

**Courses offered in English at Graz University of Technology
Academic Year 2008/09**



Course number	term	Course Title
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Faculty of Architecture

161.184	W	Digital methodes of design and representation 2
161.400	S	Architecture and new media

Faculty of Civil Engineering

GEO.606	S	Applied Quarternary Geology
GEO.620	S	Project for Geosciences for Bachelor
GEO.701	W	Soil Forming Processes
GEO.702	W	Structures of the Upper Crust
GEO.710	W	Rock Mass Characterization
GEO.730	W	Statistical Methods
GEO.731	W	Anaysis and characterization of aqueous solutions
GEO.732	W	Applied Geophysics
GEO.733	W	GIS & Remote Sensing für Erdwissenschafter
GEO.790	W	Clays and Clay Minerals in Geotechnics
GEO.791	S	Field Methods of Rock Mass Characterization
GEO.791	W	Field Methods of Rock Mass Characterization
GEO.792	W	Tunnel Mapping
GEO.793	W	Engineering Geological Laboratory Methods
GEO.801	S	Geomorphology
GEO.802	S	Stratigraphy
GEO.803	S	Sedimentary Petrology
GEO.804	S	Petrology of the Lithosphere
GEO.810	S	Ductile Structures and Rheology
GEO.883	S	Hydrogeological Laboratory Methods
GEO.891	S	Rock Mechanics and Tunneling
GEO.893	S	Rock Mechanics Laboratory
GEO.894	S	Rock Mechanics Laboratory
GEO.895	S	Fundamentals of Soil Mechanics
GEO.896	S	Soil Mechanics laboratory course
GEO.897	S	Soil Mechanics laboratory course
GEO.910	W	Seminar in Earth Science for Master Students
GEO.912	W	Applied Mineralogy
GEO.920_1	S	Field Trip
GEO.941	W	Modelling in Engineering Geoloy
GEO.990	W	Geotechnical Monitoring
GEO.991	W	Engineering Geological Investigation
GEO.992	W	Mass movements
GEO.993	W	Applied Petrology
GEO.994	S	Engineering Geological Field Excursion
GEO.994	W	Engineering Geological Field Excursion
202.462	S	Boundary Elements
202.556	S	Finite Element Method - Advanced course

217.461	W	Computational Geotechnics	
218.480	W	Economic English for Civil Engineering	
220.452	S	Rock Mechanics and Tunnelling	
220.462	S	Interpretation of Displacement Measurements (NATM)	
221.011	S	Hydrogeochemistry - practical course	
221.072	W	Selected topics on hydrogeology	
221.087	W	Selected chapters of applied mineralogy I	
221.362	S	Project	
221.362	W	Project	
221.415	W	Rock Mass Characterization	
221.422	W	Clays and Clay Minerals in Geotechnics	
221.443	W	Field Methods of Rock Mass Characterisation	
221.443	S	Field Methods of Rock Mass Characterization	
221.451	W	Engineering Geological Investigation	
221.455	W	Applied Geophysics	
221.500	W	Project (Master)	
221.602	W	Selected topics of rock strength, fracturing and weathering	
221.606	S	Advanced Engineering Geology	
261.451	W	Kontinuumsmechanik / Continuum mechanics	English or German
261.452	S	Allgemeine Materialtheorie / Theory of Materials	English or German
261.500	W, S	Master-Projekt 261 / Project Ausgewählte Kapitel der Kontinuumsmechanik / Selected topics in	German English or German
261.601	W	continuummechanics	German
261.611	S	Course for PhD students	

Faculty of Mechanical Engineering, Economics

301.032	W	Industrial Robotics
303.007	W	Modelling and Simulation
303.179	S	The Technical Harmonization in the European Market
303.200	W	Integrative laboratory materials
303.201	W	Seminar to integrative laboratory materials
303.202	S	Seminar to basic laboratory materials
303.203	W	Materials production and processing
303.204	S	Plasticity and forming processes
303.205	W	Surface technology
303.206	S	High-performance materials and composites
303.207	W	Project laboratory Metals and Ceramics
303.207	S	Project laboratory Metals and Ceramics
303.209	W	Selectin of Engineering materials
303.210	S	Modelling and Simulation
303.211	W	Materials technology of steels
303.212	W	Fracture Mechanics
307.090	S	Energy Systems Analysis
307.098	S	Energy & Environment
309.004	S	IT in Production Systems
309.013	W	Material Flow Systems and Logistics
309.024	S	Simulation Modeling of Transmission Systems
309.028	W	Automation Technologies for Production Systems
313.066	W	CAX in Automotive and Engine Technology
313.067	W	CAX in Automotive and Engine Technology

