

# COURSES TAUGHT IN ENGLISH OPEN TO EXCHANGE STUDENTS

academic year 2025-2026

#### **CONTENTS**

Faculty of Business and Economics	(2
School of Biology	(14
Faculty of Geosciences and Environment	(17
Faculty of Arts	(21
Faculty of Law Criminal Justice and Public Administration	(25

# FACULTY OF BUSINESS AND ECONOMICS

### Undergraduate courses

A more detailed description of the courses is available on www.unil.ch/hec > bachelor

### Bachelor of Science in Economics, Bachelor of Science in Management (2<sup>nd</sup> year)

Course	Faculty staff	Semester	Hours/ week	Credits
Business Law I	Raedler D.	Autumn	2	3
Communication and Leadership (annual course)	Palese T. , Schmid Mast M. , Tilston O.	Autumn and Spring	n/a	3
Decision Models	Stauffer G.	Autumn	6	6
Information Systems	Gaspoz C., Zavolokina L.	Autumn	4	6
Innovation for the Grand Challenges (annual course)	Tatarinov K.	Autumn and Spring	n/a	3
Macroeconomic Analysis	Eyquem A. , Thoenig M.	Autumn	4	6
Principles of Marketing	Czellar S.	Autumn	4	6
Risk Management (BSc)	Wagner J.	Autumn	2	3
Statistics and Econometrics I	Bruhin A., Habermacher F.	Autumn	4	6
Applied statistics and econometrics : introduction	Gallea Q. , Sorrenti G.	Spring	4	6
Business Intelligence and Analytics	Orso S., Vlachos M.	Spring	4	6
Fundamentals of Management Control	El Fassi I., Oyon D., Schnegg M.	Spring	4	6
Microeconomic Analysis	Bruhin A. ,Montez J.	Spring	4	6
Operations management	Lurkin V.	Spring	2	3
Principles of Finance (Bachelor)	Eisfeld L. , Rockinger M.	Spring	5	6

### **Bachelor of Science in Economics (3rd year)**

Course	Faculty staff	Semester	Hours/ week	Credits
Corporate Finance (BSc)	Nikolov B.	Autumn	4	6
Critical Thinking	Szemeredi Z.	Autumn	4	6
Economics of Health and Healthcare	Maurer J.	Autumn	4	6
Financial Econometrics	Zhao Z.	Autumn	4	6
Industrial Organization : The economics of price choice and competition	Montez J. , Strimbu O.	Autumn	4	6
Microeconomics II	Klaus B.	Autumn	4	6
Quantitative Macroeconomics	Eyquem A.	Autumn	2	3
Financial Markets	Celentano F.	Spring	4	6
Innovation for Happiness	Leclerc F.	Spring	2	3
International Money and Finance	Cordonier R., Davenport M.	Spring	4	6
International Trade and European Integration	Milet E.	Spring	4	6
Introduction to Financial Statement Analysis and Reporting	Markarian G.	Spring	2	6
Market Design and the Economics of Asymmetric Information	Santos Pinto L.	Spring	2	6
Monetary theory and policy	Benigno G.	Spring	4	6
Organization and markets	Zanarone G.	Spring	2	3
Statistics and Econometrics II (+exercices)	Renne JP.	Spring	4	6

### **Bachelor of Science in Management (3rd year)**

Course	Faculty staff	Semester	Hours/ week	Credits
Artificial Intelligence in Business	Shrestha Y.	Autumn	4	6
Corporate Finance (BSc)	Nikolov B.	Autumn	4	6
Critical Thinking	Szemeredi Z.	Autumn	4	6
Designing Sustainable Behavior	Vogt S.	Autumn	2	3

Course	Faculty staff	Semester	Hours/ week	Credits
Digital Business Processes and Enterprise Systems	Legner C.	Autumn	4	6
Diversity and inclusion in the workplace	Krings F.	Autumn	2	3
Economics of Health and Healthcare	Maurer J.	Autumn	4	6
Artificial Intelligence in Business	Shrestha Y.	Autumn	4	6
Corporate Finance (BSc)	Nikolov B.	Autumn	4	6
Critical Thinking	Szemeredi Z.	Autumn	4	6
Designing Sustainable Behavior	Vogt S.	Autumn	2	3
Digital Business Processes and Enterprise Systems	Legner C.	Autumn	4	6
Diversity and inclusion in the workplace	Krings F.	Autumn	2	3
Economics of Health and Healthcare	Maurer J.	Autumn	4	6
Essentials and toolbox for future innovators	de Wolff J.	Autumn	2	3
Financial Econometrics	Zhao Z.	Autumn	4	6
Industrial Organization : The economics of price choice and competition	Montez J. , Strimbu O.	Autumn	4	6
Insurance company simulation	Nguyen Q.	Autumn	2	3
Introduction to Group Accounting	Bytyqi B.	Autumn	2	3
Microeconomics II	Klaus B.	Autumn	4	6
Organizational soft-skills: From presentation techniques to group management	Marewski J.	Autumn	2	3
Quantitative Macroeconomics	Eyquem A.	Autumn	2	3
Quantitative Methods for Actuaries (BScM)	Loisel S.	Autumn	4	6
Retailing	Haasova S.	Autumn	4	6
Consumer Behavior (BScM)	Rahmani L.	Spring	4	6
Creative Accounting and Financial Scandals	Rudolf N.	Spring	2	3
Data Driven Interface Design	Cherubini M.	Spring	2	3
Entrepreneurial finance and the new venture funding process	Petty J.	Spring	2	3

