MASTER 'ELECTROCHEMISTRY. SCIENCE & TECHNOLOGY'

Year 2023/2024

Further information:

(i) https://web.ua.es/es/masteres/electroquimica-ciencia-y-tecnologia/plan-de-estudios.html

(ii) http://www.ub.edu/gestio-ensenyaments/Quimica/MD30B_PE.pdf

Schedule for Compulsory subjects taught within the joint period at the Universitat d'Alacant

MODULE	TOPIC	SUBJECT	University of the professor	Credits	Dates (Year 2023)
Fundamental	Fundamentals of Eletrochemistry	Electrified interfase and Electrochemical equilibrium	UCO, US	3	8-12 January
		Electrode kinetics, transport and electrocatalysis	UMU. UAberdeen	3	9-19 January
		Electrochemical techniques	UA, UBU, UMU, UV	4	15-26 January
	Technological applications of Electrochemistry	Energy generation and storage. Study and prevention of corrosion	UAM, UPCT, US	4	22 January – 2 February
		Industrial electrochemistry	UA, UAB, UB	6	29 January – 9 February
		Electrochemical modification of surfaces	UB, UBU	4	12-16 February

Online optional subjects (Advanced Module, Term 2, 12 ECTS)

Advanced techniques in Electrochemistry (26/02 – 24/04, 3 ECTS, **UBU, UMU**)

Electrocatalysis (26/02 – 24/04, 3 ECTS, **UA, US**)

Energy aplications of Electrochemistry: Batteries and Fuel cells

(27/02 – 07/05, 3 ECTS, **UAM, UPCT**)

Biological Applications of Electrochemistry (27/02 – 07/05, 3 ECTS, **UBU, UCO, US**)

Schedule for subjects taught at the Universitat de Barcelona

COMPULSORY UB

(i) Introduction to the Experimentation in Electrochemistry (October-December 2023, 8 ECTS)
(Advanced Module; Topic: Fundamentals of Electrochemistry)

(ii) Final Master Project (October 2023 – July 2024, 16 ECTS)
Research work carried out in a group associated to the Master. Contact with the coordinator.

OPTIONAL UB

5 subjects from the Master in 'Applied Materials Chemistry' are offered:

Characterization techniques	(Term 1, 6 ECTS)
Chemistry and Materials in Alternative Energy	(Term 1, 3 ECTS)
Materials Electrochemistry	(Term 2, 3 ECTS)
Coating Technology	(Term 2, 3 ECTS)
Nanomagnetic Systems	(Term 2, 3 ECTS)

Schedule for Optional subjects taught at other Universities

Ask the coordinator.