DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
	Faculty of Sciences and	d Technology (Campus Cité Scientifique -	https://www	.univ-lille.fr/pla	an-contact/)	
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
		Bachelor in Life Sciences - Common				
Faculty of Science and Technology	Biology	track (BILINGUAL TRACK (FRENCH +	Bachelor 1	Autumn (S1)	Maths applied to Life Sciences	3
		ENGLISH)				
		Bachelor in Life Sciences - Cell Biology				
Faculty of Science and Technology	Biology	and Physiology specilisation (BILINGUAL TRACK (FRENCH +	Bachelor 2	Autumn (S3)	Fundamentals in experimental biochemistry	3
		ENGLISH)				
		Bachelor in Life Sciences - Cell Biology				1
Facility of Calanaa and Taalanalan	Dialam.	and Physiology specilisation	D l l 2	A (C2)	Call Blancial and	
Faculty of Science and Technology	Biology	(BILINGUAL TRACK (FRENCH +	Bachelor 2	Autumn (53)	Cell Physiology	3
		ENGLISH)				
		Bachelor in Life Sciences - Common			Edition scientifique en sciences de la vie/Scientific edition in	
Faculty of Science and Technology	Biology	track (BILINGUAL TRACK (FRENCH +	Bachelor 2	Autumn (S3)	life sciences	3
		ENGLISH) Bachelor in Life Sciences - Common				-
Faculty of Science and Technology	Biology	track (BILINGUAL TRACK (FRENCH +	Bachelor 2	Spring (S4)	English for communication en life sciences	3
ractity of Science and reclinology	ыоюду	ENGLISH)	Dacrieioi 2	Spring (34)	Linguistri for Commonication en me sciences	
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Autumn (S1)	Mass spectrometry	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Autumn (S1)	Optical spectroscopy	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Autumn (S1)	Quantum chemistry and chemical bonding	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Autumn (S1)	English	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Autumn (S1)	X-Ray diffraction	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Autumn (S1)	Magnetic resonance	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Spring (S2)	Chemometrics	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Spring (S2)	Advanced kinetics and reactivity	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Spring (S2)	Physical organic chemistry	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Spring (S2)	Structural inorganic chemistry	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Spring (S2)	Synchrotron radiations and applications	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 1	Spring (S2)	Spectroscopy for biology, Applying spectroscopy to interdisicplinary projects	5
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 2	Autumn (S3)	AS -3- Magnetic Properties of Materials	3
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 2	Autumn (S3)	AS -3- Project Management	3

Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 2	Autumn (S3)	AS -3- Molecular Modelling	6
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 2	Autumn (S3)	AS -3- Solid State NMR	3
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 2	Autumn (S3)	AS -3- Time Resolved Spectroscopy	6
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 2	Autumn (S3)	AS -3- XAS and related Techniques	3
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 2	Autumn (S3)	High Resolution Mass Spectrometry	3
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 2	Autumn (S3)	LASER in Spectroscopy	3
Faculty of Science and Technology	Chemistry	Advanced spectroscopy in chemistry	Master 2	Autumn (S3)	Advanced X-Ray Diffraction	3
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1	Autumn (S1)	Mass spectrometry	5
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1	Autumn (S1)	Optical spectroscopy	5
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1	Autumn (S1)	Quantum chemistry and chemical bonding	5
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1	Autumn (S1)	English	5
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1	Autumn (S1)	Atmospheric chemistry and physics	5
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1	Autumn (S1)	Chromatography for environmental sciences	5
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1	Spring (S2)	Chemometrics	5
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1		Advanced kinetics and reactivity	5
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1	<u> </u>	Electronic spectroscopy for reactive species	6
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1		Experimental methodologies in environmental sciences	5
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 1	Spring (S2)	Internship	9
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 2	Autumn (S3)	Advanced spectroscopic methods - Electron microscopy	3
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 2	Autumn (S3)	Advanced spectroscopic methods - Spectroscopic imaging	3
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 2	Autumn (S3)	Advanced spectroscopic methods - Surface analysis	3
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 2	Autumn (S3)	Advanced Photonics for Atmospheric Sciences	6
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 2	Autumn (S3)	Aerosol 1: Atmospheric aerosol properties and impacts	3
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 2	Autumn (S3)	Atmospheric modelling	6
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 2	Autumn (S3)	Aerosol 2: Observing systems: from satellite to in situ	6
Faculty of Science and Technology	Chemistry	Atmospheric Sciences	Master 2	Spring (S4)	Research project and Master Thesis + Scientific writing and con	n 30
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECT:

					Plant Biomass production and valorisation	
Faculty of Science and Technology	Chemistry	Biorefinery	Master 2	Autumn (S3)	(land plants;, aquatic biomass, type of biorefineries, line	5
					products)	
					Energy from biomass	
Faculty of Science and Technology	Chemistry	Biorefinery	Master 2	Autumn (S3)	(H2 production, biocarburant production, non conventional	5
					carburant)	
					Biomass pretreatment and thermal treatment	
					(cellulosic biomass treatment, lignin pretreatment radical and	
Faculty of Science and Technology	Chemistry	Biorefinery	Master 2	Autumn (S3)	chemical pretreatments, algaefractionation, gasification of	5
					biomass, biogas from waste, residual biomass, environmental	
					issues)	
					Chemicals and fuels from biomass	
Faculty of Science and Technology	Chemistry	Biorefinery	Master 2	Autumn (S3)	(homogeneous catalysis, heterogeneous catalysis,	10
					biotechnologies for biomass conversion)	
Faculty of Science and Technology	Chemistry	Biorefinery	Master 2	Autumn (S3)	English	5
Faculty of Science and Technology	Chemistry	Biorefinery	Master 2	Spring (S4)	Bibliography project and english	5
Faculty of Science and Technology	Chemistry	Biorefinery	Master 2		Research - Master thesis	25
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
DELAKTIEN	11225 01 31051	Integrated Research for Advanced		SETTESTER	OL IIII I	2013
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Autumn (S1)	Language	3
		Integrated Research for Advanced				
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Autumn (S1)	Inorganic Chemistry	3
		Integrated Research for Advanced				
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Autumn (S1)	Organic chemistry	3
		Integrated Research for Advanced				1
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Autumn (S1)	Kinetics of chemical network	3
		Integrated Research for Advanced				
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Autumn (S1)	Initiation to programmation	3
		Integrated Research for Advanced				
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Autumn (S1)	Molecular Spectroscopy & Computationnal Chemistry	6
		Integrated Research for Advanced				
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Autumn (S1)	Analytical Chemistry	3
		Integrated Research for Advanced				
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Autumn (S1)	Inorganic-organic materials	3
		Integrated Research for Advanced				
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Autumn (S1)	Fundamentals of catalysis	3
		Integrated Research for Advanced				
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Spring (S2)	Project management	3
		Integrated Research for Advanced				
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Spring (S2)	Characterization of solids	3
		Integrated Research for Advanced				
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Spring (S2)	Visualazing chemical reactivity	6
Faculty of Cainage and Table 1	Ch and it	Integrated Research for Advanced	Marina	Ci- (CC)		
Faculty of Science and Technology	Chemistry	Chemistry and Materials (IRACM)	Master 1	Spring (S2)	Colloïdal dispersions in nanomedecine	6
Facility of Cairman and Tankani	Ch amaintain	Integrated Research for Advanced	Mantaga	Ci (CC)	Constant from this work and the control of	
	Chemistry	01 11 114 111 (104 014)	Master 1	Spring (S2)	Smart functional materials	6
Faculty of Science and Technology	ŕ	Chemistry and Materials (IRACM)				1
Faculty of Science and Technology	Chemistry	Integrated Research for Advanced	Master 1	Spring (S2)	Advanced catalytic processes	6

