SPIM-GM-904 3D scanning & Reverse engineering

Master Degree : Mechanical Engineering and Materials sciences

Reference number : SPIM-GM-904

Title of the subject **: 3D scanning and reverse engineering**

University component : **UFR MIM**

Coordinating lecturer : **JM Philippe :** jean-marc.philippe@univ-lorraine.fr

Semester : ***Autumn***

Total hours of classes : **30h** ECTS credits : **2**

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

Course composition	Coef.	Number of hours		
		lectures	Tutorials	Practical works
3D Scanning and Reverse Engineering		6	6	18

During their professional activity, students will have to use with the new digital technologies such as digitalization and reverse engineering

Prerequisites : none

Skills to acquire
Being capable of defining the digital shape (CAD) of a real piece, and realizing a clone of this product.

Knowledge associates with skills
Acquire the bases of the theory of curves and surfaces
Digitize an existing product
Redefine the digital shape of the product

Course syllabus
Notions on curves and surfaces
Technique of laser digitalization
Technique of reconstruction by software (Geomagic and Catia)

Evaluation :
The evaluation will lead to a written examination on the course on curves and surfaces, and to report explaining the work done during the reconstruction.