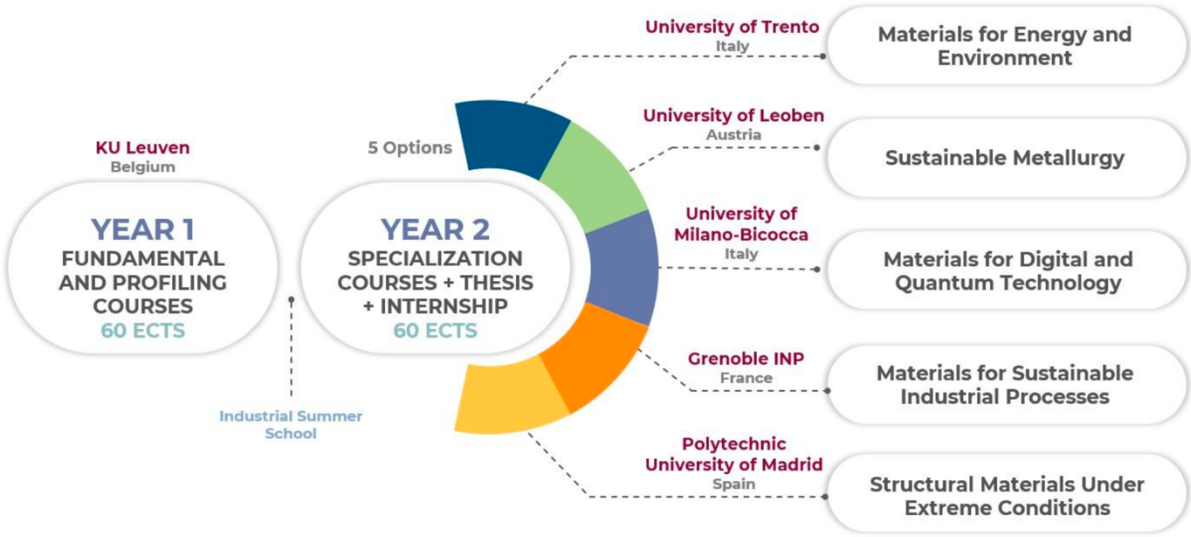
SUMA PROGRAMME 2025-2026

SUMA MOBILITY SCHEME



YEAR 1 - KU LEUVEN	
1ST SEMESTER	**2ND SEMESTER**
Bridging courses (mandatory for students who did not have equivalents in their bachelors)	
Structures and Microstructures of Materials (3)	
Thermodynamics and Kinetics in Mat. Eng. (3)	
Common trunk (21 ECTS credits first semester, 27 second semester)	
Metals: Production and Recycling (6)	Materials Characterization Techniques (6)
Ceramics and Powder Metallurgy (3)	Mat. Modelling and Simulation Techniques (6)
Polymers & Composites (6)	Surface Science and Engineering (6)
Design of Experiment and Data Analysis (6)	Sustainable Materials Management (3)
	Engineering & Entrepreneurship (6)
Profiling blocks (9 track-specific mandatory ECTS credits)	
Mater. For Digital & Quantum Tech (UNIMIB)	
Mat. Physics and Tech. for Nanoelectronics (6)	
Computational Thermodynamics (3)	
Energy and Environment (UT)	
Advanced Thermomechanical Processing (6)	
Computational Thermodynamics (3)	
Sustainable Metallurgy (MUL)	
Advanced Thermomechanical Processing (6)	
Computational Thermodynamics (3)	
Structural Mat. in Extreme Conditions (UPM)	
Advanced Thermomechanical Processing (6)	
Mechanical Behaviour of Materials (3)	
Free Electives	
	Elective (3)

YEAR 2 – PARTNER UNIVERSITY	
1ST SEMESTER	**2ND SEMESTER**
Materials for Digital and Quantum Technologies (U Milano-Bicocca)	
Choice from Nanotechnology and Innovation OR Quantum Photonics (6)	Choiche from Fabrication and Characterisation of Nano and Quantum Materials OR Advanced Solid State Physics (6)
Choiche from Quantum electronics OR Physics and Tech. of Electronic Devices (6)	Management and Sustainable Innovation (6)
Industrial Internship (3)	Elective (3)
Industrial Internship (3)	Further Linguistic Knoeledge (3)
Master's Thesis (24)	
Materials for Energy and Environment (U Trento)	
Electrochemistry for Energy and Env. (6)	Recycling and Sustainable Materials (6)
Materials for Energy (6)	Industrial Internship (6)
Mechanics and Mat. for Engineering Design (6)	Elective (6)
Master's Thesis (24)	
Sustainable Metallurgy (MU Leoben)	
Fundamentals and Application of Multiphase Simulation (2.5)	Sustainable Metals and Alloys (3)
Testing Methods and Application of Building Materials (2.5)	Refractories in Non-Ferrous Metallurgy – Fundamentals and Case Studies (1.5)
Formability of Metals (2.5)	Special Metallurgy of Non-Ferrous Metals (2.5)
Sustainable Business Management (4.5)	Elective (3)
Mineral Economics (3)	
Simulation of Production Planning and Logistics (Production Economy) (2)	
Industrial Internship (6)	
Seminar Master's Thesis Sustainable Mat. (3)	
Master's Thesis (24)	
Structural Materials under Extreme Conditions (UP Madrid)	
Materials for Energy (3)	Materials for Extreme Conditions (3)
Advanced Manufacturing of Structural Materials (3)	Impact Mechanics (3)
Design Thinking (3)	Structural Integrity (3)
Lean Start-Up (6)	Forensic Engineering (3)
Industrial Internship (3)	Industrial Internship (3)
Elective (3)	
Master's Thesis (24)	