

MASTER COURSES IN ENGLISH AVAILABLE FOR MASTER EXCHANGE VISITORS. 2023-2024. CAMPUS OF GIPUZKOA

FACULTY OF CHEMISTRY (only available for exchange visitors at the faculty)

MASTER IN CHEMISTRY AND POLYMERS

Person in charge of the Master: Marian Iriarte Ormazabal

Web: <https://www.ehu.es/es/web/master/master-quimica-polimeros>

	SEMESTER	SCHEDULE	CREDITS
Polymerization reaction engineering	1st semester 2023 - 2024	M	5
Surface and Colloids	2nd semester: January - March 2024	M	3
Synthesis of Polymeric Nanoparticles	2nd semester: January - March 2024	M	3

MASTER IN NANOSCIENCE

Person in charge of the Master: Andrés Arnau

Web: <https://www.ehu.es/en/web/master/master-nanoscience>

	SEMESTER	SCHEDULE	CREDITS
Experimental Techniques I: Structural Characterization	1st semester 2023 - 2024	M	3
Fundamentals of Nanoscale Characterization	1st semester 2023 - 2024	M	3
Low Dimensional Systems and Nanostructures	1st semester 2023 - 2024	M	3
Fundamentals of Quantum Mechanics	1st semester 2023 - 2024	M	3
Mathematical Methods for Nanoscience	1st semester 2023 - 2024	M	3
Experimental Techniques II: Spectroscopies	2nd semester 2024	M	3
From Nanoscience to Nanotechnology	2nd semester 2024	M	3
Modelling and Molecular Dynamics Simulations at the Nanoscale	2nd semester 2024	M	3
Nanostructural Properties	2nd semester 2024	M	3
Soft Matter and Nanostructures Materials	2nd semester 2024	M	3
Advanced Theoretical Methods in Nanoscience	2nd semester 2024	M	3
Advanced Topics in Nanomaterials	2nd semester 2024	M	3

Dynamics of Complex Materials	2nd semester 2024	M	3
Introduction to Scientific Research	2nd semester 2024	M	9
Nanotechnology-Oriented Research Activities	2nd semester 2024	M	3

MASTER IN THEORETICAL CHEMISTRY AND COMPUTATIONAL MODELLING

Person in charge of the Master: José M. Mercero Web: https://www.ehu.es/en/web/master/master-theoretical-chemistry-computational-modelling			
	SEMESTER	SCHEDULE	CREDITS
Advanced Methods in Electronic Structure, Dynamics and Molecular Modelling	1st semester 2023 – 2024	M	12
Advanced Computational Techniques	1st semester 2023 - 2024	M	6
Multiscale, Machine Learning and QSAR Methods Applied to Biomolecules	1st semester 2023- 2024	M	6
Theoretical Methods for Simulation of Materials	1st semester 2023 – 2024	M	6
Computational Chemistry Programming Project	1st semester 2023 – 2024	M	6
Modelling Electronic Structure	1st semester 2023 – 2024	M	6
Multiscale Modelling of Complex Molecular Systems	1st semester 2023 – 2024	M	6
Surface and Interface Chemistry: Experiment and Modelling	1st semester 2023 – 2024	M	6
Linux and Linux system managing	1st semester 2023 – 2024	M	5
Mathematical Foundations of Quantum Mechanics	2nd semester 2024	M	5
Statistical Mechanics and simulation applications	2nd semester 2024	M	5
Computational Techniques and numerical Analysis	2nd semester 2024	M	5
Methods in Theoretical Chemistry I	2nd semester 2024	M	5
Methods in Theoretical Chemistry II	2nd semester 2024	M	5
Symmetry in atoms, molecules and solids	2nd semester 2024	M	5
Solids	2nd semester 2024	M	5
Laboratory in Applied Theoretical Chemistry	2nd semester 2024	M	5

Computational Biochemistry	2nd semester 2024	M	5
Deepening the Theoretical Chemistry Methods	2nd semester 2024	M	5
Excited states	2nd semester 2024	M	5
Dynamics of Chemical Reactions	2nd semester 2024	M	5
From Theory to Implementation: Tutorials in Theoretical Chemistry	2nd semester 2024	M	6
Scientific and Linguistic Competence	1st and 2nd semester	M	5

FACULTY OF ENGINEERING- GIPUZKOA (only available for exchange visitors at the faculty)

