrischen Netzen und Anlagen	Practical course (Ü)	1	0	English
Schutzmaßnahmen und Schutzeinrichtungen in elektrischen Netzen und Anlagen	Lecture (V)	2	5	English
Seminar "The Future of Energy Supply"	Practical course (Ü)	3 (B.Sc.) oder 4 (M.Sc., Dipl.)	0	German and English
Seminar on Communications Engineering	Seminar (S)	3		English
Seminar: Wireless Internet Systems	Seminar (S)	4		English
Seminary on Technical Acoustics	Seminar (S)	3/4	3/4	English/German
Signal Processing for Radar and Imaging Radar	Practical course (Ü)	2	4 (incl. lecture)	English
Signal Processing for Radar and Imaging Radar	Lecture (V)	2	4 (incl. excercise)	English
Signals, Systems and Communication	Practical course (Ü)	1	1	English
Signals, Systems and Communication	Lecture (V)	2	2	Englsh
Video Coding: Algorithms and Specification	Lecture/practical course (VÜ)	3	4	Englsh
Virtual Reality	Lecture/practical course (VÜ)	3+1 or 2+1	6	German and English

Faculty:	Georesources and Materials Engineering			
Title	Type of course	Lecture hours per week	ECTS credits	Language of instruction
Advanced seminar	Seminar (S)	2		English
Advanced seminar: Climate variability, climatic risks and weather extremes	Seminar (HS)	2	4	English
Characterization of aqueous interfaces in Mineralogy	Practical course (Ü)	4	8	English/German
Colloquium for Mining Engineers (current R&D results, selected topics on excavation + mining equipment)	Lecture/Colloquium (VK)	3		English/German
Crystallography of Mineral Materials	Lecture/practical course (VÜ)	2		English
Data analyses in geosciences	Lecture/practical course (VÜ)	V1Ü1	2/5	English
Engineering Geophysics	Lecture/practical course/seminar (VPS)	2	3	English
Environmental Issues in Mining	Lecture/practical course (VÜ)	2	3	English

Field trips to mines and mining equipment manufactures	Excursion (E)	1		English/German
Geophysical Logging and Log Interpretation	Lecture (V)	2		English
Geophysical Logging and Log Interpretation - Group A	Practical course (ÜP)	2		English
Geophysical Logging and Log Interpretation - Group B	Practical course (ÜP)	2		English
Geophysics Special Methods: NMR	Lecture/practical course/seminar (VPS)	2	3	English
Geophysics Special Methods: SIP	Lecture/practical course/seminar (VPS)	2	3	English
Geothermics	Lecture/practical course (VÜ)	2		English
Geothermics - Practicals and Exercises	Practical course (ÜP)	2		English
Geothermics - Practicals and Exercises - Group B	Practical course (ÜP)	2		English
Guidance to self-dependent scientific studies	Exam colloquium (EK)	4		English/German
Guidance to self-dependent scientific studies (Master thesis)	Practical course (Ü)	8		English/German
Guidance to self-dependent scientific studies (Master thesis) for non-mining graduates	Exam colloquium (EK)	8	n/a	English/German
Hydrogeophysics	Lecture/Colloquium (VK)	2	3	English
Industrial Furnaces (Process Technology of Metals)	Lecture/practical course (VÜ)	4		English
Introduction to Texture Analysis - Lecture/Exercise	Lecture/practical course (VÜ)	V2Ü1	0	English
Materials Science of Steel - Steel Design	Lecture (V)	2		English
Micro and Macro Simulation of Casting Processes		V1Ü1	3	English
Mineral Exploration / Exploration Geology	Lecture/practical course/seminar (VPS)	2		English
Mineral materials: Glass	Lecture/practical course (VÜ)	2	0	English
Natural gas and isotope geochemistry	Lecture/practical course (VÜ)	2		English (German)
Ore body modeling - Team 1	Lecture/practical course/seminar (VPS)	2		English
Ore body modeling - Team 2	Lecture/practical course/seminar (VPS)	2		English
Petroleum Geochemistry	Lecture/practical course (VÜ)	2		English (German)
Petrophysics	Practical course (ÜP)	2	6	English
Petrophysics	Lecture (V)	2	6	English
Physical Metallurgy - Exercise	Practical course (Ü)	2	0	English
Physical Metallurgy - Lecture	Lecture (V)	4	0	English
Physical Metallurgy Laboratory	Practical course (ÜP)	Ü1P5		English

