

Annex 4 to the Addendum for Double Master's Degrees between Chalmers tekniska högskola and Universität Stuttgart

Double Master's Degree Scheme

The attached MACROPLAN depicts the 2-year MSc double degree structure in **Materials Engineering at Chalmers** and in **Materialwissenschaft (Materials Science) at U Stuttgart**. It shows the compulsory and elective courses in each semester as well as the prerequisites for students wishing to spend their 2nd year at the partner institution.

Semester 1		Semester 2		Semester 3		Semester 4	
Chalmers students at Chalmers	Stuttgart students in Stuttgart	Chalmers students at Chalmers	Stuttgart students in Stuttgart	Chalmers students in Stuttgart	Stuttgart students at Chalmers	Chalmers students in Stuttgart	Stuttgart students at Chalmers
1st Study Period: Metals Engineering (7,5 ECTS) Polymer Engineering (7,5 ECTS) 2nd Study Period: Characterisation of Materials and Failure Analysis (7,5 ECTS) Mechanical Performance of Engineering Materials (7,5 ECTS)	Phase Transformations (9 ECTS) ----- Synthesis and Properties of Ceramic Materials (6 ECTS) Materials Science Laboratory (12 ECTS) Materials Science Seminar (6 ECTS) Elective (6 ECTS)	1st Study Period: Corrosion / Environmental Adopted Product Development / Materials Mechanics (7,5 ECTS) ----- Ceramic Engineering (7,5 ECTS) Elective (7,5 ECTS) 2nd Study Period: Composite and Nanocomposite Materials (7,5 ECTS) Metal Processing-Casting, Forming, Joining (7,5 ECTS)	New Materials and Materials Characterisation Methods (6 ECTS) ----- Nanocomposite Materials (6 ECTS) and Elective (3 ECTS) Polymer Chemistry Laboratory (6 ECTS) Polymer Materials Science (9 ECTS) Statistical Thermodynamics (6 ECTS)	Synthesis and Properties of Ceramic Materials (6 ECTS) ----- 1st Part of Phase Transformations (0 ECTS) and 1st part of New Materials and Materials Characterisation Methods (0 ECTS) Materials Science -Seminar and Practical/Laboratory (9 ECTS) ----- Materials Science -Seminar and Practical/Laboratory (6 ECTS) Master Thesis (1st Part) (0 ECTS)	1st Study Period: Manufacturing Processes (7,5 ECTS) ----- Phase Transformations (7,5 ECTS) Metals Engineering (7,5 ECTS) 2nd Study Period: Innovation and Novel Design of Materials (7,5 ECTS) Mechanical Performance of Engineering Materials (7,5 ECTS)	Nanocomposite Materials (6 ECTS) ----- 2nd Part of: Phase Transformations (9 ECTS) and 2nd part of: New Materials and Materials Characterisation Methods (6 ECTS) Physical Chemistry of Polymers (3 ECTS) Diffraction methods in Materials Science (6 ECTS) Master Thesis (2nd Part) (30 ECTS)	1st and 2nd Study Period: Master Thesis (30 ECTS)
Σ ECTS = 30	Σ ECTS = 33/30	Σ ECTS = 30	Σ ECTS = 27/30	Σ ECTS = 30	Σ ECTS = 30	Σ ECTS = 30	Σ ECTS = 30

Important remarks:

- Every Semester at Chalmers is divided in 2 study periods.
- Modules separated by a horizontal line ("----") are offered in yearly alternation depending of lecture turn at University.
- Modules separated by a slash ("/") are alternative modules. Thus the student has the possibility to choose.
- Subjects that require extra attention are printed in bold.

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