Faculty of Science and Technology	Chemistry	Integrated Research for Advanced	Master 2	Autumn (S3)	Dissemination of science	3
ractity of science and recimology	Chemistry	Chemistry and Materials (IRACM)	Master 2	Automii (33)	Disserimation of science	
Faculty of Science and Technology	Chemistry	Integrated Research for Advanced Chemistry and Materials (IRACM)	Master 2	Autumn (S3)	Language	3
Faculty of Science and Technology	Chemistry	Integrated Research for Advanced Chemistry and Materials (IRACM)	Master 2	Autumn (\$3)	Hot topics in chemistry (invited professors)	3
Faculty of Science and Technology	Chemistry	Integrated Research for Advanced Chemistry and Materials (IRACM)	Master 2	Autumn (S3)	Artificial intelligence in chemistry	3
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECT
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Autumn (S1)	Refresher in mathematics & computer science	3
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Autumn (S1)	Mathematics for data science	9
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Autumn (S1)	Computer science	6
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Autumn (S1)	Machine Learning 1	3
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Autumn (S1)	Machine Learning 2	3
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Autumn (S1)	Foreign language: english or french	3
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Spring (S2)	Probability and statistics	6
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Spring (S2)	Numerical analysis, algorithms and complexity	•
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Spring (S2)	Statistical learning and signal processing	
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Spring (S2)	Deep learning and data challenge	(
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 1	Spring (S2)	Internship (6 to 14 weeks)	
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 2	Autumn (S3)	Refresher in mathematics & computer science	
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 2	Autumn (S3)	Theoretical machine learning	'
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 2	Autumn (S3)	Algorithmics & Data Bases	
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 2	Autumn (S3)	Machine learning in practice	1
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 2	Autumn (S3)	Foreign language: english or french	
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 2	Spring (S4)	Research in practice	
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 2	Spring (S4)	Carreer preparation	
Faculty of Science and Technology	Computer Science, Mathematics, Electrical engineering	Data Science	Master 2	Spring (S4)	Internship and memoir	1
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	EC
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Prerequisites - Computer systems, algorithms and computations	

Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Prerequisites - Introduction to numerical methods	
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Prerequisites - Modeling	9
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Prerequisites - English, self training	
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Seminar	
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Seminar - Pass'Pro	3
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Mathematical tools for simulation - Finite element method	
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Mathematical tools for simulation - Finite volume method	9
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Mathematical tools for simulation - Project in PDE	
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Supercomputing - Project in supercomputing	
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Autumn (S3)	Supercomputing	9
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Spring (S4)	Machine learning and optimization for scientific computing	6
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Spring (S4)	Scientific computing for electrical engineering	6
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2		Scientific computing for mechanics	6
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	<u> </u>	Scientific computing for parallel numerical linear algebra	6
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2		Scientific computing for material sciences	6
Faculty of Science and Technology	Computer Science, Mathematics	Scientific Computing	Master 2	Spring (S4)	Internship in company or research laboratory (4 or 6 months)	18
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECT:
	Electronique, Electrotechnique,	Electrical engineering for sustainable				
Faculty of Science and Technology	Atomatique	development	Master 2	Autumn (S3)	DD -3- Electromagnetic energy conversion and eco-design	5
	Electronique, Electrotechnique,	Electrical engineering for sustainable				
Faculty of Science and Technology	Atomatique	development	Master 2	Autumn (S3)	DD -3- Energy Conversion	5
	Electronique, Electrotechnique,	Electrical engineering for sustainable				
Faculty of Science and Technology	Atomatique	development	Master 2	Autumn (S3)	DD -3- Bibliographic Project PBb	5
	Electronique, Electrotechnique,	Electrical engineering for sustainable			DD -3- Renewable Energy Production OR Advanced	
Faculty of Science and Technology	Atomatique	development	Master 2	Autumn (S3)	transportation systems	5
5 lv 60 : LT l l	Electronique, Electrotechnique,	Electrical engineering for sustainable		. (00)		_
Faculty of Science and Technology	Atomatique	development	Master 2	Autumn (\$3)	DD -3- Sustainable development applications	5
For the Code of Tools of	Electronique, Electrotechnique,	Electrical engineering for sustainable	Martaga	6	DD 4 led at 2 let with OD let with 1 let with	20
Faculty of Science and Technology	Atomatique	development	Master 2	Spring (S4)	DD -4- Industry internship OR Laboratory internship	20
Faculty of Science and Tacknology	Electronique, Electrotechnique,	Electrical engineering for sustainable	Master 2	Spring (C4)	DD 4 Scientific project	10
Faculty of Science and Technology	Atomatique	development	Master 2	Spring (S4)	DD -4- Scientific project	10
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Autumn (S1)	Digital Signal Processing	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Autumn (S1)	Initiation to Cleanroom Technologies	3
	1	1		1		