MASTER IN CONTROL IN SMARTGRIDS AND DISTRIBUTED GENERATION

Person in charge of the Master: Aritza Camblong Ruiz Web: https://www.ehu.eus/en/web/master/master-control-in-smartgrids	SEMESTER	SCHEDULE	CREDITS
Introduction to Smartgrids	1st semester: Sept - Dec 2023	M/A	3
Grids operation and control	1st semester: Sept - Dec 2023	M	3
Power converters	1st semester: Sept - Dec 2023	M/A	3
Modelling and control of storage systems and associated converters	1st semester: Sept - Dec 2023	M	3
Disturbances and protections in Smartgrids	1st semester: Sept - Dec 2023	M/A	3
Control of the machine-side converter-generator set	1st semester: Sept - Dec 2023	M	4,5
Industrial informatics	1st semester: Sept - Dec 2023	M/A	3
Management and control of Smartgrids and microgrids	1st semester: Sept - Dec 2023	M	4,5
Introduction to the electric power system	1st semester: Sept - Dec 2023	M/A	3
Modelling and control of wind turbines	2nd semester: Jan - Apr 2024	M/A	3
Communications in Smartgrids	2nd semester: Jan - Apr 2024	A	3
Dynamic modelling of distributed generation sources	2nd semester: Jan - Apr 2024	M	3
Implementation of Smartgrids control algorithms	2nd semester: Jan - Apr 2024	M	3

FACULTY OF EDUCATION, PHILOSOPHY AND ANTHROPOLOGY

EUROPEAN MASTER IN MULTILINGUALISM AND EDUCATION

Person in charge of the Master: Alaitz Santos Berrondo Web: https://www.ehu.eus/es/web/master/master-multilinguismo-educacion	SEMESTER	SCHEDULE	CREDITS
503156- Multilingual education: research perspectives	1st semester 2023 – 2024	A	6
503157- Comparative research on minority languages in education	1st semester 2023 - 2024	A	6
503170- Multilingualism: historical and social perspectives	1st semester 2023 - 2024	A	6
503179- Multilingualism, attitudes and motivation	1st semester 2023 - 2024	A	3
503181- Media and multilingualism	1st semester 2023 - 2024	A	3
504195- Sociolinguistics	1st semester 2023 - 2024	A	6
503168- Computer assisted language learning	2nd semester 2024	A	6
503183- New challenges of multilingual education	2nd semester 2024	A	3
504197- Language and education	2nd semester 2024	A	6

FACULTY OF INFORMATICS

MASTER IN LANGUAGE ANALYSIS AND PROCESSING

Person in charge of the Master: Maite Oronoz Anchordoqui Web: https://www.ehu.es/en/web/master/master-language-analysis-processing	SEMESTER	SCHEDULE	CREDITS
505297- Theoretical Linguistics	1st semester 2023 – 2024	A	6
505299- Building Language Resources	1st semester 2023 – 2024	A	3
505300- Computational Morphology	1st semester 2023 – 2024	A	4,5
505301- Deep Learning	1st semester 2023 – 2024	A	6
505303- Machine Learning (II)	1st semester 2023 – 2024	A	3
505306- Programming Techniques for NLP	1st semester 2023 – 2024	A	6
505307- Speech Processing	1st semester 2023 – 2024	A	4,5
505309- Statistics and Mathematics for NLP	1st semester 2023 – 2024	A	3
505310- Computational syntax	1st semester 2023 - 2024	A	4,5
505312- Introduction to Automatic Learning	1st semester 2023 - 2024	A	3
505302- Language Technologies for Digital Humanities	2nd semester 2024	A	4,5
505304- Machine Translation and Multilingualism	2nd semester 2024	A	4,5
505305- NLP Applications (II): Building Information Extraction, Question Answering and Conversational Systems	2nd semester 2024	A	4,5
505315- Computational Semantics and Pragmatics	2nd semester 2024	A	4,5
505403- Speech Technologies	2nd semester 2024	A	4,5
505404- Automated Reasoning	2nd semester 2024	A	3

MASTER IN COMPUTATIONAL ENGINEERING AND INTELLIGENT SYSTEMS

Person in charge of the Master: Borja Calvo Web: https://www.ehu.es/es/web/kisa/home	SEMESTER	SCHEDULE	CREDITS
505595- Advanced probabilistic modelling*	1st semester 2023 – 2024	A	3
504300- Optimization techniques *	1st semester 2023 – 2024	A	3
505589- Introduction to time series data analysis*	1st semester 2023 – 2024	A	3
505594- Natural language processing*	1st semester 2023 – 2024	A	3
505601- Computer vision*	2nd semester 2024	A	3
505586- Biomedical data analysis*	2nd semester 2024	A	3
505592- Introduction to reinforcement learning *	2nd semester 2024	A	3

*High level of mathematics is required