



## MASTER'S DEGREE IN MECHANICAL ENGINEERING

DEGREE PROGRAMME 2018/2019

Course contents are available at this [link](#)

### 1<sup>st</sup> year

Sem	Teaching course	SSD*	TAF*	Credits	h
1	Automatic Control Systems	ING-INF/04	C	6	60
1	Manufacturing Systems	ING-IND/16	B	6	60
1	Integrated Course: Mechanical Behavior of Materials - Module: Mechanics of Materials	ING-IND/14	B	6	60
2	- Module: Mechanics of Composite Materials	ING-IND/14	B	6	60
1	Integrated Course: Industrial Systems - Module: Industrial Systems Management	ING-IND/17	B	6	60
2	- Module: Industrial Systems Design	ING-IND/17	B	6	60
2	Kinematics and Dynamics of Mechanisms	ING-IND/13	B	12	120

### 2<sup>nd</sup> year

Sem	Teaching course	SSD*	TAF*	Credits	h
1	Industrial Energy Technologies	ING-IND/09	B	9	90
2	Design of Fluid Machinery	ING-IND/08	B	9	90

### Additional credits to be acquired

Sem	Activity	SSD*	TAF*	Credits	h
	4 courses from tab 1		C	24	
	Laboratories or internship		F	6	
	Elective activities <sup>1</sup>		D	12	
	Final Examination		E	12	

**TOTAL CREDITS 120**

- (1) The elective activities must be consistent with the personal educational plan and they need approval by the Degree Programme Board.



Tab 1. Courses TAF C (4 from the list)

Sem	Teaching course	SSD*	TAF*	Credits	h
<b>1<sup>st</sup> year</b>					
1	Numerical Calculus	MAT/08	C	6	60
1	Thermal Hvac Systems	ING-IND/11	C	6	60
2	Finite Elements Analysis	ING-IND/14	C	6	60
2	Quality Management	ING-IND/16	C	6	60
2	Renewable Energy Technologies	ING-IND/09	C	6	60
<b>2<sup>nd</sup> year</b>					
1	Experimental Mechanics	ING-IND/14	C	6	60
1	Computational Modeling of Fluid Systems	ING-IND/08	C	6	60
1	Experimentation in Fluid Machines	ING-IND/08	C	6	60
2	Environmental Impact Energy Systems	ING-IND/09	C	6	60

**Other optional activities:**

Sem	Laboratory	SSD*	TAF*	Credits	h
1	Simulation of Dynamical Systems with Matlab-Simulink	ING-INF/04	F	3	30
1	Modeling and Simulation of Energy Systems	ING-IND/09	F	3	30
2	Nondestructive Testing	ING-IND/14	F	3	30
2	Mechanical Design Project	ING-IND/14	F	3	30

**\*Abbreviations**

SSD	Scientific Disciplinary Sector
TAF	Type of Educational Activity