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Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Autumn (S1)	Semiconducting Devices	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Autumn (S1)	Architecture of Communicating Objects and Communication Networks	6
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Autumn (S1)	Guided Propagation Media	9
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Autumn (S1)	IOT -1	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Spring (S2)	Data Processing and Artificial Intelligence	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Spring (S2)	Digital Communications	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Spring (S2)	Tools for Modeling, modeling and data processing - 1	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Spring (S2)	Emerging Trends in Nanotechnology	6
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Spring (S2)	Antennas for Mobile Networks and Connected Objects - 1	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Spring (S2)	Electronic Systems Engineering	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Spring (S2)	IOT- 2	6
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 1	Spring (S2)	Student Project: Bibliographic Research Project	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 2	Autumn (\$3)	Sensor and Actuator Technologies	6
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 2	Autumn (\$3)	Advanced Wireless and Wired Technologies for UHD Communications	6
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 2	Autumn (S3)	Neuromorphic Technologies for Spiking Neural Networks	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 2	Autumn (S3)	Energy for the Internet-Of-Things	3

Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 2	Autumn (S3)	Tools for Modeling, modeling and data processing - 2	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 2	Autumn (S3)	Micro-nano Fabrication Techniques	6
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 2	Spring (S4)	Laboratory Research Project & Seminars	6
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 2	Spring (S4)	Professional Communication Skills	3
Faculty of Science and Technology	Nanosciences and Nanotechnologies	Emergent TECHnologies, E-TECH	Master 2	Spring (S4)	Internship	21
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Autumn (S1)	From genotype to phenotype	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Autumn (S1)	Evolutionnary biology & Population Dynamics	9
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Autumn (S1)	Conservation genetics	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Autumn (S1)	Introduction to Omics data	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Autumn (S1)	Statistics initiation with R	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Autumn (S1)	Bioinformatics tools	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Autumn (S1)	Language : English or FLE	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Autumn (S1)	Student project	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Spring (S2)	Theoretical modelling	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Spring (S2)	Ecology : from theory to experiments	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Spring (S2)	Multivariate statistics	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	 	Experimental approaches in Ecology	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	 	Experimental Evolutionary Genetics	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Spring (S2)	Scientific writing	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	 	Research in « global changes and biodiversity »	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 1	Spring (S2)	Professional Internship	9
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 2	Autumn (S3)	Population genomics	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 2	Autumn (S3)	Evolutionary genomics	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 2	Autumn (S3)	Macroevolution	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 2	Autumn (S3)	Introduction to Bioinformatics	6
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 2	Autumn (S3)	GLM statistics	3