Course	Faculty staff	Semester	Hours/ week	Credits
Environmental Crisis and Societal Change	Palazzo G. ,Vejdovsky B.	Spring	2	3
Financial Markets	Celentano F.	Spring	4	6
Innovation for Happiness	Leclerc F.	Spring	2	3
International Money and Finance	Cordonier R., Davenport M.	Spring	4	6
International Trade and European Integration	Milet E.	Spring	4	6
Introduction to Financial Statement Analysis and Reporting	Markarian G.	Spring	2	6
Judgment and Decision Making	Hoffrage U.	Spring	2	3
Managing risks: Current topics and practical insights	Albrecher H. , Hashorva E. , Havrylenko Y. , Hieber P. , Wagner J.	Spring	2	3
Market Design and the Economics of Asymmetric Information	Santos Pinto L.	Spring	2	6
Marketing Research	Haasova S.	Spring	4	6
Monetary theory and policy	Benigno G.	Spring	4	6
Organization and markets	Zanarone G.	Spring	2	3
Practical Operations Management	Hameri A.	Spring	4	6

### Graduate courses

To attend master's degree courses, exchange students must have completed a bachelor's degree or a minimum of 3 years of specialised study. Also some courses may require specific prerequisites and the approval of the master programme's director.

A more detailed description of the courses is available on www.unil.ch/hec > master

#### **Master of Law in Law and Economics**

Course	Faculty staff	Semester	Hours/ week	Credits
Advanced Group Accounting	Bytyqi B.	Autumn	2	3
Advanced Issues in International and European Tax Law	Danon R.	Autumn	2	3
Business and Society - Corporate Sustainability	Philippe D.	Autumn	4	6
Empirical Methods for Lawyers	Thoeni C.	Autumn	4	6

Course	Faculty staff	Semester	Hours/ week	Credits
Entrepreneurship, Innovation and Control Systems	Davila A.	Autumn	2	3
Finance Ethics	Fiole E.	Autumn	2	3
Foundations in Econometrics and Machine Learning	Lalive R.	Autumn	5	7,5
International Tax Disputes & Investment Treaty Arbitration	Danon R.	Autumn	2	3
Managerial Decision Making	Hoffrage U.	Autumn	4	6
Microeconomics & Game Theory	Thoeni C.	Autumn	4	6
Regulatory Economics	Thoeni C.	Autumn	2	3
Strategy of Innovation	Cagnolo E.	Autumn	4	6
Unethical Decision Making - Advanced	Hoffrage U. / Palazzo G.	Autumn	2	3
Unethical Decision Making - Basics	Hoffrage U. / Palazzo G.	Autumn	2	3
Advanced Financial Analysis	André P.	Spring	2	3
Advanced Project Management & Outsourcing in a Digital Era	Bienz P.	Spring	4	6
Digitalization and Taxation: Focus on Global Minimum	Chand V.	Spring	2	3
Financial Institutions & Regulation	Bruhin A.	Spring	4	6
Innovation Law	Junod V.	Spring	2	3
International Corporate and Individual Taxation - International and European Perspective	Chand V.	Spring	4	6
International Strategy	Zanarone G.	Spring	4	6
Political and Institutional Economics	Saia A.	Spring	4	6
Power and Leadership	Tur B.	Spring	4	6
Simple Rules for Leadership & Strategy: a Practical Approach	Marewski J.	Spring	4	6

### **Master of Science in Accounting and Finance**

Course	Faculty staff	Semester	Hours/ week	Credits
Advanced Group Accounting	Bytyqi B.	Autumn	2	3
Advanced Issues in International and European Tax Law	Danon R.	Autumn	2	3

Course	Faculty staff	Semester	Hours/ week	Credits
Entrepreneurship, Innovation and Control Systems	Davila A.	Autumn	2	3
International Tax Disputes & Investment Treaty Arbitration	Danon R.	Autumn	2	3
Advanced Financial Analysis	André P.	Spring	2	3

#### **Master of Science in Actuarial Science**

Course	Faculty staff	Semester	Hours/ week	Credits
Asset and Liability Management for Actuaries	Wagner J.	Autumn	4	6
Computational Tools for Actuaries	Zucchinetti G.	Autumn	4	6
Credibility Theory	Smith N.	Autumn	2	3
Dependence Modelling	levlev P.	Autumn	4	6
Financial Accounting	Markarian G.	Autumn	4	6
Insurance Economics	Fuino M.	Autumn	2	3
Introduction to Data Science I	Müller A.	Autumn	2	3
Introduction to Data Science II	Hieber P.	Autumn	2	3
Investments	Goyal A.	Autumn	4	6
Life Contingencies II	Hieber P.	Autumn	4	6
Mathematics of Compound Interest	Viquerat S.	Autumn	2	3
Principles of Finance	Kistak S.	Autumn	4	6
Probability and Stochastic Processes	Albrecher H.	Autumn	4	6
Time Series	Tamraz M.	Autumn	2	3
Blockchain and Crypto Economy	Ivliev S.	Spring	2	3
Data Science for Non-Life Insurance	Hieber P.	Spring	2	3
Life Contingencies I	Havrylenko Y.	Spring	4	6
Loss Models	Hashovra E.	Spring	4	6
Risk Theory	Albrecher H.	Spring	4	6

