

General Information	
Academic subject	Manufacturing Systems for Port Industries
Degree course	Master Degree in Strategic Maritime and Port Sciences
Curriculum	-
ECTS credits	6
Compulsory attendance	No
Language	Italian

Subject teacher	Name Surname	Mail address	SSD
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ECTS credits details	Area	CFU/ETCS
Basic teaching activities	09	6

Class schedule	
Period	February\May
Year	2021
Type of class	Frontal

Time management	
Hours	150
In-class study hours	48
Out-of-class study hours	102

Academic calendar	
Class begins	February 2021
Class ends	May 2021

Syllabus	
Prerequisites/requirements	Basic Manufacturing Processes
Expected learning outcomes	<ul style="list-style-type: none"> Knowledge and understanding skills The aim of teaching production systems for the port industry is to introduce students to the themes of production technologies, with particular reference to the industries in the port maritime sector. To this end, it addresses both theoretical issues and topics related to practical applications. Applied knowledge and understanding skills The student will make his own the basics, learning a method of analysis and knowledge of production systems, with particular reference to the industries of the port maritime sector. Autonomy of judgment The course aims to train students who specialise in understanding and solving manufacturing engineering issues in port infrastructure management. The student will thus be able to acquire an integrated and comprehensive view of the port infrastructure, suitable for the development of analytical and managerial skills, useful in the business practice. Communication skills At the end of the course, the student will have acquired the engineering lexicon necessary to operate in management and entrepreneurial roles in maritime-port companies, and in particular in the management of port infrastructure, holding functions of command, planning, administrative coordination, organization and management. Ability to learn The learning path involves the student acquiring the basic knowledge necessary for sustainable infrastructure management, with particular reference to production technologies within manufacturing companies operating in the port maritime sector. Knowledge and understanding skills.

Contents	<p>1.THE OIL INDUSTRY8</p> <p>2.THE STEEL INDUSTRY26</p> <p>3.METALLIC CARPENTRY</p> <p>4 SHIPBUILDING</p> <p>5.INDUSTRY 4.0 and PORTS 4.0</p> <p>6.ADVANCED MANUFACTURING SOLUTIONS</p> <p>7.ADDITIVE MANUFACTURING</p> <p>8.AUGMENTED REALITY AND 3D SCANNING</p>
Course program	
Bibliography	Handouts, slides and course notes.
Notes	•
Teaching methods	Frontal lessons
Assessment methods	Oral examination
Evaluation criteria	<ul style="list-style-type: none"> • <i>Knowledge and understanding skills:</i> quality of theoretical knowledge possessed and adequacy of reference to sources; • <i>Knowledge and understanding skills applied:</i> ability to apply and use the knowledge and methodologies proposed in relation to real-world contexts; • <i>Autonomy of judgment:</i> ability to choose between technical solutions • <i>Communication skills:</i> ability to express concepts • <i>Ability to learn:</i> <ul style="list-style-type: none"> ○ autonomous and personal reworking capabilities of learning.
Further information	