

Summer Semester 2020

English-taught courses

at the

Otto von Guericke University Magdeburg, Germany



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General Information

Explanations: Level: B = Bachelor; M = Master.

Hours: 1 SWS = 45 minutes;

L = Lecture, T = Tutorial, U=Exercise, S = Seminar, P=Training

BS=Compact Course, HS=Advanced Seminar, PS=Undergraduate Seminar,

ECTS:

ECTS = all-European credit transfer system (not relevant for non-European students).

If there is more than one number for ECTS, you can choose between different options to conclude the seminar (for example exam or oral presentation).

Some course descriptions include no credit (ECTS) information. Please consult the lecturer for this information. The lecturers' contacts can be found in LSF, under the relevant course details:

<https://lsf.ovgu.de/qislsf/rds?state=user&type=0>

- This is a list of the courses offered in the summer semester 2020. It's an orientation for the courses offered in summer semester 2021, because most courses are offered annually, but there is no guarantee that the courses will be offered again.
- No responsibility is taken for the correctness of the course information. Courses are subject to changes and other courses might be added.
- The courses you wish to take at OVGU should correspond to your study program at your home institution. All courses you wish to take at OVGU must be agreed upon in your Learning Agreement with your home coordinator and with the OVGU departmental coordinator.
- Access to specific courses hereunder cannot be guaranteed in advance. We reserve the right to check the applicant's academic qualification for any such course.

1 Faculty of Humanities, Social Sciences and Education (FHW)

Course Name	Level	Hours/ week	ECTS
An ever wider Europe? The Enlargement Policy of the EU.	B	2S	4/6
Are people in Other Countries different? The Imagology of National Character	B/M	2S	4/6
Arguing International Politics- Debating Normative Issues of Global Scope	M	2S	4/6
Articulating and Defending Conflict Management Policy	M	2S	4
Cognition as a Natural Kind	B/M	2S	2/4
Comparing and Connecting Humanitarian Action and Development Assistance	M	2S	4/5/6
Conflicts in Energy Transitions	M	2S	4/5/6/10
Didactics and Learning Theories in Vocational Education and Training	M	2S	6
Ecocritical Perspectives on Monsters and Monstrosity	B	2S	4/6
EU Policy Cycle	M	2S	10
Fantastic Cities	B	2S	4/6
Fictionalized Threats to Civilization in Europe; Some of Ian McEwan's Novels, and a Novella	B/M	2S	4/6
Fish: Philosophy of Perception	M	S	
History and Theory of Literature and Culture I: 16th to 18th Century	B/M	2L	4/5/6
Human Rights and Sustainability	M	2S	4/5/6
Intercultural identity: Landscape Gardens in Europe	B	2S	4/6
International Conflict Management- Simulation of the UN Security Council	M	BS	10
Introduction to Social Cognition	B	2S	2/4/6
Landscape Gardens and Their Message of Interculturality	M	2HS	4/5/6
Mediation	M	BS	10
Medicine in SF Film and Fiction	B/M	2S	4/5/6

Methods in Peace and Conflict Studies: An Overview	M	2S	10
Methods of Peace and Conflict Studies	M	2S	10
Parliaments in the EU	B	2S	4/5/6/10
Philosophy of Science	B/M	2L	2/4
Political Violence and Media	M	BS	4
Postcolonial Approaches to South-East Asia	M	2S	4/6
Qualitative research methods in political science	B/M	2S	10
Quality of Life in Europe: Are more equal societies better?	M	2S	4/5/6/10
Scotland's urban Heritage	B/M	2S	4/5/6
The EU Governance System: Polity, Politics and Policies	B/M	2L	4/5/6
The Language of Advertising	B	2PS	4/6
Theoretical Problems of Unity: Descartes, Locke, Hume, Kant, Coleridge and others	B/M	2S	4/5/6
The Politicization of the EU-Causes, Patterns, Consequences	M	2S	4/5/6/10
Transitional Justice	M	2PS	4/6
Vocational Education for Sustainable Development	M	2S	4