Course	Faculty staff	Semester	Hours/ week	Credits
Simulation Methods in Finance and Insurance	Tamraz M.	Spring	2	3
Social Insurance	Flores Contro J.M	Spring	2	3

### **Master of Science in Economics**

Course	Faculty staff	Semester	Hours/ week	Credits
Advanced Data Analysis	Scheidegger S.	Autumn	4	6
Behavioral Economics	Santos Pintos L.	Autumn	4	6
Data Science and Advanced Programming	Scheidegger S.	Autumn	4	6
Development Economics	Nigmatulina D.	Autumn	4	6
Dynamic Macroeconomic Models	Eyquem A.	Autumn	4	6
Economic Forecasting for Decision Making	Grobéty M.	Autumn	4	6
Economic Policy Seminar	Maurer J	Autumn	4	6
Foundations in Econometrics and Machine Learning	Lalive R.	Autumn	5	7,5
Genes, Populations, and Evolution	Lehmann L.	Autumn	4	6
Health Economics	Dusheiko M.	Autumn	4	6
Human Behavior and Evolutionary Inference	Efferson C.	Autumn	4	6
International Trade	Brülhart M. / Nigmatulina D.	Autumn	4	6
Labor Economics	Lalive R.	Autumn	2	3
Leadership Development	Bendahan S.	Autumn	2	3
Macroeconomic Policy	Benhima K.	Autumn	4	6
Macroeconomics	St-Amour P. / Benigno G.	Autumn	5	7,5
Mathematics for Economics	Strimbu O.	Autumn	1	1,5
Mathematics for Economics and Finance	Schuerhoff N.	Autumn	5	6
Microeconomics	Klaus B.	Autumn	5	7,5
Organizational Theory and Decision Making	Grieder M.	Autumn	4	6

Course	Faculty staff	Semester	Hours/ week	Credits
Regulatory Economics	Thoeni C.	Autumn	2	3
Advanced Topics in Industrial Organization (ATIO)	Strimbu O.	Spring	4	6
Behavior, Economics, and Evolution Lecture Series	Lehmann L. / Santos Pintos L.	Spring	2	6
Economic Growth	Sestito M.	Spring	4	6
Environmental Economics	Houde S.	Spring	4	6
Financial Institutions & Regulation	Bruhin A.	Spring	4	6
Game Theory	Klaus B.	Spring	4	6
Macroeconometrics	Renne JP.	Spring	4	6
Macroeconomics of Financial Crises	Benigno G.	Spring	4	6
Microeconometrics	Renne JP.	Spring	2	3
Neuro Economie	Villa A.	Spring	4	6
Political and Institutional Economics	Saia A.	Spring	4	6
Public Economics	Sorrenti G.	Spring	4	6

#### **Master of Science in Finance**

Course	Faculty staff	Semester	Hours/ week	Credits
Advanced Data Analysis	Scheidegger S.	Autumn	4	6
Alternative Investments	Goyal A.	Autumn	4	6
CFA General Research Challenge	Schuerhoff N.	Autumn	4	6
Corporate Finance	Dimoupoulos T.	Autumn	4	6
Data Science and Advanced Programming	Scheidegger S.	Autumn	4	6
Entrepreneurship and Strategy	Tsukanova T.	Autumn	4	6
Finance Ethics	Fiole E.	Autumn	2	3
International Finance	Zhao Z.	Autumn	4	6
Managing Risk in Financial Institutions	Mihet R.	Autumn	2	3

Course	Faculty staff	Semester	Hours/ week	Credits
Market Microstructure	Mihet R.	Autumn	2	3
Mathematics for Economics and Finance	Schuerhoff N.	Autumn	5	6
Optimization Methods in Management	Oeuvray R.	Autumn	4	6
Private Equity & Venture Capital	Dimoupoulos T.	Autumn	4	6
Quantitative Asset and Risk Management II	Divernois MA.	Autumn	4	6
Unethical Decision Making - Advanced	Hoffrage U. / Palazzo G.	Autumn	2	3
Unethical Decision Making - Basics	Hoffrage U. / Palazzo G.	Autumn	2	3
Asset Pricing	Bretscher L	Spring	4	6
Derivatives	Bretscher L	Spring	4	6
Empirical Methods in Finance	Jondeau E.	Spring	4	6
Financial Analysis	Froidevaux J.	Spring	4	6
Fixed Income and Credit Risk	Rockinger M.	Spring	4	6
International Strategy	Zanarone G.	Spring	4	6
Real Estate Investments	Celentano F.	Spring	2	3
Sustainability Aware Asset Management	Jondeau E.	Spring	4	6
Valuation	Eisfeld L.	Spring	4	6
Financial Accounting	Markarian G.	Autumn	4	6
Investments	Goyal A.	Autumn	4	6
Mergers, Acquisitions and Corporate Restructurings	Tazi A.	Autumn	4	6
Blockchain and Crypto Economy	Ivliev S.	Spring	2	3