Portfolio Management	Lecture/practical course (VÜ)	V1 Ü1	2,5	English
Practical Course: Petroleum Geochemistry - Course B	Practical course (P)	2		English (German)
Process Metallurgy and Recycling (Part Fe Metallurgy) (Basic course M.Sc.)	Lecture (V)	2	0	English
Process Metallurgy and Recycling (Part Fe Metallurgy) (Basic course M.Sc.)	Practical course (Ü)	1	0	English
Process Metallurgy and Recycling, Part NF Metallurgy (Basic Course M.Sc.)	Lecture (V)	2	0	English
Prospect evaluation and Risk analysis	Lecture/practical course (VÜ)	V1 Ü2	3	English
Refinement and Trade of Fossil Fuels	Lecture/practical course (VÜ)	2		German (English)
Seminar II	Practical course (Ü)	1	0	English/German
Transport Phenomena I (High Temperature Engineering I)	Lecture/practical course (VÜ)	3	0	English
Underground Mining Engineering 3 - Mine Ventilation	Lecture/practical course (VÜP)	6	7	English

Faculty:	Mathematics, Computer Science and Natural Science			
Title	**Type of course**	**Lecture hours per week**	**ECTS credits**	**Language of instruction**
Actual Topics of Molecular Biology of the Neural System	Seminar (S)	1		German or English, on demand
Advanced cryptography: cloud & more	Lecture/practical course (VÜ)	V4/Ü2 (or V3/Ü2 see below)	8 (or 6)	English
Advanced Internet Technology	Lecture (V)	3	6 (together with exercises)	English
Advanced Internet Technology: Exercise	Practical course (Ü)	1	6 (together with Lecture)	English
Advanced Molecular Dynamics Simulations	Lecture (V)	2	3	English
Advanced Topics in Software Construction	Lecture/practical course (VÜ)	V3/Ü1	6	English
Algorithmic Model Theory	Lecture (V)	4	9	German or English
Algorithms for Data Compression and Resilient Internet Transmission	Practical course (P)	P5	10	English
Algorithms for Sparse Graphs	Seminar (HS)	2		English
Applied Quantum Mechanics	Lecture/practical course (VÜ)	3+3	6	English

Applied Software Engineering within the life cycle of Automotive Electronics	Lecture (V)	V1Ü1		English
Astronomy and Astrophysics	Lecture/practical course (VÜ)	6		English
Automatic Speech Recognition	Practical course (Ü)	2	cf. Lecture	English
Automatic Speech Recognition	Lecture (V)	4 (Master)/3 (Bachelor)	8 (Master)/6 (Bachelor)	English
Basic Techniques in Computer Graphics	Lecture (V)	3	6	English/German
Basic Technologies for Web Compliance Engineering. Developing and testing Web 2.0 applications	Lecture/practical course (VÜ)	V2/Ü1	4	English
Biology/Molecular Biology Lecture	Lecture (V)	2	2	English
Biology/Molecular biology Practical course	Practical course (ÜP)	1	2	English
Bridging Course "Theoretical Computer Science" at BIT	Lecture (V)	2		English
Built to resist: Innate Immunity in Plants	Seminar (S)	2	4	German and English
Calculus of Variations I	Lecture (V)	4		English
Calculus of Variations I (Exercise session)	Practical course (Ü)	2		German or English
Carbon Nanoelectronics	Lecture/practical course (VÜ)	3	5	English
Categorical Data Analysis	Lecture (V)	4		English
Colloquium "Life Science"	Colloquium (K)	1		English/German
Communication in Mobile/Distributed Systems	Practical course (P)	5	10	English
Communication Systems Lab	Practical course (P)	4	7	English
Computational Complexity	Seminar (S)	2	4	English
Computer Vision	Lecture/practical course (VÜ)	3+1	6	German or English
Concurrency Theory	Practical course (Ü)	2		English
Concurrency Theory	Lecture (V)	3	6	English
Condensed Matter Physics I	Lecture/practical course (VÜ)	6		English
Content-based Multimedia Search	Lecture/practical course (VÜ)	3+2	6	English
Critical evaluation of scientific literature in the field of applied microbiology	Seminar (S)	2	3	English
CSCW and groupware: concepts and systems for computer supported cooperative work	Lecture/practical course (VÜ)	V2/Ü1	4	English
Current Topics in Cellular and Developmental Biology	Seminar (S)	2	3	English