Faculty of Science and Technology	Biology	Evolutionary Biology	Master 2	Autumn (S3) Student project : project management	3
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 2	Autumn (S3) Bibliographic project	6
Faculty of Science and Technology	Biology	Evolutionary Biology	Master 2	Autumn (S3) Research in « Evolution of mating systems »	3
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER UE NAME	ECTS
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Autumn (S1) Cell Biology (basic)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Autumn (S1) Life Imaging (basic)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Autumn (S1) Systems Biology (basic)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Autumn (S1) Microsystems (basic)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Autumn (S1) Metabibliography	3
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Autumn (S1) Language	3
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Spring (S2) Cell Biology (advanced)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Spring (S2) Life Imaging (advanced)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Spring (S2) Systems Biology (advanced)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Spring (S2) Microsystem (advanced)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Spring (S2) Lab project	3
Faculty of Science and Technology	Biology	Life Science and Technology	Master 1	Spring (S2) Science and Society (basic)	3
Faculty of Science and Technology	Biology	Life Science and Technology	Master 2	Autumn (S3) Cell Biology (expert)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 2	Autumn (S3) Life Imaging (expert)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 2	Autumn (S3) Systems Biology (expert)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 2	Autumn (S3) Microsystem (expert)	6
Faculty of Science and Technology	Biology	Life Science and Technology	Master 2	Autumn (S3) Lab project	3
Faculty of Science and Technology	Biology	Life Science and Technology	Master 2	Autumn (S3) Science and society (advanced)	3
Faculty of Science and Technology	Biology	Life Science and Technology	Master 2	Spring (S4) Life Imaging (expert)	3
Faculty of Science and Technology	Biology	Life Science and Technology	Master 2	Spring (S4) Lab Project	27
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER UE NAME	ECT:
Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 1	Autumn (S1) BCC1-UE1-EC1 - Introduction to omics data	3
Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 1	Autumn (S1) BCC3 - Ethics, health and Society	1
Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 1	Spring (S2) BCC2 - Metabolic Health and Plasticity	4
Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 1	Spring (S2) Mémoire bibliographique	2
Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 1	Spring (S2) Projet recherche	4
Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (S3) Advanced Mass Spectrometry & Hyphenated methods	6
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Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$3) Control Science and Technology Biology Omics and Systems Biology Autorn (\$3) Systems Biology and differential analysis 2 Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$3) Systems Biology Autorn (\$3) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$3) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$3) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$3) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$3) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$3) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$4) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$4) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$4) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$4) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$4) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$4) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$4) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$4) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$4) Faculty of Science and Technology Biology Omics and Systems Biology Autorn (\$5) Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Phys							
Faculty of Science and Technology Flysics Flysics of the 21st century Faculty of Science and Technology Flysics Flysics of the 21st century Faculty of Science and Technology Flysics Flysics of the 21st century Flace of the 21st century Flore of the 21	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (\$3)	Clinical proteomic	3
Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Faculty of Science and Technology Physics Physics Physics of the 21st century Ma	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (S3)	Systems Biology and differencial analysis	3
Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (33) Metabolomics 3 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (33) New Topics in Omics 3 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (33) New Topics in Omics 3 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (33) New Topics in Omics 3 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (33) Personnel Professional Project 3 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (33) Proteogenomics 3 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Spring (54) Industry internship 30 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Spring (54) Laboratory internship 30 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Spring (54) Laboratory internship 30 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Spring (54) Laboratory internship 30 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (51) TW -1- Advanced Optics I 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (51) TW -1- Mechanical Properties of Matter 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (51) TW -1- Mechanical Properties of Matter 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (51) TW -1- Quantum and Statistical Physics 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (52) TW -2- Advanced Optics II 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (52) TW -2- Advanced Optics II 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (52) TW -2- Advanced Optics II 3 Faculty of Science and Technology Physi	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (S3)	Interactomics	2
Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) New Topics in Omics Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) New Topics in Omics Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) Personnel Profesional Project Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) Proteogenomics Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) Proteogenomics Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) Technical bibliographic report Faculty of Science and Technology Physics Physics of the Zist century Faculty of Science and Technology Physics Physics Physics of the Zist century Faculty of Science and Technology Physics Physics of the Zist century Faculty of Science and Technology Physics P	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (S3)	Mass Spectrometry Based Large Scale Proteomics	3
Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) New Topics in Omics 3 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) Proteogenomics 3 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) Proteogenomics 3 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) Proteogenomics 5 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Spring(S4) Industry internship 30 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Spring (S4) Industry internship 30 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Spring (S4) Industry internship 30 Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Spring (S4) Industry internship 30 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW-1- Advanced Optics 1 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW-1- Electromagnetism in Matter 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW-1- Project management 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW-1- Project management 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW-1- Project management 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW-2- Advanced Optics II 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW-2- Electromagnetism in Matter 1 Spring (S2) TW-2- Electromagnetis	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (S3)	Metabolomics	3
Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (S3) Proteogenomics 3 Faculty of Science and Technology Biology Omics and Systems Biology Omics and Systems Biology Master 2 Autumn (S3) Proteogenomics 3 Faculty of Science and Technology Biology Omics and Systems Biology Omics and Systems Biology Master 2 Spring (S4) Biology Omics and Systems Biology Master 2 Spring (S4) Biology Omics and Systems Biology Master 2 Spring (S4) Biology Omics and Systems Biology Master 2 Spring (S4) Biology Omics and Systems Biology Master 2 Spring (S4) Biology Master 3 DEPARTMENT Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW-1-Advanced Optics 1 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW-1-Electromagnetism in Matter 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW-1-Optics 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW-1-Quantum and Statistical Physics Physics of the 21st century Master 1 Spring (S2) TW-2-Lab. Internship 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW-2-Solid State Physics and Quantum information Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW-2-Solid State Physics and Guantum information Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW-2-Solid State Physics and Guantum infor	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (S3)	Methods in Structural Biology	6
Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Autumn (\$3) Froteogenomics 3 Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Technology Fhysics Fhysics of the 21st century Faculty of Science and Te	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (S3)	New Topics in Omics	3
Faculty of Science and Technology Biology Omics and Systems Biology Amster 2 Spring (S4) Faculty of Science and Technology Biology Omics and Systems Biology Amster 2 Spring (S4) Faculty of Science and Technology Biology Omics and Systems Biology Omics and Systems Biology Omics and Systems Biology Amster 2 Spring (S4) Level Settlestire Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (S3)	Personnel Profesionnal Project	3
Faculty of Science and Technology Biology Omics and Systems Biology Master 2 Spring (S4) Biology Omics and Systems Biology Master 2 Spring (S4) Biology DEPARTMENT FIELO OF STUDY DEGREE PROGRAMME NAME EVEL SEMESTER UE NAME ECTS Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (S3)	Proteogenomics	3
Faculty of Science and Technology DEGREE PROGRAMME NAME Faculty of Science and Technology Physics Physics of the 21st century Physics of the 21st century Master 1 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Advanced Optics 1 TW -1- Electromagnetism in Matter 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Project management TW -1- Optics TW -1- Project management TW -1- Quantum and Statistical Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Project management TW -1- Optics TW -1- Project management TW -1- Project management TW -1- Quantum and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Project management TW -1- Quantum and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Project management TW -1- Quantum and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Advanced Optics II TW -2- Nolecular and Atomic Physics and Quantum information Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Nolecular and Atomic Physics and Quantum information Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Thermodynamics and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Thermodynamics and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Thermodynamics and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Thermodynamics and Stati	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Autumn (S3)	Technical bibliographic report	3
Faculty of Science and Technology DEGREE PROGRAMME NAME Faculty of Science and Technology Physics Physics of the 21st century Physics of the 21st century Master 1 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Advanced Optics 1 TW -1- Electromagnetism in Matter 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Project management TW -1- Optics TW -1- Project management TW -1- Quantum and Statistical Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Project management TW -1- Optics TW -1- Project management TW -1- Project management TW -1- Quantum and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Project management TW -1- Quantum and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Project management TW -1- Quantum and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Advanced Optics II TW -2- Nolecular and Atomic Physics and Quantum information Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Nolecular and Atomic Physics and Quantum information Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Thermodynamics and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Thermodynamics and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Thermodynamics and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Thermodynamics and Stati	Faculty of Science and Technology	Biology	Omics and Systems Biology	Master 2	Spring (S4)	Industry internship	30
Faculty of Science and Technology Physics Physics of the 21st century Physics of the 2	•		, e				30
Faculty of Science and Technology Physics Physics of the 21st century Physics of the 2			, ,				ECTS
Faculty of Science and Technology Physics Physics of the 21st century Physics of the 2	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Autumn (S1)	TW -1- Advanced Optics I	3
Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (\$1) TW -1- Optics 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (\$1) TW -1- Project management 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (\$1) TW -1- Project management 4 Autumn (\$1) TW -1- Quantum and Statistical Physics Faculty of Science and Technology Physics Physics of the 21st century Physics o	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Autumn (S1)	TW -1- Electromagnetism in Matter	3
Faculty of Science and Technology Physics Physics of the 21st century Physics of the 21st century Master 1 Autumn (S1) Faculty of Science and Technology Physics Physics of the 21st century Physics o	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Autumn (S1)	TW -1- Mechanical Properties of Matter	3
Faculty of Science and Technology Physics Physics of the 21st century Master 1 Autumn (S1) TW -1- Quantum and Statistical Physics 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Advanced Optics II 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Lab. internship 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Molecular and Atomic Physics and Quantum information 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Solid State Physics and Quantum information 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Solid State Physics 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Solid State Physics 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Solid State Physics 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Solid State Physics 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) PF-2-SCOL (Complex systems, optic, laser) 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) PF-2-MME 1 (Matter, Molecules and their Environnement) 3 DEPARTMENT FIELD OF STUDY DEGREE PROGRAMME NAME LEVEL SEMESTER UE NAME ECTS Applied and fundamental physics Complex Systems, Optics, Lasers Master 2 Autumn (S3) Optics, Photonics, Laser 9	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Autumn (S1)	TW -1- Optics	3
Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Advanced Optics II 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Lab. internship 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Molecular and Atomic Physics and Quantum information 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Solid State Physics 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Solid State Physics 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Thermodynamics and Statistical Physics 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) TW -2- Thermodynamics and Statistical Physics 6 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) PF-2-SCOL (Complex systems, optic, laser) 3 Faculty of Science and Technology Physics Physics of the 21st century Master 1 Spring (S2) PF-2-MME 1 (Matter, Molecules and their Environnement) 3 DEPARTMENT FIELD OF STUDY DEGREE PROGRAMME NAME LEVEL SEMESTER UE NAME ECTS Applied and fundamental physics - Complex Systems, Optics, Lasers Master 2 Autumn (S3) Optics, Photonics, Laser 9	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Autumn (S1)	TW -1- Project management	3
Faculty of Science and Technology Physics Physics of the 21st century Physics of the 2	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Autumn (S1)	TW -1- Quantum and Statistical Physics	6
Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Faculty of Science and Technology Physics Physics of the 21st century Physics of the 21st cent	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Spring (S2)	TW -2- Advanced Optics II	3
Faculty of Science and Technology Physics Physics of the 21st century Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Faculty of Science and Technology Physics Physics of the 21st century Physics of the 2	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Spring (S2)	TW -2- Lab. internship	3
Faculty of Science and Technology Physics Physics of the 21st century Physics of the 2		Physics	Physics of the 21st century	Master 1	Spring (S2)		6
Faculty of Science and Technology Physics Physics of the 21st century Physics of the 2	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Spring (S2)	TW -2- Solid State Physics	6
Faculty of Science and Technology Physics Physics of the 21st century DEPARTMENT FIELD OF STUDY DEGREE PROGRAMME NAME LEVEL SEMESTER UE NAME ECTS Applied and fundamental physics - Complex Systems, Optics, Lasers Master 2 Autumn (S3) Optics, Photonics, Laser 9	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Spring (S2)	TW -2- Thermodynamics and Statistical Physics	6
DEPARTMENT FIELD OF STUDY DEGREE PROGRAMME NAME LEVEL SEMESTER UE NAME ECTS Applied and fundamental physics - Faculty of Science and Technology Physics Complex Systems, Optics, Lasers Master 2 Autumn (S3) Optics, Photonics, Laser 9	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Spring (S2)	PF-2-SCOL (Complex systems, optic, laser)	3
Faculty of Science and Technology Physics Complex Systems, Optics, Lasers Master 2 Autumn (\$3) Optics, Photonics, Laser 9	Faculty of Science and Technology	Physics	Physics of the 21st century	Master 1	Spring (S2)	PF-2-MME 1 (Matter, Molecules and their Environnement)	3
Faculty of Science and Technology Physics Complex Systems, Optics, Lasers Master 2 Autumn (S3) Optics, Photonics, Laser 9	DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
	Faculty of Science and Technology	Physics	Complex Systems, Optics, Lasers	Master 2	Autumn (\$3)	Optics, Photonics, Laser	9

Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Complex Systems Dynamics)	Master 2	Autumn (\$3)	Extreme Regime of Light (Optics, Photonics, Laser also required)	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Complex Systems Dynamics)	Master 2	Autumn (S3)	Advanced Photonics/Fibers (Optics, Photonics, Laser also required)	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Complex Systems Dynamics)	Master 2	Autumn (\$3)	Complex Systems I	18
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Complex Systems Dynamics)	Master 2	Autumn (\$3)	Complex Systems II	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Complex Systems Dynamics)	Master 2	Autumn (S3)	Quantum Optics / Cold Atoms	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Complex Systems Dynamics)	Master 2	Autumn (S3)	Foreign language: french or english	3
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Complex Systems Dynamics)	Master 2	Spring (S4)	Experimental and Numerical tools	6
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Complex Systems Dynamics)	Master 2	Spring (S4)	Professionnal project (bibliography, internship, language)	24
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Atmospheric sciences and spectroscopy)	Master 2	Autumn (\$3)	Optics, Photonics, Laser	9
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Atmospheric sciences and spectroscopy)	Master 2	Autumn (\$3)	Radiative Transfer	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Atmospheric sciences and spectroscopy)	Master 2	Autumn (S3)	Adv. Spectroscopy for Environment Sciences	18
Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Atmospheric sciences and spectroscopy)	Master 2	Autumn (\$3)	Atmospheric Modeling	