### **Master of Science in Information Systems**

Course	Faculty staff	Semester	Hours/ week	Credits
Digital Strategies and Innovation	Missonier S.	Autumn	4	6
Enterprise Data and Integration	Estier T.	Autumn	4	6

Course	Faculty staff	Semester	Hours/ week	Credits
Information Security & Privacy	Huguenin K.	Autumn	4	3
Preferable Futures through Business Modeling and Imagination	Avdiji H. / Witch P.	Autumn	4	6
Software Architectures	Delgado P.	Autumn	4	6
Strategy in Digital Markets	Peuckert C.	Autumn	4	6
Advanced Project Management & Outsourcing in a Digital Era	Bienz P.	Spring	4	6
Business and IS Design	Legner C.	Spring	4	6
Cloud and Advanced Analytics	Vlachos M.	Spring	4	6
Cybersecurity	Humbert M.	Spring	4	6
Digital Innovation and Design Thinking	Zavolokina L.	Spring	4	6
Interaction Design	Cherubini M.	Spring	4	6
	1		_	

### **Master of Science in Management**

Course	Faculty staff	Semester	Hours/ week	Credits
Advanced Data Analysis	Scheidegger S.	Autumn	4	6
Applied AI & Deep Learning for Managers: From Fundamentals to Business Applications	Vatter Th.	Autumn	2	3
Applied Corporate Strategy	Borghi G. / Barras N. / Domicent P.	Autumn	2	3
Behavioral Economics	Santos Pintos L.	Autumn	4	6
Business and Society - Corporate Sustainability	Philippe D.	Autumn	4	6
Data and Code Management: From collection to application	Orso S.	Autumn	4	6
Data Science and Advanced Programming	Scheidegger S.	Autumn	4	6
Data Science Methods for Management - BA orientation	Shemendyuk A.	Autumn	4	6
Datascience for Marketing	Schlager T.	Autumn	4	6
Demand Management	Kaboli A.	Autumn	2	3
Digital Strategies and Innovation	Missonier S.	Autumn	4	6
Entrepreneurship and Strategy	Tsukanova T.	Autumn	4	6

Course	Faculty staff	Semester	Hours/ week	Credits
Evidence-Based Management	Dietz J.	Autumn	4	6
Generative AI for Intelligent Information Extraction	Vuillon L.	Autumn	4	6
Genes, Populations, and Evolution	Lehmann L.	Autumn	4	6
Global Marketing	Eckardt Th.	Autumn	2	3
Heuristic Decision Making Strategies	Marewski J.	Autumn	4	6
Human Behavior and Evolutionary Inference	Efferson C.	Autumn	4	6
Human Decisions-Making and the SDGs	Vogt S.	Autumn	4	6
Insights from Text Data	Baumgartner M.	Autumn	2	3
Integrated Marketing Communications	Haasova S.	Autumn	4	6
Leadership Development	Bendahan S.	Autumn	2	3
Managerial Decision Making	Hoffrage U.	Autumn	4	6
Marketing Science - MKT orientation	Clegg M.	Autumn	4	6
Optimization Methods in Management	Oeuvray R.	Autumn	4	6
Organizational Theory and Decision Making	Grieder M.	Autumn	4	6
Projects in Demand Forecasting	Aviolat F.	Autumn	2	3
Risk Analytics	Aviolat F.	Autumn	4	6
Social Norms and Social Tipping: Mechanisms of Behavioral Change	Vogt S.	Autumn	4	6
Software and Tools for Business Analytics	Baumgartner M.	Autumn	2	3
Statistical Methods for Management	Boldi MO.	Autumn	4	6
Strategic Management	Amer Maistriau E.	Autumn	4	6
Strategic Management Control Systems	Davila T.	Autumn	4	6
Strategic Marketing	Engeler I.	Autumn	4	6
Strategic Pricing	Christen M.	Autumn	2	3
Strategy in Digital Markets	Peuckert C.	Autumn	4	6
Strategy of Innovation	Cagnolo E.	Autumn	4	6

Course	Faculty staff	Semester	Hours/ week	Credits
Sustainable Choice Models	Lurkin V.	Autumn	4	6
Unethical Decision Making - Advanced	Hoffrage U. / Palazzo G.	Autumn	2	3
Unethical Decision Making - Basics	Hoffrage U. / Palazzo G.	Autumn	2	3
Advanced Project Management & Outsourcing in a Digital Era	Bienz P.	Spring	4	6
Advanced Strategy	Vacat	Spring	4	6
Al Driven Business Innovation	Shemendyuk A.	Spring	2	3
Behavior, Economics, and Evolution Lecture Series	Lehmann L. / Santos Pintos L.	Spring	2	6
Developing Behavioral Insights and Nudging	Engeler I.	Spring	4	6
Digital Marketing Strategy	Clegg M.	Spring	4	3
Distribution Management	Eckardt T.	Spring	2	6
Environmental Economics	Houde S.	Spring	4	6
Grand Challenges Strategy Project	Haack P.	Spring	4	6
Group Processes	Krings F.	Spring	4	6
International Strategy	Zanarone G.	Spring	4	6
Machine Learning in Business Analytics	Vialfont A.	Spring	4	6
Multicriteria Decision Analysis	Thiémard M.	Spring	2	3
Neuro Economie	Villa A.	Spring	4	6
Power and Leadership	Tur B.	Spring	4	6
Production Planning and Scheduling	Lurkin V.	Spring	4	6
Simple Rules for Leadership & Strategy: a Practical Approach	Marewski J.	Spring	4	6
Social Well Being	Clergue V.	Spring	4	6
Supply Chain Network Design and Planning	Stauffer G.	Spring	4	6
Sustainability Strategy Project	Aeschlimann S. / Fischer C.	Spring	4	6
Sustainable Logistics	Gallay O.	Spring	4	6
The Management of Risk, Reputation and Legitimacy	Haack P.	Spring	4	6

