

## COURSES IN ENGLISH IN SURVEYING ENGINEERING - 5th year - semester 9

	ECTS
<b>CT-SHSL-09-English</b>	2
<b>STM-TOPO-13-Photogrammetry 4</b>	3
Stereopreparation, Aerotriangulation, Orthophotos, DTM	
<b>STM-TOPO-13-Remote Sensing-Radar-Laser 2</b>	2
Supervised/unsupervised classification	
Radar and its applications	
Terrestrial laser scanning	
<b>STM-TOPO-13-GIS 5</b>	3
GIS project management	
Data processing - statistics - classical algorithms - spatial analysis	
3D in GIS and 3D GIS	
Internet and GIS, webmapping	
geospatial webservices	
GIS programming (Python)	
<b>STM-TOPO-14-Imagery project/Photogrammetry/Remote Sensing/GIS</b>	3
The imagery project aims to manipulate various sources of image, LiDAR point cloud and vector data that can be used for the representation, analysis and management of the urban environment. The combination of data acquired by aircraft or satellites, from the visible to the infrared range, from passive and active sensors, will be based on a multi-scale approach enabling students to familiarize themselves with different photogrammetry, GIS and image processing tools, and to merge the various sources of information.	
<b>STM-TOPO-14-Introduction to research</b>	2
Discover the world of research	
Writing scientific documents	
<b>STM-TOPO-15-Adjustment computations 3</b>	3
Correlations between observations	
Error ellipses	
Spatial or 3D network compensation	
<b>STM-PRT : Technological Research Project</b>	4
Project opened to large aspects of Geomatics, Surveying, Lidar...	