

# Master

LURPA is leading the research master 2 entitled "Advanced Manufacturing and Smart Systems" (AMSS) at the Paris-Saclay University

## Master 2 Research : Advanced Manufacturing and Smart Systems

### About

The Advanced Manufacturing and Smart Systems (AMSS) program is part of an engineering-research formation specialized in the field of complex systems engineering. It addresses a real industrial need in terms of engineering-research combining major topics in the industry of the future, such as the optimisation of manufacturing processes and procedures on the one hand and the control of associated critical systems on the other.

### Core modules

- › Technics and tools for proof of concept (4 ECTS)
- › Modeling of Multi-Physical Manufacturing Systems (4 ECTS)
- › Research Methodologie (2 ECTS)
- › Optimization technics and data science (3 ECTS)
- › English for scientists (2 ECTS)

## Modules of the Critical Systems Control (CSC) speciality

- › Reliability and Risk (3 ECTS)
- › Modeling of Discrete Event Systems (3 ECTS)
- › Methods and tools for fault removal (3 ECTS)
- › Methods and tools for fault tolerance (3 ECTS)
- › Model-based System Engineering (3 ECTS)

## Modules of the Numerical Product Process Engineering (IN2P) speciality

- › Modelling and control of robotic systems (3 ECTS)
- › Geometric modelling of assemblies and systems (3 ECTS)
- › Computer Aided Manufacturing (3 ECTS)
- › Advanced Manufacturing (3 ECTS)
- › 3D digitizing and geometric processing (3 ECTS)

## Other information

**Link to apply** (<https://www.universite-paris-saclay.fr/en/education/master/industrial-engineering/m2-advanced-manufacturing-and-smart-systems>)

For more information, download the brochure below.

Do not hesitate to contact the training manager: [Gregory Faraut](#)