

Supporting Education
on Critical Raw Materials



NOVEL EDUCATIONAL CONCEPT

Courses on complex and interdisciplinary topics in a modular structure adaptable to various course formats.

DEVELOPED AND TAUGHT BY EXPERTS

SusCritMat brings together educational and technical expertise of leading European educational institutions and business.

INTERDISCIPLINARY APPROACH

The project helps to understand the role of critical raw materials in the whole value chain across various academic fields, by highlighting the bigger picture and the interconnected nature of global business and society, which is is increasingly necessary for decision-making in industry.

WINTER SCHOOL

Join to discuss with experts, gain skills and competences, enlarge your professional network and gain ECTS points!

More information and winter school registration at www.suscritmat.eu







2018 winter school program

January 15-19, Les Diablerets, Switzerland

Case study: Nd Permanent magnets for electric cars

DAY 1 INTRODUCTION

DAY 2 ANALYSIS

DAY 3 ANALYSIS 2

DAY 4 SOLUTIONS

PROJECT **PRESENTATIONS**

	Introduction Module (3h)		
	TU Delft	BRGM / TU Delft	University of Leiden
8:00 - 12:30	Historical Solutions for Critical Raw Materials	Criticality	Methods of Material Flow Analysis
Project work with mentors (1h)		n)	

indicators

Hands-on work on criticality

Discussions/project work with

14:00

17:00

18:30 22:00

2h

Project work with mentors (1h)	Project work with mentors (1h)
Student project work / outdoors teambuilding	Student project work / outdoors teambuilding
RDGM	Outotoc

Analysis Module (3 h)		
University of Bordeaux	University of Bordeaux / Tu Delft	University of Leiden
Environmental & Societal Aspects	Resource efficiency	Life Cycle Assessment
Project work with mentors (1h)		
Student project work / outdoors teambuilding		

1h	Outotec Process model based LCA using HSC Chemistry software
2h	Discussions / Project work with mentors

University of Bordeaux Certification Potentials Policy & Governance, Economic Aspects Project work with mentors (1h)	Analysis Mo	odule 2 (3 h)
Potentials Governance, Economic Aspects Project work		TU Delft
		Governance, Economic

Student project work /

outdoors teambuilding

2h	<u>Granta Design</u> Sustainability assessment
1h	Discussions / Project work with mentors

Solutions Module (3h)	
Empa Characte- rizing the urban mine	Granta Design Materials Selection and Eco-Design
TU Delft Waste mana- gement	TU Delft Design for Resource efficiency
Project work with mentors (1h)	

Waste mana- gement	Design for Resource efficiency
Project work with mentors (1h)	
Student pro outdoors te	

1h	Outotec Production and Recycling of metal cases
2h	Discussions / Project work with mentors

Assessment (5h) Group presentations and assessment

by consortium experts