2 Faculty of Economics and Management (FWW)

Course Name	Code	Level	Hours/week	ECTS
Advanced Computational Transportation	22033	B/M	2L+2U	5
Bargaining, Arbitration, Mediation	20812	B/M	2L+2U	5/6
Behavioral Business Economics	21004	B/M	2S	10
Behavioral Finance	20043	M	2L+1U	5/6
Business Decision Analysis	41057	B	2L+1U	5
Business Forecasting	22035	B/M	2L+2U	5/6
Business Planning	20624	B/M	2L+1U	5/6
Collective Decision-Making in Organizations	20623	M	2L+1U	5/&
Company Valuation	22373	B/M	2L+2U	5/6
Computational Finance and Financial Management	22047	B/M	2S	10
Consumer Behavior	20322	B/M	2L+1U	5/6
Cross-Cultural Management	22683	M	2L	5/6
Current Issues in International Management	21920	B	4S	10
Current Trends in Marketing Research	21013	B/M	4S	10
Do Employees benefit from lower corporate income taxes? Evidence on the incidence of the corporate income tax	22728	M	4PS	15
Economic Policy	41071	B/M	2L+1U	5
Economics of International Business	21682	B/M	2L+1U	5/6
Empirical Corporate Finance	22045	B/M	2S	10
Evidence-Based Policy Analysis	50004	B/M	2L+2U	5/6
Financial Engineering	50760	B/M	2L+2U	5/6
Financial Institutions	50009	B/M	2L+2U	5/6
Game Theory	41091	B	2L+1U	5
International Business Plan	22203	B	2S	10
International Entrepreneurship	22689	M	4S	10
International Joint Venture	22680	B	4S	10
Introduction to Econometrics	41092	B	2L+2U	5
Introduction to International Economics	41038	B/M	2L+2U	5

Introduction to Probability and Statistics	41083	B	2L+2U	5
Inventory Management	21979	M	2L+2U	5/6
Management Accounting	41066	B	2L+2U	5
Managing in a globalized world	22722	B	2S	10
Marketing Methods & Analysis	50566	B/M	2L+2U	5/6
Multicultural and Interactive Marketing Communication	22034	B/M	2L+1U	5/6
Negotiations in International Business	22724	M	2S	10
Operations Research Application in Transport and Mobility	22744	M	4S	10
Robots at work: Economic effects of automation	22707	M	2S	10
Population and Family Economics	22036	B/M	2L+1U	5/6
Principles of International Management	41040	B	2L+1U	5
Project in FinTech and Blockchain Innovation	22228	M	4PS	15
Secrets of Innovation in Multinational Companies	22038	B/M	2S	10
Strategic Analysis and Decision Making	22688	M	4PS	15
Strategic Technology	22681	B	2L+2U	5
Supply Chain Management	20179	B/M	2L+2U	5/6
Tax Incidence-Who bears the burden of the corporate income tax?	22727	M	4S	10
The Economics of Banking and Financial Systems	21451	B	2L+2U	5
Topics in Economic Analysis of Law	21166	M	2S	10

3 Faculty of Process and Systems Engineering (FVST)

Course Name	Level	Hours/ week	ECTS
Advanced Heat and Mass Transfer	M	2L+2U	5
Air Pollution Control	M	3L+1U	4
Computational Fluid Dynamics	M	1L+2U	4
Chemical Reaction Engineering	B/M	2L+2U	5
Chemistry	M	3L	5
Control of toxic trace elements	M	3L/U	4
Electrochemical Process Engineering	M	2L+1U	
Explosion-protected equipment	M	2L	
Fluid Dynamics	M	2L+2U	
Legal Issues in Plant Operation and Process Safety	M	2L	3
Mechanical Process Engineering	M	2L+2U	5
Methods of Risk Analysis	M	2L + 1U	4
Modern organic synthesis	M	2L	3
Product quality in the chemical industry	M	2L+1U	4
Relevant soft skills for academics	B/M	BS	No ECTS, certificate
Sustainability Assessment for Biofuels	M	2L+1U	4
Transport phenomena in granular, particulate and porous media	M	2L+1U	5
Thermal power plants	M	2L+1U	4

