

Engenharia Mecânica



Code 9123

Department Mechanical Engineering and Industrial Management Department

Degree Licenciado (bachelor)

Registry Initial registry:
R/A-Ef 730/2011 from 18-03-2011
Changes registry:
R/A-Ef 730/2011/AL01 de 25-03-2015

Duration 3 year(s)

Regime Daytime

National entrance and exams 07 Physics and Chemistry
16 Mathematics

Course director Carlos Alberto Catorze Pereira

Course Secretariat DEMGI – Departamento de Engenharia Mecânica e Gestão Industrial
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Curricular structure

1st Year - 1st Semester

Course unit	Contact hours				ECTS
	T	TP	PL	O	
9123-31823 - Linear Algebra and Analytical Geometry	19,5	32,5	-	-	5
9123-31821 - Mathematical Analysis I	19,5	39	-	-	6
9123-31821227 - Materials Science and Engineering I	19,5	26	19,5	-	6
9123-31822 - Technical Drawing I	-	65	-	-	6.5
9123-3182734 - Mechanics I	13	32,5	19,5	-	6

T - Theoretical; TP - Theoretical and Practical; PL - Practical and laboratorial; O - Other types

1st Year - 2nd Semester

Course unit	Contact hours				ECTS
	T	TP	PL	O	
9123-31826 - Mathematical Analysis II	19,5	39	-	-	6
9123-31821228 - Materials Science and Engineering II	19,5	26	19,5	-	6
9123-31827 - Technical Drawing II	-	65	-	-	6.5
9123-3182346 - Electricity	13	32,5	19,5	-	6
9123-3182736 - Mechanics II	13	32,5	19,5	-	6

T - Theoretical; TP - Theoretical and Practical; PL - Practical and laboratorial; O - Other types

2nd Year - 1st Semester

Course unit	Contact hours				ECTS
	T	TP	PL	O	
9123-3182330 - Machine Drawing	13	26	32,5	-	6
9123-3182333 - Electronics and Instrumentation	13	32,5	19,5	-	6
9123-3182345 - Production and Materials Management	13	32,5	19,5	-	6
9123-318236 - Strength of Materials	13	32,5	19,5	-	6
9123-3182316 - Applied Thermodynamics	13	32,5	19,5	-	6

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2nd Year - 2nd Semester

Course unit	Contact hours				ECTS
	T	TP	PL	O	
9123-3182571 - Industrial Maintenance Management and Quality Control	13	32,5	19,5	-	6
9123-31821113 - Electrical Machines and Installations	13	32,5	19,5	-	6
9123-3182543 - Fluid Mechanics	13	32,5	19,5	-	6
9123-3182776 - Machine Components I	13	32,5	19,5	-	6
9123-3182348 - Heat and Mass Transfer	13	32,5	19,5	-	6

T - Theoretical; TP - Theoretical and Practical; PL - Practical and laboratorial; O - Other types

3rd Year - 1st Semester

Course unit	Contact hours				ECTS
	T	TP	PL	O	
9123-3182195 - Automation and Control	13	26	19,5	-	6
9123-3182871 - Renewable Energies	13	26	19,5	-	6
9123-3182780 - Machine Components II	13	26	19,5	-	6
9123-3182133 - Project Work I	13	45,5	-	29,5	6
9123-31821378 - Mechanical Technology I	13	26	19,5	-	6

T - Theoretical; **TP** - Theoretical and Practical; **PL** - Practical and laboratorial; **O** - Other types

3rd Year - 2nd Semester

Course unit	Contact hours				ECTS
	T	TP	PL	O	
9123-31821229 - Bioenergy and Combustion	13	26	19,5	-	6
9123-3182781 - Structural Mechanics Elements	13	26	19,5	-	6
9123-3182343 - Thermal Machines	13	26	19,5	-	6
9123-3182134 - Project Work II	-	58,5	-	29,5	6
9123-31821379 - Mechanical Technology II	13	26	19,5	-	6

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Scientific areas

Areas	ECTS
Basic Sciences	48
Energy	60
Industrial Management	12
Mechanic and Materials	60
Total	180 (*)

(*) Some course units are assigned to more than one scientific area. The total ECTS of the course is .