# SCHOOL OF BIOLOGY

### Undergraduate courses

A more detailed description of the courses is available on https://www.unil.ch/ecoledebiologie > Bachelors > Study programmes

### Bachelor of Science in Biology (optional courses 2<sup>nd</sup> and 3<sup>rd</sup> years)

Course	Faculty staff	Semester	Credits
Chemosensory Perception : from Genes to Behaviour	Benton R.	Autumn	1
Introduction to the Analysis of Plant Lipids	Nawrath C.	Autumn	1
Plant Evolutionary Ecology	Sanders I.	Autumn	1
Sleep and Circadian Rhythms : from Molecules to Performance	Lüthi A.	Autumn	1
Case Studies in Conservation Biology	Wedekind C.	Spring	1
Molecular Machines	Fasshauer D.	Spring	1

### Bachelor of Science in Biology (3<sup>rd</sup> year)

Course	Faculty staff	Semester	Credits
From Mutation to Gene Function	Fasshauer D.	Autumn	2
Molecular Evolution	Robinson-Rechavi M.	Autumn	2
Population Biology and Conservation	Santiago Cuellar J.	Autumn	2
Principles of Molecular Biophysics	Wedekind C.	Autumn	2.5
Module Advanced Molecular, Cellular and Developmental Biology	Resp: Jean-Yves Roignant	Spring	9
- Cell Cycle, DNA Replication and Recombination			
- Proteasome Degradation			
- Circadian Clocks			
- Introduction to Reading and Presentation of Scientific Literature			
- Post-transcriptional Gene Regulation and Recombination			

Course	Faculty staff	Semester	Credits
- Regulation of Gene Transcription			
- Body Patterning			
- Understanding & Interpretation of Scientific Literature			
Module Genetics and Genome Evolution	Resp: Zoltan Kutalik	Spring	9
- Bioinformatics for Genomics			
- Gene Regulation			
- Genome Wide Association Studies			
- Cancer Genetics			
- Bacterial Genomes and Evolution			
- Structural Genomics and Mutation			
- Introduction to Quantitative Genetics			
Module Biotic Interactions	Resp. : Jérôme Gouttenoire	Spring	9
- Bacteria-Hosts			
- Fungi-Hosts			
- Endosymbionts and Bacterial Parasites			
- Bee Microbiome			
- Parasites			
- Plants-Insects			
- Viruses-Hosts			
- Practical Work : Introduction to Research			
- Journal Club			
Module The Dynamic Cell	Resp. : Stephan Gruber	Spring	9
- Cilia: Cellular Antennae - Structure, Function, Evolution and Disease			
- Chromosome Dynamics during the Cell Cycle			
- Dynamics and Organisation of the Plasma Membrane			
- Scientific writing			
- Evolution of the Eukaryotic Cell			
- Homeostasis of Proteins and Lipids in Intracellular Compartments			
- Cryo-Electron Microscopy for Neurodegenerative Diseases			

Course	Faculty staff	Semester	Credits
- The Dynamic Cell Cycle of Eukaryotes			
- Cell Division in Bacteria			
- Chloroplast Origin, Division and Dynamics			
- The Dynamic Cell Cycle of Bacteria			
- Critical Reading of the Scientific Literature			
Module Biology of Cancer	Resp. : Vincent Zoete	Spring	9
- Introduction to Molecular Mechanisms of Cancer			
- Experimental Models and Approaches to Study Cancer			
- Genetics and Epigenetics of Cancer			
- Bioinformatics and modeling for personalized oncology			
- The Tumor Microenvironment and Immunotherapy			
- Tumor Metastasis			
- Metabolism of cancer			
- Presentation and Discussion of Scientific Articles			
- Introduction to the Understanding of Scientific Articles			
Module Modelling in Biology and Bioinformatics	Resp. : Nicolas Salamin	Spring	9
- Modelling / Bioinformatics Project			
- Stochastic Processes			
- Introduction to Machine Learning			
- Introduction to Image Analysis			
- Advanced Programming and Algorithms			
- Bayesian Inference			
- Markov Chain Monte Carlo			

# FACULTY OF GEOSCIENCES AND ENVIRONMENT

#### Graduate courses

There are no undergraduate courses taught in English in the Faculty of Geosciences and Environment. Some courses may require specific prerequisites and the approval of the master programme's director. A more detailed description of the course is available on <a href="https://www.unil.ch/gse">www.unil.ch/gse</a>

