GENERAL INFORMATION					
Subject name	RO4. Robotics application for Advanced processes				
Semester	2	Character	Compulsory	Type of module	Specialisation
ECTS	4		Modality	Face-to-face	
Higher Education Institution(s)			ESTIA		
Lecturer(s)			Maylis Uhart, Anais Domergue, Jean-Baptiste Daramy		

LEARNING AND TEACHING	
ESCO Occupation(s)	Manufacturing engineer Chief technology officer
ESCO Skill & Competences (*no ESCO)	Use mathematical tools and equipment Advise on manufacturing problems Keep up with digital transformation of industrial processes Define technology strategy Scientific research methodology
Learning outcomes (Please refer to Appendix 4 for the interpretation of the acronym)	KU1, EP1, EP3, IN5
Teaching methods	Flipped Classroom Tutorials Case Studies Simulation-Based Learning Workshops
Assessment methods	Technical reports Oral presentation & defence Case studies Simulations and modelling exercises Work experience assessment

CONTENTS

Previous requirements (if necessary)

RO3 Enhanced robotic cells

Content index

Robotization of composite and ALM processes

- - Robotic wrapping: cell structure, programming, implementation
- - WAAM: cell structure, programming, implementation
- - DED L: cell structure, programming, implementation
- - Cells design, specific requirement
- - Updated programmation
- - In situ control of the process
- - Standard and regulation specification

Practical application

SUPPORTING BIBLIOGRAPHIC REFERENCES

SOFTWARE

3DExperience, ESI, equipment-based specific software, Morpheo, Abaquus, Ansys, Coriolis software