Applied and fundamental physics Faculty of Science and Technology Physics Faculty of Science and Technology							
Faculty of Science and Technology Physics Sciences and Science and Technology Physics Sciences and Sciences and Technology Physics Sciences Applied and Indiam	Faculty of Science and Technology	Physics	(SCOL) (Atmospheric sciences and	Master 2	Autumn (\$3)	Foreign language: french or english	3
Faculty of Science and Technology Physics Applied and fundamental physics— (SCOL) (Atmospheric sciences and spectracopy) DEPARTMENT Field OF STUDY DESIDES PROGRAMME NAME Faculty of Science and Technology Physics Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics, Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Complex Systems I Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Complex Systems I Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Complex Systems I Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Aptino Deep Tech Photonics) Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Applied Deep Tech Photonics) Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Applied Deep Tech Photonics) Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Applied Deep Tech Photonics) Applied and fundamental physics— Complex Systems, Optics, Lasers (SCOL) (Applied Deep Tech Photonic	Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Atmospheric sciences and	Master 2	Spring (S4)	Experimental and Numerical tools	6
Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Ph	Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Atmospheric sciences and	Master 2	Spring (S4)		24
Faculty of Science and Technology Physics Complex Systems, Optics, Laters (SCOL) (Option Deep Tech Photonics) Physics	DEPARTMENT	FIELD OF STUDY		LEVEL	SEMESTER	UE NAME	ECTS
Faculty of Science and Technology Physics Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep	Faculty of Science and Technology	Physics	Applied and fundamental physics - Complex Systems, Optics, Lasers	Master 2	Autumn (S3)	Optics, Photonics, Laser	9
Faculty of Science and Technology Physics Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics-Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Scolid (Option Deep Tech Photonics) Faculty of Science and Technology Physics Scolid (Option Deep Tech Photonics) Faculty of Science and Technology Physics Scolid (Option Deep Tech Photonics) Faculty of Science and Technology Physics Scolid (Option Deep Tech Photonics) Faculty of Science and Technology Physics Faculty of Science and Techn	Faculty of Science and Technology	Physics	Complex Systems, Optics, Lasers	Master 2	Autumn (\$3)		
Faculty of Science and Technology Physics Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Physics Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics)	Faculty of Science and Technology	Physics	Complex Systems, Optics, Lasers	Master 2	Autumn (\$3)		
Faculty of Science and Technology Physics Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Physics Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (Inc.) Applied and fundamental physics - Complex Systems, Optics, Lasers (Inc.) Applied and fundamental physics - Complex Systems, Optics, Lasers (Inc.) Applied and fundamental physics - Complex Systems, Optics, Lasers (Inc.) Applied and fundamental physics - Complex Systems, Optics, Lasers (Inc.) Applied	Faculty of Science and Technology	Physics	Complex Systems, Optics, Lasers	Master 2	Autumn (\$3)	Complex Systems I	18
Faculty of Science and Technology Physics Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Physics Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Faculty of Science and Technology Physics Physics Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics)	Faculty of Science and Technology	Physics	Complex Systems, Optics, Lasers	Master 2	Autumn (\$3)	Laser Metrology	
Faculty of Science and Technology Physics Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics)	Faculty of Science and Technology	Physics	Complex Systems, Optics, Lasers	Master 2	Autumn (\$3)	THz and Microwave tech./ Photonic Integrated Circuits	
Faculty of Science and Technology Physics Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Applied and fundamental physics - Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics)	Faculty of Science and Technology	Physics	Complex Systems, Optics, Lasers	Master 2	Autumn (\$3)	Foreign language: french or english	3
Faculty of Science and Technology Physics Complex Systems, Optics, Lasers (SCOL) (Option Deep Tech Photonics) Professionnal project (bibliography, internship, language)	Faculty of Science and Technology	Physics	Complex Systems, Optics, Lasers	Master 2	Spring (S4)	Experimental and Numerical tools	6
DEPARTMENT FIELD OF STUDY DEGREE PROGRAMME NAME LEVEL SEMESTER UE NAME ECTS	Faculty of Science and Technology	Physics	Complex Systems, Optics, Lasers	Master 2	Spring (S4)	1	24
	DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS

		Applied and fundamental physics -	T			
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	Advanced Characterisation I	
		environment (Condensed Matter)				
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	Thermod. Phase transformation (Thermo I)	
		environment (Condensed Matter)				
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	Molecular mobility in amorphous materials (Dyn. I)	
		environment (Condensed Matter)				
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	Phonons (Dynamics II)	
		environment (Condensed Matter)				
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	Precipitation / Interfaces/Growth (Thermo II)	
		environment (Condensed Matter)	-			
- 1. (0.)	.	Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	Imperfections in Solids	
		environment (Condensed Matter)	+			
Faculty of Science and Tachnology	Physics	Applied and fundamental physics -	Mostor 2	Caring (C4)	Scientific writing and communication	
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Spring (S4)	Scientific writing and communication	
		environment (Condensed Matter) Applied and fundamental physics -	+			
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Spring (S4)	MM -4- Adv. Caracterisation II	
active of science and recliniology	Thysics	environment (Condensed Matter)	l laster 2	Johnnig (3 1)	The Trave caracterisation in	
		Applied and fundamental physics -	1			
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Spring (S4)	 English	
3		environment (Condensed Matter)		' 0 ' /		
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Spring (S4)	Research project, internship, master thesis	
-		environment (Condensed Matter)				
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	E
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	Advanced Characterisation I	
ractity of science and recimology	Tilysics	environment (Dilute Matter and	l'ilastei 2	Automin (33)	Advanced Characterisation 1	
		Spectroscopy)				
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	Spectroscopy	
,		environment (Dilute Matter and		` ´		
		Spectroscopy)	-			
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	Atomic scale modeling	
		environment (Dilute Matter and				
		Spectroscopy) Applied and fundamental physics -	+			
		1				
aculty of Science and Technology	Physics	· ·	Master 2	Autumn (S3)	Radiative Transfer	
ractity of science and reclinology	•	environment (Dilute Matter and				
Enculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	Radiative Transfer	
ractity of Science and Technology	•	environment (Dilute Matter and		1		- 1

Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Dilute Matter and	Master 2	Autumn (S3)	Large instruments	
Faculty of Science and Technology	Physics	Spectroscopy) Applied and fundamental physics - Matter, molecule and their environment (Dilute Matter and Spectroscopy)	Master 2	Autumn (S3)	Mass spectroscopy	18
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Dilute Matter and Spectroscopy)	Master 2	Autumn (S3)	Adv Spectroscopy for Env. Sci.	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Dilute Matter and Spectroscopy)	Master 2	Spring (S4)	Scientific writing and communication	3
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Dilute Matter and Spectroscopy)	Master 2	Spring (S4)	Advanced Characterisation II	3
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Dilute Matter and Spectroscopy)	Master 2	Spring (S4)	English	3
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Dilute Matter and Spectroscopy)	Master 2	Spring (S4)	Research project, internship, master thesis	21
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Atmospheric Sciences)	Master 2	Autumn (S3)	Aerosols 1	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Atmospheric Sciences)	Master 2	Autumn (S3)	Space observatories and services for atmospheric composition	12
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Atmospheric Sciences)	Master 2	Autumn (S3)	Aerosols 2	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Atmospheric Sciences)	Master 2	Autumn (S3)	Radiative Transfer	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Atmospheric Sciences)	Master 2	Autumn (S3)	Atmospheric Modeling	18