#### **Master of Science in Environmental Science**

Course	Faculty staff	Semester	Credits
Advanced quantitative risk and vulnerability	M. Jaboyedoff	Autumn	3
Alpine periglacial environments	C. Lambiel	Autumn	4
Applications of environmental science seminar series	N. Chèvre (coord.), MH. Derron	Autumn	1
Aquatic ecosystems: consultancy proposals, analyses and reports	S. Lane, G. Antoniazza	Autumn	4
Communication on environmental risks	M. Jaboyedoff	Autumn	3
Dates and rates of Mountain evolution	G. King	Autumn	4
Environmental time-series analysis	J. Irving	Autumn	5
Environmental toxicology	N. Chèvre	Autumn	3
Glaciers and Glaciated Landscapes	G. Jouvet, S. Lane, A. Tedstone	Autumn	5
Introduction to Scientific Programming with Python	T. Beucler	Autumn	2
Machine Learning for Earth and Environmental Sciences	T. Beucler Autumn		5
Monitoring techniques for slope dynamics	MH. Derron	Autumn	5
Principle of scientific data acquisition	C. Schmidt	Autumn	3
Remote sensing of Earth systems	G. Antoniazza, G. Mariéthoz	Autumn	5
Scientific computing	Y. Podladchikov	Autumn	5
Solute transport in watersheds	P. Benettin	Autumn	3
Tracing biogeochemical processes and fluxes using isotope analysis	T. Vennemann	Autumn	2

Course	Faculty staff	Semester	Credits
Advanced analysis in mountain geomorphology	C. Lambiel	Spring	3
Advanced Geospatial Data Analysis - practical concepts and environmental applications	M. Tonini	Spring	5
Aquatic ecosystems: glaciers, rivers, and lakes	S. Lane, ME. Perga, G. Antoniazza	Spring	5
Erosion and slope movements	M. Jaboyedoff	Spring	5
Flood risk modeling	G. Antoniazza, S. Lane	Spring	5
Hazards and risks of slope mass movements: field camp	MH. Derron, M. Jaboyedoff	Spring	5
Laboratory methods: experiments, measurements and uncertainties	P. de Anna	Spring	5
Model parameter estimation and uncertainty quantification	N. Linde	Spring	5
Practical applications in the aquatic sciences	N. Chèvre, J. Berg, T. Vennemann	Spring	5
Risk management (monitoring, early warning, post-disaster preparedness)	M. Jaboyedoff	Spring	2
Risk quantification and insurance	M. Jaboyedoff, L. Marescot	Spring	2
Sampling and sensing aquatic ecosystems	ME. Perga, D. Bouffard	Spring	4
Watershed and river network modelling	N. Peleg	Spring	3
Weather and climate dynamics	D. Domeisen	Spring	3

### **Master of Science in Earth Sciences**

Course	Faculty staff	Semester	Credits
Chemical analyses and imaging technique for major and trace element	M. Robyr, O. Reubi	Autumn	3
Economics and management of Earth Resources Exploration and Development	A. Moscariello	Autumn	2
Exploration methods	B. Quintal	Autumn	2
Fluids in the crust	M. Lupi	Autumn	4
From outcrop to 3d model	MH. Derron, A. Samsu	Autumn	3
Geophysics across scales	G. Hetényi	Autumn	4
Life evolving with Earth	A. Daley	Autumn	4

Course	Faculty staff	Semester	Credits
Methods of isotope analysis	P. Nuriel	Autumn	3
Microtectonics	M. Robyr	Autumn	2
Paleoecology and Paleoenvirenment through geochemistry	L. Kocsis	Autumn	3
Physical-chemical mechanisms of geological processes	S. Schmalholz, P. Lanari	Autumn	4
Simulating geological processes on computers and in the laboratory	Y. Podladchikov	Autumn	3
Surface processes and depositional environments from source to sink	E. Samankassou	Autumn	4
What can we learn from melt inclusions?	A.S. Bouvier	Autumn	2
Data science	S. Guerrier, J. Irving	Autumn and Spring	4
Physical volcanology and volcanic risk	C. Bonadonna	Autumn and Spring	4
Applied mineralogy in resource exploration and modern technologies	K. Kouzmanov	Spring	2
Climate and paleoclimate: from deep time to Anthropocene	S. Jaccard, N. Zeyen	Spring	4
Erosion and slope movement	M. Jaboyedoff	Spring	5
Field camp in Earth resources*	K. Kouzmanov, A. Moscariello, M. Lupi	Spring	
Fluid and melt inclusions	Z. Zajacz Spring		3
Gemmology	L. Cartier	L. Cartier Spring	
Geo-energy exploration and development workflow	A. Moscariello, Y. Makhloufi, O. Eruteya	Spring	3
Geochemical cycles and rates of geological processes	M. Chiaradia , P. Nuriel	Spring	4
Great challenges in Earth and environmental sciences	J. Marin Carbonne, L. Caricchi	Spring	7
Integrated geo-energy seismic interpretation and 3D Modelling Workflows	A. Moscariello	Spring	3
Mineral, rocks and Magma	L. Caricchi, O. Müntener	Spring	4
Mountains belt in the field*	O. Müntener	Spring	4
Ore deposit models	K. Kouzmanov, Z. Zajacz	Spring	4
Petrophysics and reservoirs	B. Quintal, A. Moscariello	Spring	3
Risk and desision making	C. Gregg, S. Menoni, A. Scolobig	Spring	4

Course	Faculty staff	Semester	Credits
Sedimentology analytics – Collecting, interpreting and presenting data	S. Jaccard	Spring	4
Sedimentology, climate, paleontology et geomorphology Field camp*	A. Daley, S. Castelltort	Spring	4
Seismic risk	B. Duvernay, P. Bergamo	Spring	3
Volcanic risk Field trip*	C. Bonadonna, C. Frischknecht	Spring	4
Volcano Field trip *	L. Caricchi, S. Pilet	Spring	2

<sup>\*</sup> Participation subject to certain conditions. Contact: mobility.fgse@unil.ch.