Data Analysis and Visualization	Practical course (Ü)	1	0	English
Designing Interactive Systems I	Lecture/practical course (VÜ)	V3/Ü2	6	English
Designing Interactive Systems I (in Bonn)	Lecture/practical course (VÜ)	V3/Ü2	6	English
Domain Decomposition Methods	Seminar (S)	2		German or English
Experimental Physics I : Mechanics and Relativity (Tutorial Group 07), in English	Practical course (Ü)	2		English/English
Fundamentals and applications of bioelectrochemical systems	Lecture (V)	2	3	English
Group meeting	Seminar (S)			German and English
Human-Computer Interaction	Introductory seminar (PS)	2	2	German (English ok too)
Infinite Computations	Practical course (Ü)	2		English
Infinite Computations	Lecture (V)	3	6	English
Internet Algorithms	Seminar (S)	S2	4	English
Introduction to Artificial Intelligence	Lecture/practical course (VÜ)	V3Ü2	6	English
Introduction to Bioinformatics	Lecture (V)	2	4 (incl exercises)	English
Introduction to Computational Neuroscience (Lecture)	Lecture (V)	1	2	English
Introduction to Computer Graphics	Lecture/practical course (VÜ)	V4/Ü2	8	English
Introduction to Model Checking	Lecture (V)	(BSc/MSc: 3, D: 4)	6	English
Introduction to Scientific Computing Languages	Lecture/practical course (VP)	V3/ÜE1	6	English
IT-Security 2	Lecture/practical course (VÜ)	3+1	6	English
Lab: Developing Speech Processing Systems	Practical course (P)	5	10	English
Languages for Scientific computing	Seminar (S)	V2	1	English
Lehrstuhlseminar Advanced Topics in Speech and Language Processing	Seminar (S)	2	0	English/German
Machine Learning	Lecture/practical course (VÜ)	3+1	6	English
Mathematical Models in Science and Engineering (ODEs)	Lecture/practical course (VÜ)	2+1	4	German or English
Mathematics Exercise	Practical course (Ü)	2	2	English
Mathematics Lecture	Lecture (V)	2	2	English
Mechanism of molecular catalysis	Lecture (V)	2		English
Media, Culture and Mind	Lecture/practical course (VÜ)	V2/Ü1	4	English

