



MASTER'S DEGREE IN ELECTROCHEMISTRY, SCIENCE AND TECHNOLOGY

INTERUNIVERSITARY – PARTICIPANT UNIVERSITIES:

AUTÓNOMA DE BARCELONA (UAB), AUTÓNOMA DE MADRID (UNAM), ALICANTE (UA), BARCELONA (UB) BURGOS (UBU), CÓRDOBA (UCO), MURCIA (UMU), POLITÉCNICA DE CARTAGENA (UPTC) Y VALÈNCIA STUDI GENERAL (UVEG)

COMPULSORY COURSES

Code	Course	ECTS	Semester
7115	Fundamentals of electrochemistry I	6	Fall
7116	Fundamentals of electrochemistry II	4	Fall
7117	Technological applications of electrochemistry I	6	Fall
7118	Technological applications of electrochemistry II	4	Fall
7119	Basic experimentation in electrochemistry	10	Fall
7120	Advanced experimentation in electrochemistry (<i>at each university</i>)	5	Spring
7121	Master's degree Final Project	15	Spring


ELECTIVE COURSES (Choose 10 credits)

Code	Course	ECTS	Semester
7122	Introduction to research (UAB)	10	Spring
7138	Spectroelectrochemistry experimentation (UBU)	5	Spring
7124	Applied cyclic voltammetry (UMU)	3	Spring
7125	Applied electrochemistry (Univ. de Sevilla, US)	4	Spring
7126	Electropolymerization (UPTC)	3	Spring
7127	Bio-mimetic electrochemical properties in soft materials (UPTC)	3	Spring
7128	Electrochemical and bio-mimetic devices (UPTC)	4	Spring
7129	Sensors and biosensors (UMU)	3	Spring
7524	Advanced electrochemistry. Fundamentals and applications (UCO)	4	Spring
7132	Energy accumulation and fuel cells (UAM)	6	Spring
7133	Surface electrochemistry (UA)	3	Spring
7134	Electrocatalysis: electrocatalytic materials and application to electrochemistry (UA)	3	Spring
7135	Electrochemistry of semiconductor materials (UA)	3	Spring
7136	Energy vector hydrogen II: uses (UA)	3	Spring
7137	Fabrication of sensors and screen-printed biosensors (UBU)	5	Spring
7227	Photovoltaic and photo-electrochemical conversion (UAM)	5	Spring
7139	Preparation of materials (UB)	6	Spring
7142	Characterization techniques (UB)	6	Spring
7143	Catalysts for energy and the environment (Univ. de Sevilla, US)	5	Spring
7144	Theoretical and computational chemistry (UMU)	3	Spring
7145	Macromolecules: structure and properties (UMU)	3	Spring



7525	Molecular organisation and molecular devices (UCO)	3	Spring
7526	Advance techniques in molecular spectroscopy (UCO)	3	Spring
7148	Industrial placement (UVSG)	6	Spring
7149	Transversal competences (UVSG)	4	Spring
7228	Chemical kinetics of charge transfer processes (Univ. de Sevilla, US)	4	Spring
7229	Hydrogen: production, accumulation and use (UAM)	6	Spring

IMPORTANT INFORMATION

 English Friendly Courses.
<ul style="list-style-type: none">• Fall Semester = 1^o Semester• Spring Semester= 2^o Semester