### **Master of Science in Geography**

Course	Faculty staff	Semester	Credits
Inequality and the city	R. Véron	Autumn	5
Planning and housing	G. Debrunner	Autumn	5
Environmental livelihoods	C. Kull	Spring	5
Urban Worlds	M. Müller	Spring	5

### **Master of Science in Biogeosciences**

Course	Faculty staff	Semester	Credits
Soil and water chemistry	M. Keiluweit	Autumn	4
Statistical analyses in the environmental sciences	O. Broennimann	Spring	3

### Master of Arts in Foundations and Practices of Sustainability

Course	Faculty staff	Semester	Credits
Key issues in climate science	Daniela Domeisen	Spring	2

# FACULTY OF ARTS

# Undergraduate courses

A more detailed description of the course is available on www.unil.ch/lettres

### **Bachelor of Arts, English Department**

Course	Faculty staff	Semester	Hours/ week	Credits
African American Literature	Agnieszka Soltysik Monnet	Autumn	2	4
Asian American Literature	Jane Im	Autumn	2	4
British Romanticism and the Poetics of the Sublime	Rachel Falconer	Autumn	2	4
Discovering Medieval Manuscripts	Denis Renevey	Autumn	2	4
Dublin and London Stages, 1890-1925	Kevin Curran	Autumn	2	4
Intro to Gender Studies 1 : 1790s to 1st wave	Valérie Cossy	Autumn	2	4
Julian of Norwich and Her Afterlives	Diana Denissen	Autumn	2	4
Linguistics: Bilingualism	Esther de Leeuw	Autumn	2	4
Linguistics: Language and the City	Anita Auer	Autumn	2	4
Linguistics: Topics in Syntax	Jessica Brown	Autumn	2	4
Literary Analysis : Beat poetry	Agnieszka Soltysik Monnet	Autumn	2	4
Literary Analysis : Charles Dickens, Great Expectations	Martine Hennard Dutheil, Kirill Melnikov	Autumn	2	4
Literary Analysis : Elizabeth Bishop and Modern American Poetry	Boris Vejdovsky	Autumn	2	4
Literary Analysis : Emily Dickinson	Jane Im	Autumn	2	4
Literary Analysis : English Exile Poetry from Medieval to Modern	Juliette Vuille	Autumn	2	4
Literary Analysis : Fantasies of Race	Agnieszka Soltysik Monnet	Autumn	2	4
Literary Analysis: Introduction to Comparative Literature	Marie Emilie Walz	Autumn	2	4

Course	Faculty staff	Semester	Hours/ week	Credits
Literary Analysis: Restoration Drama	Rachel Falconer	Autumn	2	4
Literary Analysis: TBD	Rachel Falconer	Autumn	2	4
Literary Analysis: The Interesting Narrative of Olaudah Equiano	Enit Steiner	Autumn	2	4
Margery Kempe: A Woman of Her Time?	Juliette Vuille	Autumn	2	4
Medieval : Germanic Ethos and Christian Faith in Early English Poetry	Juliette Vuille	Autumn	2	4
Medieval : In Bed With Geoffrey Chaucer	Rory Critten	Autumn	2	4
Medieval : Marriage in Late Medieval Literature	Diana Denissen	Autumn	2	4
Medieval : TBD	Denis Renevey	Autumn	2	4
Medieval: Ennobling Love in Sir Gawain and the Green Knight and Pearl	Denis Renevey	Autumn	2	4
Milton's Paradise Lost	Rachel Falconer	Autumn	2	4
Synchronic Linguistics: Acoustic Analysis of Speech	Esther de Leeuw	Autumn	2	4
Synchronic Linguistics: Introduction to Sociolinguistics	Jennifer Thorburn	Autumn	2	4
The Development of the English Language	Anita Auer	Autumn	1	1
The Shakespeare Workshop	Kevin Curran	Autumn	2	4
Trade and Merchants in Chaucer's Canterbury Tales	Juliette Vuille	Autumn	2	4
Visions and revisions of Snow White: from the Grimms to contemporary rewritings and adaptations	Marie Emilie Walz	Autumn	2	4
Wuthering Heights and its afterlife: text, image, film	Martine Hennard Dutheil	Autumn	2	4

### Graduate courses

Graduate courses are open only to students with a background in the subject! A more detailed description of the course is available on www.unil.ch/lettres

