# SPIM-GM-903 Technical Study of Synthesis

## Master Degree : Mechanical Engineering and Materials sciences

#### Reference number : SPIM-GM-903

Title of the subject : Technical study of synthesis

University component : UFR MIM

Coordinating lecturer : **JM Philippe :** <u>jean-marc.philippe@univ-lorraine.fr</u>

Semester : Autumn

Total hours of classes : 60h ECTS credits : 8

Teaching language : French Course proposed in English for exchange students : No

Course composition	Coef.	Number of hours		
		lectures	Tutorials	Practical works
Technical Study				24
Technical deepenning 1				16
Technical deepenning 2				10

During their professional activity, students will develop projects in autonomy, monitor technological developments, implement experiments and take account the aspects of environment, security and ergonomics.

**Prerequisites :** having followed a program like a Master1 I2M

Skills to acquire

Being capable of developing a project, of defining the limits of the study and the needs of the customer, and of implementing processes and experiments allowing to comply with certain requirements

### Knowledge associates with skills

Define an argued solution of conception and manufacture

Define and implement an experimental device

Find documentation, give a presentation and organize a discussion around the solution Analyze the solutions adopted and compare them according to a few criteria

### **Course syllabus**

Adapted according to the research lad and of the problem resolve

#### Evaluation :

Oral presentations and written work on the studied topic and evaluation of the work