Course	Type	SWS	Credits	Language
Mobile Learning App Development with Android - project lab	Practical course (P)	4	7 (10 for Media Informatics with additional tasks)	English
Molecular Genetics / Gene Technology II (Regulation of gene expression)	Lecture (V)	2	0	English
Multimedia Internet Technology	Lecture/practical course (VÜ)	V3/Ü1	6	English
Nanoferronics news	Seminar (S)	2	5	English
Nano-optics I	Lecture (V)	2V+1S	5	English
Numerical Analysis IV exercises	Practical course (Ü)	2	2	German or English, on demand
Numerical Methods for the Geo-Sciences I (NGS1)	Lecture/practical course (VÜ)	4	6	English or German
Numerical Multilinear Algebra	Lecture (V)	2	4	German or English
Numerical Multilinear Algebra Exercises	Practical course (Ü)	1	0	German or English
Oberseminar Computer Security	Seminar (OS)	S3 (NO credits)	0	English
Object-Oriented Software Construction	Practical course (Ü)	2	0	English
Object-Oriented Software Construction	Lecture (V)	3	6	English
Pattern Recognition	Lecture/practical course (VÜ)	V4/Ü2	8	English
Practical Genetics of Plant-Microbe-Interaction	Practical course (P)	8	9	English and German
Proseminar: Algorithms and Tools for Verification	Introductory seminar (PS)	2	4	English/German
Quantum Field Theory of Particle Physics I	Lecture/practical course (VÜ)	6	10	English
Quantum Optics	Lecture/practical course (VÜ)	2+1	5	English
Reactor modelling and process simulation	Lecture (V)	2	3	English
Regular and Context-Free Languages: Advanced Results	Lecture (V)	2	4	English
Release Engineering as a Discipline	Seminar (S)			English
Research Focus Class on Communication Systems	Lecture/practical course (VÜ)	V3+Ü2	6	English
Research Seminar Molecular Phytopathology	Research colloquium (FK)	1	2	German and English
Research Seminar on Logic and Automata	Working group (AG)	2		German and English
Selected Topics in Human Language Technology and Pattern Recognition	Seminar (S)	2	4	English/German

Title	Type of course	Lecture hours per week	ECTS credits	Language of instruction
Seminar "Recent topics in Numerical Analysis II"	Seminar (S)	2	0	German or English
Seminar Enzyme catalysis	Seminar (S)	2	3	English/German
Seminar on Environmental Sciences	Seminar (S)	2		German or English
Seminar: Advanced Internet Technology	Seminar (S)	2	4	English
Seminar: Current Trends in Technology Enhanced Learning	Seminar (HS)	2	4	English
Single molecule techniques in life sciences - Advanced experimental methods in modern biophysics	Lecture/practical course (VÜ)	3	5	English
Software Architectures	Lecture (V)	3	6	English/German
Software Engineering Praktikum (M.Sc.)	Practical course (P)	4	7	English
Statistical Methods in Natural Language Processing	Practical course (Ü)	2	0	English
Statistical Methods in Natural Language Processing	Lecture (V)	4	8	English
Superconducting Qubits	Seminar (S)	2	5	English
The Media Computing Project (Praktikum Hauptstudium)	Practical course (P)	2	7 (10 possible for added work)	English
Theoretical Physics II (Tutorial Group 2)	Practical course (Ü)	2	cf. lecture	English
Theoretical Physics II (Tutorial Group 7) (Given in English)	Practical course (Ü)	2	cf. lecture	English
Theory of Distributed Systems	Lecture (V)	3	6	English
Topics in ethology	Seminar (S)	2	3	German or English
Topological Transport	Seminar (S)	2	5	English
Trends in Computer-Aided Verification	Seminar (S)	2	4	English/German
User-Centered Technology Design	Practical course (P)	5	10	English
Web Science	Lecture/practical course (VÜ)	V3/Ü1	6	English
Working Group Cognitive Robotics	Practical course (Ü)	2	0	English/German
Working Group Machine Translation	Working group (AG)	2	0	English/German
Working Group Speech Recognition	Working group (AG)	2	0	English/German

Faculty:	Mechanical Engineering			
Title	Type of course	Lecture hours per week	ECTS credits	Language of instruction
Advanced Software Engineering	Practical course (Ü)	2	3	English
Advanced Software Engineering	Lecture (V)	2	3,5	English