4 Faculty of Computer Sciences (FIN)

Course Name	Level	Hours/ week	ECTS
Advanced Database Models	M	2L + 2U	6
Advanced Topics in Databases	M	2L + 2U	6
Advanced Topics in Machine Learning	M	2L + 2U	6
Computational Geometry	M	4 L/U	6
Computational Intelligence	B/M	2S	6
Computational Intelligence in Games	B/M	2L + 1U	5/6
Computer-Supported Diagnosis of Cardiovascular Diseases	B	2S	3
Data and Knowledge Engineering	M	2S	6
Data Mining I - Introduction to Data Mining	B/M	2L + 2U	6
Data Science with R	M	2S	6
Datenbanken 1 (Database Concepts)	B/M	2L + 2U	5
Evolutionary Multi-Objective Optimization	M	2L + 2U	6
Flow Visualization	M	2L + 2U	6
Fuzzy Systems	M	4L + 4U	6
Hot Topics in Communication and Networked Systems	B/M	2S	3
Introduction to Computer Vision	B	2L + 2U	5
Introduction to Deep learning	B/M	2L + 2U	
Introduction to Software-Engineering for Engineers	M	2L + 2S + 2U	5
Knowledge Engineering and Digital humanities	M	2L + 2U	6
Learning and Memory	B/M	3L	
Learning Generative Models	B/M	2L	5
Management of Global Large IT-Systems in International Companies	M	4 L/U	6
Medical Visualization	M	2L + 2U	6
Methods on Computed Tomography	M	2L + 2U	5/6
Principles and Practices of Scientific Work	M	2L + 2U	3
Service Engineering	B/M	2L	5
Software Defined Networking	B/M	2L + 2U	6

Software Engineering	B	2L+2U	5
Student Conference	M	4L	6
Visual Analytics	M	2L + 2U	6

5 Faculty of Electrical Engineering and Information Technology (FEIT)

Course Name	Level	Hours/ week	ECTS
Advances in medical physics	M	2P	5
Anatomy for Engineering students	B/M	3L/U	5
Basics of Radiation Physics and Image Science	M	L/U	4
Brain Computer Interfaces	M	1P	
Digital Communication Systems	M	2L+1U	5
Digital Information Processing Lab	M	2P	5
Digital Power of Networks	M	BS	5
Distributed Control Systems	M	2L + 1U	5
FPGA and Microcontroller Programming (Part 1/2)	M	2P	5
Heterogeneous Computing	M	2L+1U	5
Introduction into nuclear medicine	M	2L + 1U	5
Introduction to Programming Techniques in Engineering	M	4L	5
Introductory event 'Medical Systems Engineering'	M	S	
Lab course CT	M	P	
Machine Learning, Dynamical Systems and Control	M	L/U 3	
Medical Measurement Technology	M	2L + 2S	5
Nonlinear Control	B/M	L/U 3	5
Nonlinear Systems	M	L2+U2	
Power Systems Control and Optimization	M	3L/U	
Process Control	M	2L + 1U	5
Project "Electrical Actuators"	M	P3	
Project "Electric Power Networks/ Renewable Energy Sources"	M	P3	
Project "Power Electronics"	M	P3	
Radiological Diagnostics	B/M	1L	
Renewable Energy Sources	M	2L + 1U	5
Scientific Working	M	S	5
Simulation in Medicine and Medical Engineering	M	S	
Solution Design in Medical Engineering	M	2S	5

States Estimation	M	2L+2U	
Systems Theory in Systems Biology	M	L2	

6 Faculty of Natural Sciences (FNW)

Course Name	Level	Hours/ week	ECTS
Development & Plasticity	M	2L + 2S/U	3
Mikrofluidik: Theorie und Anwendungen, Teilmodul (Microfluidics: theory and usage – part module)	B/M	2L	4
Molecular & Cellular Neurobiology	M	P + 2L + 2S	11
MR System Engineering	M	2L	
Statistical Foundations	B/M	2L+2U	3
Systems Neurophysiologie	M	3L	4
Systems Neurophysiology (Auditory systemic electrophysiology)	M	P	2
Systems Neurophysiology (Electrophysiology Methods)	M	P	2
Theoretical Neuroscience II	M	3L + 2S/U	3 / 4

7 Faculty of Mathematics (FMA)

Course Name	Level	Hours/ week	ECTS
Advanced Topics in Numerical Linear Algebra	M	4 L/U	6
Introduction to Probability and Statistics	B	2L + 2U	5
Mathematical Methods II	B	2L + 3U	
Statistical Foundations	B/M	2L+2U	

8 Faculty of Mechanical Engineering (FMB)

Course Name	Level	Hours/ week	ECTS
CAX Basics	M	2L + 2U	5
Collaborative Management in Supply Networks	M	4 L/U	5
Engineering Design II	M	4L + 4U	5
Factory Automation	M	3L/U	5
Mechanics of Materials	M	2L + 2U	5
Renewable Energies- Materials, Components, Functions	M	2L+2U	5