313.192	S	Traffic and Air Quality
331.088	W	Introduction to Automotive Engineering
333.038	S	Vehicle safety 1 (vehicle structure)
333.041	W	Vehicle safety 2 (restraint systems)
335.001	W	Modern Body Constructions
335.002	S	Advanced Processing Technology
335.004	W	Process Simulation of Forming and Joining Technologies
336.018	W	Production Strategies
336.032	W	Teambuilding
336.040	W	Leadership and Motivation
336.048	W	Quality Management
336.053	W	Warehouse Logistics
336.054	W	Warehouse Logistics
336.062	S	Successfactors in Management
336.064	S	Career Management
336.066	S	Safety and Sustainability
336.090	S	PSM Internship
336.144	S	Product Innovation Management
336.145	S	Product Innovation Management
336.167	W	Change Management
336.168	W	Change Management
371.108	W	Industrial Management-Seminar
371.141	W	Industrial Engineering
371.142	W	Industrial Engineering
371.146	W	Product Innovation Project
371.172	W	Creativity Techniques
371.173	W	Creativity Techniques
372.214	S	Project Management (english)
372.228	W	Management Seminar
372.232	W	scientific consolidation of management and organisation 1
372.233	S	scientific consolidation of management and organisation 2
372.229	W	Management Seminar
372.242	S	General Management, Case Studies
372.243	S	General Management, Case Studies
372.245	S	General Management, Simulation
372.246	S	General Management, Simulation
372.247	S	General Management and Organization
372.248	S	General Management and Organization
372.258	W	Information Management
372.259	W	Information Management
373.301	W	Business Economics Case Studies
373.303	W	Business Economics Case Studies
373.305	S	Rhetoric and Presentation (engl.)
373.306	S	Rhetoric and Presentation (engl.)
373.341	W	Marketing Management (english)
373.342	W	Marketing Management (english)
373.370	S	Controlling (engl.)
373.371	S	Controlling (engl.)
374.001	W	Quantitative Methods for Business
374.002	W	Quantitative Methods for Business
374.004	S	Optimization Methods for Operations Planning
374.016	S	Business Informatics

374.017	S	Business Informatics
374.018	S	Engineering and Business Informatics
374.019	S	Engineering and Business Informatics
374.021	W	Production Planning & Control
374.022	W	Production Planning & Control
374.023	W	Production Planning & Control

Faculty of Electrical Engineering and Information Technology

437.213	S	Electrodynamics 1 (engl.)
438.086	S	Statistical Signal Processing
438.087	S	Statistical Signal Processing
439.214	S	IC Design Project Management and Quality
439.215	S	Noise and Crosstalk, Modelling and Simulation
439.222	W	Survey on Methods for IC Evaluation
440.307	S	Communication Networks
440.315	W	Information Theory and Coding
440.316	W	Information Theory and Coding
440.406	S	Wireless Communication Networks and Protocols
440.407	W	Measuring Techniques in the Middle Atmosphere
440.418	W	Satellite Communications
440.419	W	Satellite Communications
440.505	S	Satellite Communications, Seminar
440.512	W	Privatissimum 1
440.513	S	Privatissimum 2
441.055	W	Digital Audio Engineering, Laboratory
441.055	S	Digital Audio Engineering, Laboratory
441.067	W	Signal Processor Techniques
441.098	S	Optical Communications
442.003	W	Digital Signal Processing Laboratory
442.011	W	Adaptive Systems
442.012	W	Adaptive Systems
442.021	W	Nonlinear Signal Processing
442.022	W	Nonlinear Signal Processing
442.031	W	Speech Communication 1
442.032	S	Speech Communication 2
442.033	S	Speech Communication Laboratory
442.041	W	Advanced Signal Processing 1, Seminar
442.042	S	Advanced Signal Processing 2, Seminar
442.051	W	Privatissimum 1
442.052	S	Privatissimum 2
442.061	S	Digital Audio Engineering 2
442.087	W	Seminar/Project Signal Processing
442.087	S	Seminar/Project Signal Processing
442.088	W	Seminar/Project Speech Communication
442.088	S	Seminar/Project Speech Communication
442.089	S	Master Project
442.089	W	Master Project
442.103	W	Fundamentals of Digital Communications
442.104	W	Fundamentals of Digital Communications
442.113	W	Fundamentals of Telecommunication
442.114	W	Mobile Radio Systems
442.120	W	Mixed-Signal Processing Systems Design