Applied Molecular Thermodynamics	Practical course (Ü)	1	4,5	English
Applied Molecular Thermodynamics	Lecture (V)	2	4,5	English
Automotive Engineering - Practical Course I	Lab course (LÜ)	2	3	English
Automotive Engineering I	Practical course (Ü)	2	3	English
Automotive Engineering I	Lecture (V)	2	3	English
Automotive Engineering III	Practical course (Ü)	1	1,5	English
Automotive Engineering III	Lecture (V)	2	3	English
Basics of Mechanics/Biomechanics	Lecture (V)	2	3	English
CES Seminar: Presentation	Seminar (S)	2	5	German, English on demand
Control Engineering Exercise	Practical course (Ü)	1/5	2.0	English
Control Engineering Lecture	Lecture (V)	1/5	2.0	English
Data Analysis and Visualization	Lecture (V)	2	4	English
Finite Elements in Fluids	Lecture (V)	2	4	English
Fluid Dynamics	Lecture (V)	2	3	English
Foundations of Finite Element Methods for Engineers	Practical course (Ü)	2	5	English
Foundations of Finite Element Methods for Engineers	Lecture (V)	2	5	English
Foundations of Numerical Methods in Mechanical Engineering	Practical course (Ü)	2		English
Foundations of Numerical Methods in Mechanical Engineering	Lecture (V)	3		English
From Molecular to Continuum Physics I	Lecture/practical course (VÜ)			English
Fundamentals of Lightweight Design	Practical course (Ü)	1	1,5	English
Fundamentals of Lightweight Design	Lecture (V)	2	3	English
Gear and Transmission Technology	Lecture (V)	2	3	English
Heat and Mass Transfer (in Englisch)	Practical course (Ü)	2		English
Image Guided Therapy I	Lecture/practical course (VÜ)	2		English
Industrial Engineering and Ergonomics, Participants Master students RWTH Aachen University	Lecture/practical course (VÜ)	2/2		English
Innovation Management for Long-distance Freight Transport Technologies	Lecture (V)	2	3	English
Introduction to Polymer Physics	Lecture/practical course (VÜ)	2	3	English
Lattice-Boltzmann Methods	Lecture/practical course (VÜ)	4	5	English

Lecture Mechatronics and Control for Production Plants M.Sc.	Lecture (V)	2	5	English
Machine Design Process	Practical course (Ü)	2		English
Machine Design Process	Lecture (V)	2		English
Manufacturing Technology I	Lecture (V)	2	0	English
Mechanics of living tissues	Lecture/practical course (VÜ)	3	5	English
Membrane Processes	Practical course (Ü)	2	3	English
Membrane Processes	Lecture (V)	2	3	English
Modelling, Model Reduction and Simulation in Laser Processing II	Lecture/practical course (VÜ)	2	4	English
Numerical Analysis IV	Lecture (V)	4	8	German or English, on demand
Numerical Methods for Partial Differential Equations	Lecture/practical course (VÜ)	4+2	8	English
Parallel Programming I	Practical course (Ü)	Ü2	2	English
Parallel Programming I	Lecture (V)	V3	4	English
Practical Applications of Computer-Aided Engineering Tools	Practical course (Ü)	1		English
Practical Introduction to FEM-Software I	Lecture/practical course (VP)	3	3	English
Process Chains for the replication of complex optical components	Lecture (V)	2	3	English
Production Management A	Practical course (Ü)	1	3	English
Production Management A	Lecture (V)	2	3	English
Quality Management (Lecture/Exercise)		2	3	English
Selected Topics in Turbomachinery	Practical course (Ü)	2	3	English/German
Selected Topics in Turbomachinery	Lecture (V)	2	3	English/German
Simulation of Discrete Event Systems, Participants International Academy	Lecture/practical course (VÜ)	2/2		English
Simulation of Discrete Event Systems, Participants Master students RWTH Aachen University	Lecture/practical course (VÜ)	2/2		English
Simulation Techniques in Manufacturing Technology	Practical course (Ü)	1	0	English
Simulation Techniques in Manufacturing Technology	Lecture (V)	2	4,5	English
SiSc Laboratory	Lab course (LÜ)	3	6	English

