

Bloc 1

Ce programme résulte d'une collaboration avec différentes universités européennes (Bordeaux, Lisbonne, Dortmund, etc.). Les étudiants qui participeront à ce programme devront acquérir 60 crédits à l'ULiège (30 crédits de finalité et 30 crédits pour les TFE/stage). Les 60 autres crédits seront acquis au sein d'une des universités partenaires du programme.

Optional courses from the core curriculum

Choose a partner university's programme :

University of Miskolc

HULG9740-1	<i>Quant. sustainability assessment methods, Project work</i> * (anglais)	-	-	-	6
* are joint (online) courses gathering students of the same edition					
HULG9741-1	<i>Industrial Seminar, Joint Project</i> *	-	-	-	6
* are joint (online) courses gathering students of the same edition					
HULG9742-1	<i>Microstructure investigation</i> (anglais)	-	-	-	6
HULG9743-1	<i>Basics of waste management and waste utilization</i> (anglais)	-	-	-	7
HULG9744-1	<i>Recycling of glass, rubber, polymer and paper wastes</i> (anglais)	-	-	-	5
HULG9745-1	<i>Materials testing</i> (anglais)	-	-	-	4
HULG9746-1	<i>Polymer studies</i> (anglais)	-	-	-	4
HULG9747-1	<i>Mechanical activation and particulate composites</i> (anglais)	-	-	-	6
HULG9748-1	<i>Applied chemistry and transportation processes</i> (anglais)	-	-	-	6
HULG9749-1	<i>Materials equilibria</i> (anglais)	-	-	-	3

Elective courses

Choose one course among :

HULG9750-1	<i>Polymer studies 2</i> (anglais)	-	-	-	7
HULG9751-1	<i>Waste preparation technologies and qualification of wastes</i> (anglais)	-	-	-	7
HULG9752-1	<i>Chemical processes 2</i> (anglais)	-	-	-	7

Remark : mandatory for those who want to get Uliege degree

University Nova of Lisboa

HULG9755-1	<i>Biocatalysis and Bioremediation</i> (anglais)	-	-	-	6
HULG9756-1	<i>Entrepreneurship</i> (anglais)	-	-	-	3
HULG9757-1	<i>Finance for Entrepreneurs</i> (anglais)	-	-	-	3
HULG9758-1	<i>Project in Innovative Materials Recycling and Sustainability</i> (anglais)	-	-	-	6
HULG9759-1	<i>Materials Selection and Sustainability</i> (anglais)	-	-	-	3
HULG9760-1	<i>Industrial and Entrepreneurial Seminars</i> (anglais)	-	-	-	3
HULG9761-1	<i>Substitution by Clean Technologies and Green Chemistry</i> (anglais)	-	-	-	6
HULG9762-1	<i>Characterisation, Monitoring and Rehabilitation Techniques</i> (anglais)	-	-	-	6
HULG9763-1	<i>Waste treatment and Recycling Technologies</i> (anglais)	-	-	-	3
HULG9764-1	<i>Advanced Topics in Materials Science and Engineering</i> (anglais)	-	-	-	3

Optional courses

Choose 3 courses among :

Remarque : the first 3 courses are compulsory to obtain the degree of Master of science in

HULG9765-1	<i>Transport Phenomena</i> (anglais)	-	-	-	6
HULG9766-1	<i>Chemical Reactors I</i> (anglais)	-	-	-	6
HULG9767-1	<i>Separation Processes I</i> (anglais)	-	-	-	6
HULG9768-1	<i>Mineral Processing and Sustainable Exploration and Mining</i> (anglais)	-	-	-	6
HULG9769-1	<i>Mineral Resources in the Circular Economy</i> (anglais)	-	-	-	6
HULG9770-1	<i>Nanomaterials and Energy</i> (anglais)	-	-	-	3

Bloc 2

Focus courses

GEOL1044-1	<i>Raw Materials in a Circular Economy</i> (anglais) - Maud BAY, Sandra BELBOOM, Eric PIRARD - [1j T. t.]	Q1	26	26	[+]	5
GEOL1043-1	<i>Extractive metallurgy</i> (anglais) - Stoyan GAYDARDZHIEV, Andreas PFENNIG - [1j T. t.]	Q1	30	20	[+]	5
GEOL0315-1	<i>Solid Waste and by products processing</i> (anglais) - Stoyan GAYDARDZHIEV - [20h Labo., 7h Proj., 1,5j T. t.]	Q1	20	-	[+]	5
GEOL1045-1	<i>Economic and societal issues in mining and recycling</i> (anglais) - Eric PIRARD - [30h Proj., 2j T. t.]	Q1	15	-	[+]	5
CHIM0695-2	<i>Modelling of chemical & energy processes</i> (anglais) - Grégoire LÉONARD	Q1	20	32	-	5
MECA0526-1	<i>High Temperature Processes in Recycling & Remanufacturing</i> (anglais) - Anne MERTENS - [1j T. t.]	Q1	26	26	[+]	5

Optional courses from the core curriculum

Choose 5 credits from the University of Liège course catalog or the internship :

ASTG0023-1	<i>Stage technique (8 semaines)</i> - Benoît HEINRICHS - [40j T. t.]	TA	-	-	[+]	5
[...]	University of Liège course catalogue					

Compulsory courses from the core curriculum

Remarque : the courses of this major are exclusively reserved for Erasmus students who follow the whole programme "Advanced Materials -Innovative Recycling" during the second year of the Master.

University of Liège

ATFE9012-1	<i>Master Thesis (including an introduction to research methodology)</i> (anglais) - Grégoire LÉONARD - [750h Proj.]	-	-	[+]	25
------------	--	---	---	-----	-----------