442.131	S	Source Coding Theory
442.182	S	Bachelor Thesis Telematics
442.183	W	Audio Signal Processing, Seminar
442.184	W	Speech Processing, Seminar
442.184	S	Speech Processing, Seminar
445.051	W	Neural networks
445.155	W	Neural networks
448.034	S	Signal Processors
450.001	W	Biomechanics of Biological Tissues
450.002	W	Mechanics for Biomedical Engineers
450.003	W	Biomechanics and cardiovascular measuring technique
450.004	S	Introduction to Biomechanics
450.005	S	Computational Biomechanics
450.006	W	Tissue Engineering
450.007	W	Mechanics of Proteins and Cells
450.011	W	Seminar in Biomedical Engineering
450.012	W	Mechanics for Biomedical Engineers
450.013	S	Seminar in Biomedical Engineering
450.014	S	Introduction of Biomechanics

Faculty of Mathematical and Physical Sciences

501.070	W	AK Topology
501.635	W	Recent developments in Mathematics for Finance and Insurance
501.636	W	Recent developments in Mathematics for Finance and Insurance
501.840	W	Seminar TM
501.903	W	Classical groups over commutative rings
502.791	W	Mathematical Seminar TM (Discrete Optimization)
503.008	W	Group theory
503.018	S	Random Walks
503.037	S	Mathematical Models
503.038	S	Mathematical Models
503.534	W	Algebra
503.557	S	Bachelor project TM (Stochastics, Fractals and Geometry)
503.563	S	Stochastics, Fractals and Geometry
503.708	S	The calculation of variations
503.709	S	The Calculation of Variations
503.736	S	Discrete Stochastics and Information Theory
503.737	S	Discrete Stochastics and Information Theory (Computer Science)
503.739	W	Discrete Stochastics and Information Theory
503.901	W	Group Representations
503.902	W	Group Representations
503.903	W	AK Analysis (Vector and Tensor Analysis)
503.904	W	AK Analysis (Vector and Tensor Analysis)
503.905	S	AK Analysis (Topology and Space-Time-Theories
503.906	S	AK Analysis (Topology and Space-Time-Theories Selected Chapters of Functional Analysis: Spectral Theory of Chrystal
503.907	S	Lattices Selected Chapters of Functional Analysis: Spectral Theory of Chrystal
503.908	S	Lattices
503.935	S	Seminar TM (Industrial Mathematics)
503.936	W	Project TM (industrial mathematics)
503.937	S	Project TM (industrial mathematics)

503.946	W	AK Analysis (Potential Theory)
503.947	W	AK Analysis (Potential Theory)
504.000	W	Numerical Simulations in Technical Sciences
504.000	S	Numerical Simulations in Technical Sciences
504.499	S	Privatissimum
504.500	W	Privatissimum
504.549	W	Proseminar Bakkalaureat TM
504.558	S	Bakkalaureat Project TM
504.561	S	Seminar Bakkalaureat TM
504.712	W	Mathematical Modelling 2
504.791	W	Seminar TM (Computational Mathematics)
504.792	S	Seminar TM (Computational Mathematics)
504.798	S	Project TM (Computational Mathematics)
504.901	W	Grundthemen Numerik (Advanced Mathematical Modeling)
504.950	W	AK Analysis (Boundary Integral Equations)
506.406	S	Selected Topics in Mathematics for Finance
506.790	S	Seminar TM (Applied Statistics)
507.231	W	Selected Topics of CAD
508.505	W	Advanced Geomathematics
508.506	W	Advanced Geomathematics
508.507	W	Geophysics & Geodynamics
508.508	W	Geophysics & Geodynamics
509.510	W	Photogrammetry and Remote Sensing
509.514	S	GIS and Remote Sensing Applications
509.540	W	Remote Sensing
510.506	S	Geoinformatics Research Seminar
513.005	W	Solid State Physics - Fundamentals
513.006	S	Solid State Physics - Applications
513.042	W	Optoelectronic Semiconductor Devices
513.046	W	Organic Materials & Structural Research 1
513.060	S	Surface and Thin Films Physics
513.062	W	Thin Film Technology
513.064	S	Surface Analysis
513.066	W	Recent Development in Surface Analysis
513.121	W	Physics of Semiconductors and Devices
513.141	S	Organic Semiconductors - Fundamentals and Applications
513.148	W	Theoretical and experimental investigation of organic semiconductor materials I
513.149	S	Theoretical and experimental investigation of organic semiconductor materials II
513.151	S	Advanced Physics Seminar for Doctoral Students
513.152	W	Advanced Physics Seminar for Doctoral Students
513.160	S	Microelectronics and Micromechanics
513.201	W	Organic Electronics
513.202	S	Molecular Electronics&Devices
513.221	W	Physics of Semiconductor Devices
513.300	W	Introduction to solid-state physics
513.301	W	Material Characterization III
513.304	W	Vacuum Technology AdvMatSci
515.020	W	Practical training project Theoretical Physics – Computational Physics

