

Institut National Polytechnique de Lorraine, École Européenne d'Ingénieurs en Génie des Matériaux, Nancy, France

1. Year (1st and 2nd Semester)

École Européenne d'Ingénieurs en Génie des Matériaux (EEIGM - INPL), Nancy	Credit Points	FS 1 (WS)	FS 2 (SS)
MI - Structure of Materials			
Flow and Transfer (André)	4	●	
Solid State Diffusion (Redjaïmia)	4	●	
Metallic Materials (Appolaire)	3		●
Theory of Composite Beams (Nivoit)	3		●
Inorganic Materials Phase Transformation I (Metauer)	5	●	
Inorganic Materials Phase Transformation II (Metauer)	5		●
Polymer Physics (Etienne)	5		●
Polymers – laboratory work (Etienne)	3		●
Macromolecular Chemistry (Six)	5	●	
Minimal Credits out of MI	min. 7		
MII - Characterisation and Modelling of Materials			
Materials Characterisation (NN)	5	●	
Numerical Analysis (Maurice)	5	●	
Numerical Mechanics – Laboratory work (Ayadi)	2		●
Numerical Analysis – Laboratory work (Maurice)	2		●
Molecular Modelling (Hocquet)	3	●	
Minimal Credits out of MII	min. 7		
MIII - Properties of Materials			
Physical Properties of Materials (Pêcheur)	5	●	
Materials Mechanics (Ayadi)	3		●
Corrosion (Steinmetz)	6	●	
Minimal Credits out of MIII	min. 7		
MIV - Materials Technologies			
Metallic Materials Processing – laboratory work (NN)	2		●
Chemical Reaction Engineering (Simmonot)	4	●	
Separation Engineering (Barth)	2		●
Granular Solids and Porous Media (Barth)	2		●
Chem. and Proc. of Polymer Blends and Comp. (Hu & Six)	2		●
Process Engineering – laboratory work (Simmonot)	3		●
Minimal Credits out of MIV	Min. 7		
Seminars: Integrated into courses			
Languages			
French language and culture (foreign students only)	4	●	●
Second language (German or Spanish or English)	4	●	●
Third language (French speaking students only)	4	●	●
Required Credits out of Languages	max. 8		
Total required	60		

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2nd Year (3rd and 4th Semester)

École Européenne d'Ingénieurs en Génie des Matériaux (EEIGM - INPL), Nancy	Credit Points	FS 3 (WS)	FS 4 (SS)
Plastic Deformation and Microstructures (George)	3	●	
Microstructure Origin (Denis)	3	●	
Materials Processing (Gautier / Bauer-Grosse)	3	●	
Advanced Processing of Materials (Ablitzer)	3	●	
Surface Treatment (Belmonte)	3	●	
Crystalline Growth and Solidification (Lesoult)	3	●	
Composite Materials and Semi-Crystalline Polymers (G'Sell)	3	●	
Surface of Solids (Belmonte / von Stebut)	3	●	
Phase transformation and internal stresses (Bellot)	3	●	
Heat Transfer in Semi-Transparent Materials (Degiovanni)	2	●	
Thermal Characterisation of Materials (Didierjean)	2	●	
Transfer in Porous Media (Stemmelen)	2	●	
Materials for Mechanical Applications (Cunat)	2	●	
Mechanical Behaviour and Structural Calculation of Composites (Cunat)	2	●	
Shape Forming Analysis of Materials (Rahouadj)	2	●	
Electronic Properties of Solids (Billaud)	5	●	
Structures and Electrical Properties of Materials (Malaman)	4	●	
Project Work	15	●	
Languages			
French language and culture	4	●	
Second language (German or Spanish or English)	4	●	
Required Credits out of Languages	4		
Master Thesis	30		●
Total required	60		