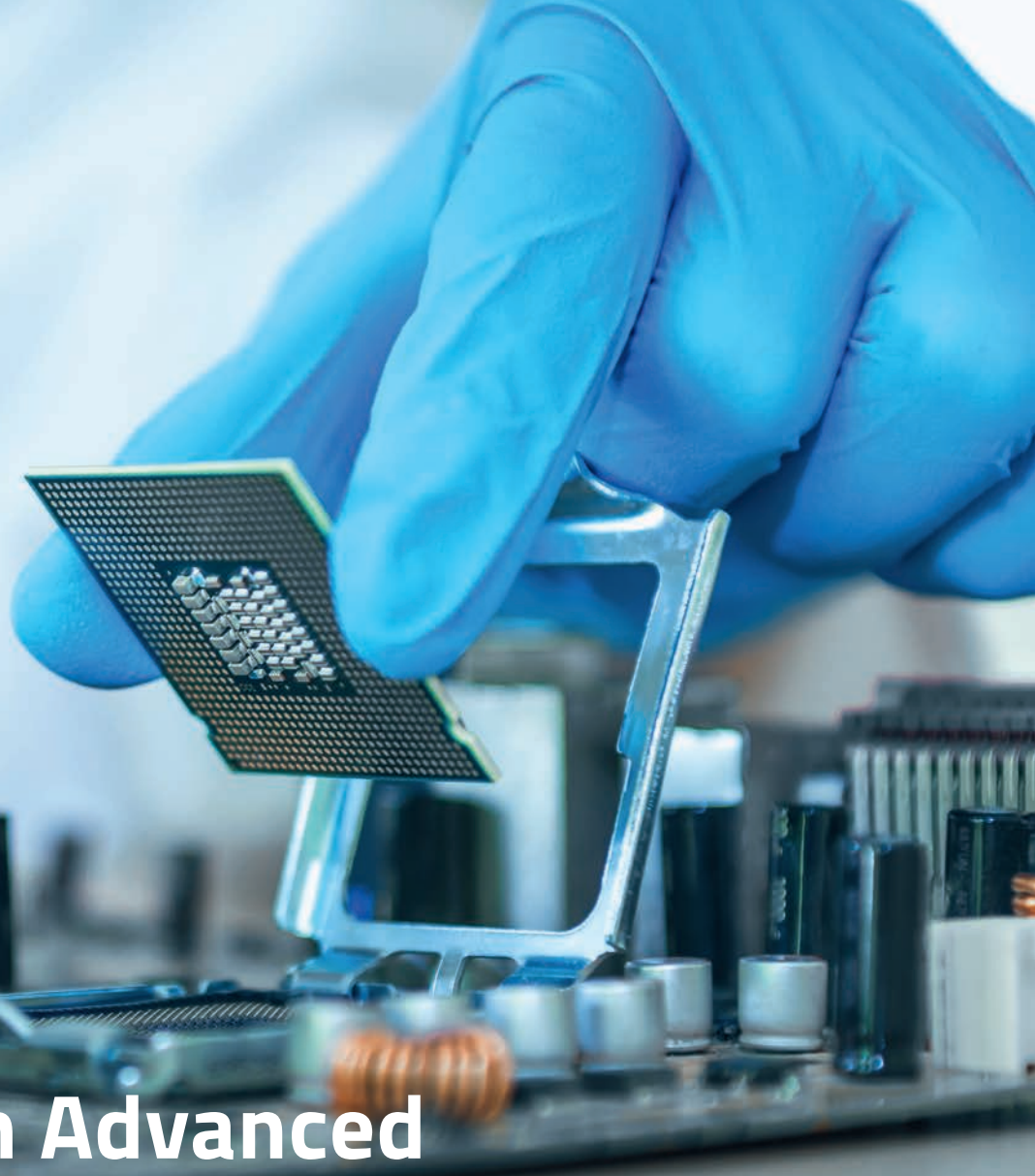


AMIR master



Master in Advanced Materials: Innovative Recycling

Awarded the EIT Label in 2018

THE CHALLENGE

Materials are the building blocks of the modern global economy and are instrumental for the transition to a green, circular and carbon-neutral economy. Thirty of these materials have been defined by the EU as critical, meaning that they are both highly important to the EU economy and in dangerously low domestic supply. Accessing the known primary raw material sources has become more challenging, while amounts of industrial waste and end-of-life-products are rapidly increasing. These waste streams contain secondary raw materials,

many of which are critical and can be recovered, diversifying supply and delivering usable materials to meet increasing demands. To achieve this, we need skilled professionals with advanced technical knowledge of recycling, an understanding of the full raw materials value chain and the skills required to transform knowledge into solutions and business. The AMIR master's programme was created to fulfil this need by educating future international professionals who will develop new routes for materials recycling.

With the support of the
Erasmus+ Programme
of the European Union



Double Diploma	Graduates of the AMIR programme will be awarded a single or double Master of Science degree, depending upon their chosen pathway. Graduates will also be awarded the EIT Label Certificate.
Credits	120 ECTS, 24 months
Language of Instruction	English
Starts in	September
Requirements	The programme is aimed at candidates who have a bachelor's degree in Engineering and Environmental Sciences with advanced knowledge in Chemistry (minimum 3 years of study or 180 ECTS credits), or a bachelor's degree in Chemistry, Physical-Chemistry, Materials (or Matter) Sciences. Candidates must also demonstrate English language proficiency.
Tuition fees	Please consult the AMIR website (www.amir-master.com)
Application Period	For more details, please check www.amir-master.com/apply/
Scholarships	For students beginning in September 2024, EIT Label scholarships from EIT RawMaterials of €15,000 per eligible student are available. For information on how EIT Label scholarships will be awarded and who is eligible, please contact the coordinating university directly: amir.master@u-bordeaux.fr . Additional scholarships and grants may be available – visit www.amir-master.com for details. A number of Erasmus Mundus Joint master's degree scholarships are available, covering full tuition fees and living expenses.



I chose AMIR because I wanted to play a pioneering role in the responsible utilisation of secondary raw materials. The programme has equipped me with skills in several end-of-life options for materials and taught me strategies to incorporate sustainable designs early in material research. The highlight of the programme has been the enjoyable experience of attending various EIT RawMaterials Label events, which enabled me to build a large network of like-minded sustainability experts and helped me to develop life-long friendships while travelling across Europe."

— **HAMZA JAMIL, PAKISTAN (AMIR)**

PARTICIPATING UNIVERSITIES

University of Bordeaux

France

NOVA University Lisbon

Portugal

TU Darmstadt

Germany

University of Liège

Belgium

Technical University of Madrid

Spain

University of Miskolc

Hungary

FOR MORE INFORMATION

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www.amir-master.com

Programme Structure

YEAR 1 of the master's programme takes place at the University of Bordeaux, NOVA University Lisbon or the University of Miskolc. Students learn about general and technical aspects of the raw materials value chain (general chemistry, material science, the lifecycle of materials), as well as about the main learning outcomes expected from an EIT-Labelled programme: sustainability, intellectual transformation, value judgments (ethical, scientific and sustainability challenges), creativity, innovation, leadership and entrepreneurship. In addition, a new module focusing on batteries has been introduced into the programme at Bordeaux, in line with the key trend of electrification in the development of sustainable materials for future mobility.

YEAR 2 takes place at one of the other partner universities, allowing students to gain specialist knowledge in their area of interest. This is followed by an industrial internship and completion of the master thesis.