Tensor Algebra and Tensor Analysis for Engineering Students I	Practical course (Ü)	2	5	English
Tensor Algebra and Tensor Analysis for Engineering Students I	Lecture (V)	2	5	English
Transportation Design - Advanced Design and Presentation Techniques	Lecture/Colloquium (VK)	2	2	German and English

Faculty:	Medicine			
Title	Type of course	Lecture hours per week	ECTS credits	Language of instruction
Advanced Immunology	Seminar (S)	2	3	English/German
Anatomy: Practical Course	Practical course (ÜP)	1	2	English
Artificial Organs I :Lecture	Lecture (V)	2	3	English
Artificial Organs I:Practical Course	Practical course (P)	1	2	English
Artificial Organs II: Lecture	Lecture (V)	2	3	English
Artificial Organs II: Practical Course	Practical course (P)	1	2	English
Biochemistry and Cell Biology seminar	Practical course (Ü)			English/German
Cell Culture and Tissue Engineering (Lecture)	Lecture (V)	2	3	English
Cell Culture and Tissue Engineering (Prac Class)	Practical course (P)	1	2	English
Chemistry/Biochemistry: Lecture	Lecture (V)	2	2	English
Chemistry/Biochemistry: Practical Course	Practical course (P)	1	2	English
Chemistry/Biochemistry: Practice	Practical course (P)			English
Colloquium Medical Informatics	Research colloquium (FK)	2	2	English/German
experimental hepatology: immunology	PhD colloquium (DoK)			English
experimental hepatology: signal transduction	Research colloquium (FK)			English
Hard Tissue Implants and Prostheses Lecture	Lecture (V)	1		English
Image Guided Therapy / Molecular Imaging Lecture	Lecture (V)	2	3	English
Image Processing and Management: Exercise	Practical course (Ü)	1	2	English
Image Processing and Management: Lecture	Lecture (V)	2	3	English
Immunology and Microbiology (2L)	Lecture (V)	1		English
Introduction to Computational Neuroscience (Exercise)	Practical course (Ü)	2	3	English
Laboratory training for cryosectioning and immunostaining of samples	Practical course (ÜP)	1		German or English

Medical Image Processing: Seminar	Seminar (S)	2	4	English
Medical Imaging Part I (for Natural Sc., Engineering and Medicine)	Lecture/practical course (VP)	2	4	English
Medical Statistics (Exercise)	Practical course (Ü)	1	2	English
Methods in Immunology	Seminar (S)	2	0	German or English
Microsurgical training for CNS studies in small laboratoty animals	Practical course (Ü)	1		English
Nerve Regeneration Journal Club	Seminar (S)	2		English
Neuro-psychiatric research colloquium of the IRTG 1328	Seminar (S)	2		English
Neurosciences:Lecture	Lecture (V)	1		English
PhD student colloquium in experimental surgery of Prof. Tolba's research group	PhD colloquium (DoK)	1		English
Physics for Biomedical Engineering: Exercise	Practical course (Ü)	1	2	English
Physics for Biomedical Engineering: Lecture	Lecture (V)	2	2/5	English
Physiology: Lecture	Lecture (V)	2	2	English
Physiology: Practical Course	Practical course (P)	1	2	English
Postgraduates' progress reports	Seminar (S)			Ponglish
Prep Course in Mathematics (Lecture)	Lecture (V)	1		English
Prep-Course Mathematics (Exercise)	Practical course (Ü)	1		English
Regulation of protein structure , expression and function	Lecture (V)		3	English
Scientific course in immunology	Practical course (P)	all day	0	German or English
Seminar on molecular and pathophysiological mechanisms of cytokines and their receptors	Practical course (Ü)			English/German
Stereotaxic microtransplantation in the CNS of small laboratory animals	Practical course (Ü)			English
Supervision of Doctoral Thesis (MD)	Practical course (P)	all day	0	German or English
Supervision of Master Thesis	Practical course (P)	all day	0	German or English
Systems Biology: Lecture	Lecture (V)	2	3	English
Systems Biology: Practical Course	Practical course (Ü)	1	2	English