515.020	S	Practical training project Theoretical Physics – Computational Physics
515.300	W	Atom physics - Quantum mechanics ET/MB
515.302	S	Modelling and Simulation of Semiconductors
515.403	S	Introduction to Symbolic Computation
515.412	S	Classical and Quantum Physics
515.412	W	Classical and Quantum Physics
515.557	S	Electromagnetic Fields (statics, basic dynamics)
515.560	W	Correlation Phenomena in Solid State Physics 1
515.561	S	Correlation Phenomena in Solid State Physics 2
515.568	W	Special topics in the theory of correlated systems
515.569	S	Special topics in the theory of correlated systems II
515.571	W	Electrodynamics
515.573	S	Training course: Correlation phenomena in condensed-matter physics MATHEMATICA for Theoretical Physics: Symbolic and Numerical
515.574	W	Computation
515.575	S	Introduction to Theoretical Physics
515.603	W	Quanta and Fields
515.605	W	Phase Transitions and Critical Phenomena
515.611	S	Simulations of strongly correlated materials
515.614	W	Quantum Monte Carlo methods for strongly correlated systems
515.819	S	Computer Simulations
515.823	S	Computer Simulation and Many-Body Physics
515.826	S	Selected Topics in Theoretical Many-Body Physics
519.007	W	Electron Microscopy in Materials Science
519.011	W	Scientific Methods
519.021	W	Introduction into Electron Microscopy and Related Methods
519.023	W	Privatissimum Microanalysis
519.300	W	Materials characterization II
519.310	W	Project laboratory Metals and Ceramics
520.510	W	Measurement Systems
520.511	W	Measurement Systems
520.601	W	Engineering Geodesy
520.602	S	Civionics

Faculty of Chemistry, Chemical- and Process Engineering, Biotechnology

CHE.147	S	Biochemistry I
CHE.155	W	Biochemistry II
CHE.171	W	Chemical Engineering
CHE.177	S	Biotechnology - Laboratory Course
CHE.178	S	Biotechnology - Seminar
CHE.311	W	Inorganic Chemistry I - Organometallic Chemistry of Main Group Elements
CHE.343	W	Electrochemical Reactions
CHE.351	S	Modern experimental kinetic methods
CHE.354	S	Renewable Resources
CHE.355	S	Organometallic Polymers, Materials and Nanoparticles
CHE.377	W	Speciation
CHE.516	W	Renewable Resources - Chemistry and Technology II
CHE.522	S	Macromolecular Materials and -technologies II

CHE.531	W	Introduction to Chemical Engineering for Technical Chemists
CHE.546	W	Lab Course Surface and Interface Technologies
CHE.547	W	Lab Course Surface and Interface Technologies
CHE.574	S	Electrosynthesis in Industry and Laboratory
CHE.602_1	W	Project Laboratory Surface and Interface Technologies
CHE.602_1	S	Project Laboratory Surface and Interface Technologies
CHE.782	S	Pharmaceutical Multiphase Reactors
MOL.502	W	Molecular Analytics
MOL.741_1	W	xx
MOL.855	W	Molecular physiology
MOL.915	W	Environmental food biotechnological
MOL.932	W	Environmental Biotechnology
MOL.952	S	Laboratory course Environmental Biotechnology
MOL.952	W	Laboratory course Environmental Biotechnology
		Quality Assurance in Pharmaceutical, Food and Biotechnological
MOL.962	W	Processing
MOL.963	W	Environmental Microbiology
MOL.964	W	Bioremediation
MOL.965	W	Enzymatic processes in environmental and human technology
MOL.982	S	Protein Technology
641.250	W	Glycochemistry and Glycobiologie
641.250	S	Glycochemistry and Glycobiologie
641.252	W	Intelligent Products from Renewable Resources
641.252	S	Intelligent Products from Renewable Resources
648.004	S	Molecular Enzymology II
648.087	W	Biophysical chemistry of lipids
648.100	W	Cell Biology
648.200	S	Cell Biology 2
651.208	W	Tutorial 1 BCR
651.209	S	Supervising doctoral thesis
653.001	W	Selected topics in applied microbiology I
653.008	W	Environmental microbiology
653.017	S	Environmental Biotechnology
655.012	W	Proteinengineering 1
655.013	S	Proteinengineering 2
661.305	S	Minerals in Paper Manufacturing
661.308	S	Paper Coating Technology and Converting
661.310	S	Pulp & Paper Engineering Field Trip
661.326	S	Paper Coating Technology and Converting - ULG P&P
669.007	S	PhD students' seminar
669.009	W	Energy and environmental process engineering
669.010	W	chemical engineering and sustainable technology
669.011	W	Preventive Environmental Production Strategies
669.017	S	chemical engineering and sustainable technology II
669.019	W	Chemical Engineering for Pharmaceuticals
669.022	S	Production integrated environmental Protection II
669.029	S	Chemical Engineering for Pharmaceuticals II
669.032	W	Energy in Process Engineering
		Pharmaceutical Engineering II: Drug Products and Manufacturing
669.034	W	Sciences
669.035	W	Pharmaceutical Engineering I: Active Ingredients and Processes
669.038	W	Production Integrated Environmental Protection