### **Master of Arts, English Department**

Course	Faculty staff	Semester	Hours/ week	Credits
Critical Approaches	Matthew Scully, Boris Vejdovsky	Autumn	2	5
Derrida and the Deconstruction of Natural Rights: Animals, Ethics, Humanity	Matthew Scully, Boris Vejdovsky	Autumn	2	5
English in Switzerland	Jennifer Thorburn	Autumn	2	5
Expanding the Counterculture	Agnieszka Soltysik Monnet	Autumn	2	5
Language and Migration	Anita Auer	Autumn	2	5
New American Studies	Boris Vejdovsky	Autumn	2	5
Postcolonial Relations	Enit Steiner	Autumn	2	5
Race, Sex, and Money in the Long 18th Century: Aphra Behn, Isabelle de Charrière, Germaine de Staël, Jane Austen	Valérie Cossy	Autumn	2	5
Seamus Heaney's Elemental Poetry	Rachel Falconer	Autumn	2	5
Shakespeare's Justice	Kevin Curran	Autumn	2	5
The Romance of Tristan in Medieval Europe	Rory Critten, Christine Putzo	Autumn	2	5
Topics in Digital Linguistics	Jessica Brown	Autumn	2	5
Travel Writing in Old and Middle English Literature, and Beyond	Denis Renevey	Autumn	2	5
New American Studies : Final Colloquium	Agnieszka Soltysik Monnet	Autumn and Spring		2
Participation in Scientific Conference	Agnieszka Soltysik Monnet	Autumn and Spring		3
Bilingual Speech	Esther de Leeuw	Spring	2	5
Black Nature	Matthew Scully	Spring	2	5
Environmental Crisis and Societal Change	Guido Palazzo, Boris Vejdovsky	Spring	2	5

Course	Faculty staff	Semester	Hours/ week	Credits
Ethnic American Literature	Jane Im	Spring	2	5
Gender in trouble in the first half of the 20th century: Woolf, Rachilde, Forster, Rivaz	Valérie Cossy	Spring	2	5
In the Workshop of Creation: Translational Poetics in 20th century British Literature	Martine Hennard Dutheil	Spring	2	5
J. M. Coetzee's Jesus Trilogy	Rachel Falconer	Spring	2	5
Language and Ageing	Anita Auer	Spring	2	5
Linguistics: Introduction to Old Irish	Marion Patricia Ronan	Spring	2	5
Love Under Siege in Chaucer's Troilus and Criseyde	Lucie Kaempfer	Spring	2	5
Marlowe's Theater	Kevin Curran	Spring	2	5
Medieval Women's Writing in the Global Middle Ages	Diana Denissen	Spring	2	5
Modernism in/and Switzerland	Nell Wasserstrom	Spring	2	5
Research Methodologies	Jennifer Thorburn	Spring	2	5
Tolkien's Environmental Vision	Rachel Falconer	Spring	2	5

# FACULTY OF LAW, CRIMINAL JUSTICE AND PUBLIC ADMINISTRATION

### Graduate courses

A more detailed description of the course is available on www.unil.ch/fdca

#### **Master of Arts in Public Management and Policy**

Course	Faculty staff	Semester	Credits
Behavioural Public Administration and Nudge Theory	Oliver Neumann	Autumn	3
Contract Economics and Organization of Public Services	Laure Athias	Autumn	3
Digital government transformation	Tobias Mettler	Autumn	3
Economics and management of sport	Mickaël Terrien	Autumn	3
Empirical analysis of public policies	Christopher Grigoriou	Autumn	3
European governance and europeanization	Emmanuelle Mathieu	Autumn	3
Fiscal Federalism and Equalization	Marko Köthenbürger	Autumn	3
Fiscal Policy	Nils Soguel	Autumn	3
Institutions and governance strategies for dealing with complex problems	Francesco Sarti, Josef Philipp Trein	Autumn	3
Introduction to applied econometrics	Christopher Grigoriou	Autumn	3
Managing diversity: from immigration to integration policy	Flavia Fossati	Autumn	3
Managing regulation in modern government	Lorenzo Allio	Autumn	3
Policy Design and Implementation – Everyday Challenges of Street-level Bureaucrats	J. Hornung	Autumn	3
Politics and Institutions in Switzerland	Markus Hinterleitner	Autumn	3
Public administration and international regulation	Martino Maggetti	Autumn	6
Transforming social welfare Institutions	Giuliano Bonoli	Autumn	3
Urban Economics and Public Services	Olivier Schöni	Autumn	3

Course	Faculty staff	Semester	Credits
Use and misuse of expertise in public policy and administration	Francesco Sarti, Josef Philipp Trein	Autumn	3
Policy Evaluation	Pirmin Bundi	Spring	3
Research project and project management	Flavia Fossati, Mickaël Terrien	Spring	6
Research Seminar 4 : Data analysis for public administration	Flavia Fossati	Spring	3

### **Master of Law**

Course	Faculty staff	Semester	Credits
Advanced issues in International and European Tax Law	R. Danon	Fall	3
International Commercial Litigation	A. Bonomi, E. Lein	Fall	6
International Tax Disputes & Investment Treaty Arbitration	R. Danon	Fall	3
Microeconomics & Game Theory	C. Thoeni	Fall	6
Taxation of Multinational Enterprises and Transfer Pricing Policy	V. Chand	Fall	6
Contract Drafting	E. Lein	Spring	3
Digital Health and International Human Rights Law	A. Lebret	Spring	3
Digitalization and Taxation	V. Chand	Spring	3
International Commercial Arbitration	A. Bonomi, E. Lein	Spring	6
International Corporate and Individual Taxation – International and European Perspective	V. Chand	Spring	6
International Human Rights Law	E. Schmid	Spring	6