						_
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Atmospheric Sciences)	Master 2	Autumn (S3)	Adv Spectroscopy for Env. Sci.	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Atmospheric Sciences)	Master 2	Spring (S4)	Research project, internship, master thesis	30
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Modelling at the Molecular and Atomic Scales, MoMAS)	Master 2	Autumn (\$3)	Advanced Characterisation I	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Modelling at the Molecular and Atomic Scales, MoMAS)	Master 2	Autumn (S3)	Spectroscopy	12
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Modelling at the Molecular and Atomic Scales, MoMAS)	Master 2	Autumn (S3)	Atomic scale modeling	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Modelling at the Molecular and Atomic Scales, MoMAS)	Master 2	Autumn (S3)	Post Hartree Methods	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Modelling at the Molecular and Atomic Scales, MoMAS)	Master 2	Autumn (S3)	Quantum Dynamics	18
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Modelling at the Molecular and Atomic Scales, MoMAS)	Master 2	Autumn (S3)	Advanced Programming	
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Modelling at the Molecular and Atomic Scales, MoMAS)	Master 2	Spring (S4)	Research project, internship, master thesis	30
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECTS
Faculty of Science and Technology	Physics	Applied and fundamental physics - Matter, molecule and their environment (Biopham)	Master 2	Autumn (S3)	THERMODYNAMICS AND PHASE TRANSFORMATIONS	6

Faculty of Science and Technology	pl '	Applied and fundamental physics -		. (00)	DVALANILOS IN TUE AMODRILIOUS MATERIALS	
	Physics	Matter, molecule and their	Master 2	Autumn (S3)	DYNAMICS IN THE AMORPHOUS MATERIALS	3
		environment (Biopham)				
Faculty of Science and Technology		Applied and fundamental physics -				
	Physics	Matter, molecule and their	Master 2	Autumn (S3)	MATERIALS SCIENCE & PHARMACEUTICAL DEVELOPMENTS	6
		environment (Biopham)				
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	ATOMISTIC MODELLING : FROM THE GAS PHASE TO SOLIDS	6
		environment (Biopham)				
Faculty of Science and Technology		Applied and fundamental physics -				
	Physics	Matter, molecule and their	Master 2	Autumn (S3)	ADVANCED CHARACTERIZATION METHODS	6
		environment (Biopham)				
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	SCIENTIFIC WRITING & COMMUNICATION	6
		environment (Biopham)				
		Applied and fundamental physics -			LANGUAGE COURSE	
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	To be chosen in a list of courses such as English C1 level or a	3
Taconsy or colonics and recimience,	, nganes	environment (Biopham)			basic level in Spanish, French, Italian, or other foreign language	
		<u> </u>			course.	
		Applied and fundamental physics -				
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	er 2 Autumn (S3)	PROJECT DESIGN MANAGEMENT	3
		environment (Biopham)				
	Physics				Courses to be chosen in a list of courses offered by the "Health	
Faculty of Science and Technology		Applied and fundamental physics -			Entrepreneurship Program" degree	
Faculty of Science and Technology	Physics	Matter, molecule and their	Master 2	Autumn (S3)	(intellectual property protection, marketing, economic and	3 each
Faculty of Science and Technology	Physics	Matter, molecule and their environment (Biopham)	Master 2	Autumn (S3)	(intellectual property protection, marketing, economic and strategic intelligence, regulatory affairs, technology transfer,	3 each
		environment (Biopham)			strategic intelligence, regulatory affairs, technology transfer, start-up creation,)	
Faculty of Science and Technology DEPARTMENT	Physics FIELD OF STUDY	environment (Biopham) DEGREE PROGRAMME NAME	Master 2	Autumn (S3) SEMESTER	strategic intelligence, regulatory affairs, technology transfer,	3 each
DEPARTMENT	FIELD OF STUDY	environment (Biopham)	LEVEL	SEMESTER	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME	ECTS
		environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment		SEMESTER	strategic intelligence, regulatory affairs, technology transfer, start-up creation,)	
DEPARTMENT Faculty of Science and Technology	FIELD OF STUDY Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology,	LEVEL Master 1	SEMESTER Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy	ECTS 3
DEPARTMENT	FIELD OF STUDY	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment	LEVEL	SEMESTER Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME	ECTS
DEPARTMENT Faculty of Science and Technology Faculty of Science and Technology	FIELD OF STUDY Earth Science Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology,	LEVEL Master 1 Master 1	SEMESTER Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy	3 3
DEPARTMENT Faculty of Science and Technology	FIELD OF STUDY Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1	SEMESTER Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy	ECTS 3
DEPARTMENT Faculty of Science and Technology Faculty of Science and Technology Faculty of Science and Technology	FIELD OF STUDY Earth Science Earth Science Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology,	LEVEL Master 1 Master 1 Master 1	SEMESTER Autumn (S1) Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy	3 3 3
DEPARTMENT Faculty of Science and Technology Faculty of Science and Technology	FIELD OF STUDY Earth Science Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1 Master 1	SEMESTER Autumn (S1) Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy	3 3
DEPARTMENT Faculty of Science and Technology	FIELD OF STUDY Earth Science Earth Science Earth Science Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1 Master 1 Master 1 Master 1	SEMESTER Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization	3 3 3 3
DEPARTMENT Faculty of Science and Technology Faculty of Science and Technology Faculty of Science and Technology	FIELD OF STUDY Earth Science Earth Science Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1 Master 1 Master 1	SEMESTER Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy	3 3 3
DEPARTMENT Faculty of Science and Technology	FIELD OF STUDY Earth Science Earth Science Earth Science Earth Science Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology,	LEVEL Master 1 Master 1 Master 1 Master 1 Master 1	SEMESTER Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization Geoconservation 1 Outreach	3 3 3 3 3 3
DEPARTMENT Faculty of Science and Technology	FIELD OF STUDY Earth Science Earth Science Earth Science Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1 Master 1 Master 1 Master 1	SEMESTER Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization	3 3 3 3
DEPARTMENT Faculty of Science and Technology	Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology,	LEVEL Master 1	SEMESTER Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization Geoconservation 1 Outreach Introductory micropaleontology	3 3 3 3 3 3 3 3
DEPARTMENT Faculty of Science and Technology	FIELD OF STUDY Earth Science Earth Science Earth Science Earth Science Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1 Master 1 Master 1 Master 1 Master 1	SEMESTER Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization Geoconservation 1 Outreach	3 3 3 3 3 3
Faculty of Science and Technology	Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1	SEMESTER Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization Geoconservation 1 Outreach Introductory micropaleontology Applications of paleontology	3 3 3 3 3 3 3 3
DEPARTMENT Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1	SEMESTER Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization Geoconservation 1 Outreach Introductory micropaleontology Applications of paleontology	3 3 3 3 3 3 3 3
DEPARTMENT Faculty of Science and Technology	Earth Science	environment (Biopham) DEGREE PROGRAMME NAME Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology,	LEVEL Master 1	SEMESTER Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization Geoconservation 1 Outreach Introductory micropaleontology Applications of paleontology Language	3 3 3 3 3 3 3 3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1	SEMESTER Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization Geoconservation 1 Outreach Introductory micropaleontology Applications of paleontology	3 3 3 3 3 3 3 3
Faculty of Science and Technology Faculty of Science and Technology	Earth Science Earth Science	Paleontology, Paleoclimatology, Paleoenvironment Paleontology, Paleoclimatology,	LEVEL Master 1	SEMESTER Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization Geoconservation 1 Outreach Introductory micropaleontology Applications of paleontology Language Specialization - Statistics initiation with R	3 3 3 3 3 3 3 3 3 3
DEPARTMENT Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1	SEMESTER Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization Geoconservation 1 Outreach Introductory micropaleontology Applications of paleontology Language	3 3 3 3 3 3 3 3
Faculty of Science and Technology Faculty of Science and Technology	Earth Science Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	LEVEL Master 1	SEMESTER Autumn (S1) Autumn (S1)	strategic intelligence, regulatory affairs, technology transfer, start-up creation,) UE NAME Facies stratigraphy Biostratigraphy Sequence stratigraphy Methods of geol. material characterization Geoconservation 1 Outreach Introductory micropaleontology Applications of paleontology Language Specialization - Statistics initiation with R	3 3 3 3 3 3 3 3 3 3

Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Autumn (S1)	Personal project - Geobiosphere interactions in deep time	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Paleoenvironmental reconstructions 1	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Advanced micropaleontology	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Language	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Supervised Project	6
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Field training	6
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Internship professional experience	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Literature review	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Specialization - Vertebrate Paleontology, Paleobotany	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Specialization - Multivariate statistics	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Specialization - Organic matter	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 1	Spring (S2)	Specialization - Vertical movements & Sediment flow	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	Paleoenvironmental reconstructions 2	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	Geobiology	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	Paleoclimatology	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	Carbonate facies analysis	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	Quantitative paleontology	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	Phylogenetics	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	Specialization - Field training Alpes	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	Specialization - Macroevolution	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	Specialization - PE : Project (design) Management	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	Geoconservation 2 : case studies & applications	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Autumn (S3)	English scientific writting and communication	3
Faculty of Science and Technology	Earth Science	Paleontology, Paleoclimatology, Paleoenvironment	Master 2	Spring (S4)	Internship professional experience (4 to 6 months) or supervised research project + Internship (2 months), only if the S3 of this master track has been validated	30
DEPARTMENT	FIELD OF STUDY	DEGREE PROGRAMME NAME	LEVEL	SEMESTER	UE NAME	ECT:

		Exact Sciences and Engineering				
Faculty of Science and Technology	Computer Science	Sciences	Bachelor 1	Autumn (S1)	Computer science	6
		Computer Science / Track : Internet	Master 2			
Faculty of Science and Technology	Computer Science	of Things		Autumn (S3)	Compiling and Static Analysis	3
		Computer Science / Track : Internet				
Faculty of Science and Technology	Computer Science	of Things	Master 2	Autumn (S3)	Formal Methods for Embedded Systems	3
Facility of Calanda and Tank and an	Computer Science	Computer Science / Track : Internet	Master 2	Autumn (S3)	Operating System Architecture – III	3
Faculty of Science and Technology		of Things				3
Faculty of Science and Technology	Computer Science	Computer Science / Track : Internet	Master 2	Autumn (S3)	Real-Time Systems	3
ractity of science and recimology	Compoter science	of Things	Master 2	Automi (33)	inear-time systems	
Faculty of Science and Technology	Computer Science	Computer Science / Track : Internet	Master 2	Autumn (S3)	Risk Analysis	3
racorty of science and recimology	Computer science	of Things	Traster 2	7.0001111 (33)	NISK / Wildry Sis	
Faculty of Science and Technology	Computer Science	Computer Science / Track : Internet	Master 2	Autumn (S3)	Wireless Sensor Networks	3
racerty or coronec and recimelegy		of Things		7.000(00)	777 STOOL ST. 10 CH ST. 10	<u> </u>
Faculty of Science and Technology	Computer Science	Computer Science / Track : Internet	Master 2	Autumn (S3)	Signal Processing	3
,		of Things		(11)		
Faculty of Science and Technology	Computer Science	Computer Science / Track : Internet	Master 2	2 Autumn (S3)	Student Project	3
,	,	of Things				-
Faculty of Science and Technology	Computer Science	Computer Science / Track : Internet	Master 2	2 Autumn (S3)	Neuromorphic Computations	3
	•	of Things				-
Faculty of Science and Technology	Computer Science	Computer Science / Track : Internet	Master 2	Autumn (S3)	Parallel Embedded Systems Design	3
		of Things Computer Science / Track : Internet				
Faculty of Science and Technology	Computer Science	of Things	Master 2	Spring (S4)	Final Internship	9
		Computer Science / Track : Internet				
Faculty of Science and Technology	Computer Science	of Things	Master 2	Spring (S4)	Final Project (Projet de Fin d' études)	6
		Computer Science / Track : Internet				
Faculty of Science and Technology	Computer Science	of Things	Master 2	Spring (S4)	Final Msc thesis (Mémoire de Fin d'Études)	6
	Computer Science	Computer Science / Track : Internet	Master 2	aster 2 Spring (S4)	4) Language	
Faculty of Science and Technology		of Things				3
_ , , , , , , , , , , , , , , , , , , ,	Computer Science	Computer Science / Track : Internet	Master 2		Business Communication (Communication and Knowledge of	
Faculty of Science and Technology		of Things		Spring (S4)	the business)	3
Facility of College and Tarabasel	Community Colors	Computer Science / Track : Internet	†	6	Professional project preparation (Projet de l'étudiant : Préparer	
Faculty of Science and Technology	nd Technology Computer Science	of Things	Master 2	Spring (S4)	son projet professionnel)	3