669.039	S	Innovation for sustainability in industry
669.040	W	Ecological Process Evaluation

Faculty of Computer Science

705.005	W	System-on-Chip Architectures and Modelling
705.040	W	Verification and Testing
705.041	W	Verification and Testing
705.052	S	Selected Topics IT Security 1
705.053	S	Selected Topics IT Security 1
705.059	S	IT Security
705.062	S	Applied Cryptography
705.063	S	Applied Cryptography
705.064	W	Applied Cryptography 2
705.065	W	Applied Cryptography 2
705.108	W	PhD Seminar
705.304	S	Cryptanalysis of symmetric cryptographic primitives
705.804	W	Applied Cryptography
705.805	W	Applied Cryptography
705.814	W	IT Security
706.002	W	Modern Information Systems
706.003	W	Internet and New Media
706.004	S	Databases 1
706.016	W	Software Architecture
706.017	W	Software Architecture
706.021	S	Human-Computer Interaction
706.029	W	Databases 2
706.041	W	Information Architecture and Web Usability
706.045	S	Structured Data-Management - Advanced Topics Human-Computer Interaction (Selected Topics): Applying User- Centered Design
706.046	S	Centered Design
706.052	W	Multimedia Information Systems 1
706.053	W	Multimedia Information Systems 1
706.056	S	Selected Topics Media Technologies
706.057	S	Information Visualisation
706.104	S	Databases
706.154	S	Multimedia Information Systems 2
706.301	W	Interacting with Computers 1
706.302	W	Media Technology 1
706.311	S	Interacting with Computers 2
706.312	S	Media Technology 2
706.318	W	PhD Seminar
706.328	S	PhD Seminar
707.000	S	Web Science and Web Technology
708.111	S	Computational Intelligence Seminar A
708.244	S	Theoretical Computer Science I
710.001	S	Advanced Computer Vision
710.002	W	Advanced Computer Graphics
710.007	W	Scientific Communication
710.008	S	Augmented Reality
710.098	S	Scene Graph Programming
710.100	S	Mathematical Principles in Vision and Graphics
710.102	S	Seminar/Project Computer Graphics

710.111	W	Research Seminar Virtual Reality
710.301	W	Digital Vision Information WS
716.076	S	Compiler Construction

English Language Courses & Intercultural Training

940.001	W	English for Engineers (Refresher 1)
940.003	W	English for Engineers (Refresher 1)
940.010	S	English for Engineers (Refresher 2)
940.011	S	English for Engineers (Refresher 2)
940.012	S	English for Engineers (Refresher 2)
940.013	S	English for Engineers (Refresher 2)
940.020	W	English for Engineers (Intermediate 1)
940.021	W	English for Engineers (Intermediate 1)
940.022	W	English for Engineers (Intermediate 1)
940.022	S	English for Engineers (Intermediate 1)
940.023	S	English for Engineers (Intermediate 1)
940.030	W	English for Engineers (Intermediate 2)
940.031	W	English for Engineers (Intermediate 2)
940.031	S	English for Engineers (Intermediate 2)
940.032	S	English for Engineers (Intermediate 2)
940.033	S	English for Engineers (Intermediate 2)
940.040	W	English for Engineers (Intermediate Oral Skills)
940.040	S	English for Engineers (Intermediate Oral Skills)
940.050	W	English for Engineers (Perfection Level 1)
940.060	S	English for Engineers (Perfection Level 2)
940.070	W	English for Engineers (Advanced Oral Skills)
940.070	S	English for Engineers (Advanced Oral Skills)
940.080	S	English for Engineers (Advanced - Professional Meetings)
940.965	W	Intercultural Social Competence for Business
940.965	S	Intercultural Social Competence for Business