

*Bachelor in Branch: Civil Engineering*

*Speciality: Civil Engineering*

*Brief*

*The Civil Engineering Bachelor course aims to give the student a scientific and technological basis ensuring the mastery of academic and practical knowledge in the various construction fields. In addition, a professional aptitude leading to a good insertion in functions of supervision, management within construction companies, monitoring and control of projects.*

Field	Branch	Speciality
<i>Sciences and Technologies</i>	<i>Civil Engineering</i>	<i>Civil Engineering</i>

First Semester

Teaching unit	Matter	Credit	Coefficient	Course	TD	TP	HV
Fundamental Unit	Mathematics 1	6	3	3h00	1h30		67h30
	Physics 1	6	3	3h00	1h30		67h30
	Structure of matter	6	3	3h00	1h30		67h30
Methodological unit	PW Phisic 1	2	1			1h30	22h30
	PW Chemistry 1	2	1			1h30	22h30
	Computer science 1	4	2	1h30		1h30	45h00
	Writing methodology	1	1	1h00			15h00
Discovery unit	Careers in science and technology	1	1	1h30			22h30
Transversale Unit	Ethical and deontological dimension (the foundations)	1	1	1h30			22h30
	Foreign language 1 (French	1	1	1h30			22h30

Teaching unit	Matter	Credit	Coefficient	Course	TD	TP	HV
	or English)						

## Second Semester 2

Teaching unit	Matter	Credit	Coefficient	Courses	TD	Practical Work	Volume (hour)
Fundamental Unit	Mathematics 2	6	3	3h00	1h30		67h30
	Physics 2	6	3	3h00	1h30		67h30
	Thermodynamics	6	3	3h00	1h30		67h30
Methodological unit	PW physics 2	2	1			1h30	22h30
	PW chemistry 2	2	1			1h30	22h30
	Computer science 2	4	2	1h30		1h30	45h00
	Methodology of presentation	1	1	1h00			15h00
Discovery unit	Careers in science and technology 2	1	1	1h30			22h30
Transversale Unit	Foreign language 2 (French or English)	2	2	3h00			45h00

### Third Semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
<b>Fundamental Unit</b>	Mathematics 3	6	3	3h00	1h30		67h30
	Waves and vibrations	4	2	1h30	1h30		45h00
	Fluid mechanics	4	2	1h30	1h30		45h00
	Rational mechanics	4	2	1h30	1h30		45h00
Methodological unit	Probability and statistics	4	2	1h30	1h30		45h00
	Computer science 3	2	1			1h30	22h30
	Technical drawing	2	1			1h30	22h30
	PW waves and vibrations	1	1			1h00	15h00
Discovery unit	Basic technology	1	1	1h30			22h30
	Metrology	1	1	1h30			22h30
Transversale Unit	Technical English	1	1	1h30			22h30

### Fourth semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
<b>Fundamental Unit</b>	Soil mechanics	4	2	1h30	1h30		45h00
	Construction materials	2	1	1h30			22h30
	Mathematics 4	4	2	1h30	1h30		45h00
	Numerical methods	4	2	1h30	1h30		45h00

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
	Strength of materials	4	2	1h30	1h30		45h00
Methodological unit	PW Soil mechanics	2	1			1h30	22h30
	PW Construction materials	2	1			1h30	22h30
	Computer Assisted drawing	2	1			1h30	22h30
	PWNumerical methods	1	1			1h00	15h00
	PWStrength of materials	2	1			1h30	22h30
Discovery unit	Geology	1	1	1h30			22h30
	Topography	1	1	1h30			22h30
Transversale Unit	Techniques of expression and communication	1	1	1h30			22h30

#### Fifth semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
<b>Fundamental Unit</b>	Strength of materials 2	6	3	3h00	1h30		67h30
	Reinforced concrete 1	4	2	1h30	1h30		45h00
	Metal frame	4	2	1h30	1h30		45h00
	Soil mechanics 2	4	2	1h30	1h30		45h00
	Construction materials 2						
Methodological unit	PW Topography	2	1			1h30	22h30
	PWSoil mechanics 2	2	1			1h30	22h30
	PWConstruction materials 2	2	1			1h30	22h30
	Construction drawing	3	2	1h30		1h00	37h30
Discovery unit	Topography	1	1	1h30			22h30
	General hydraulics	1	1	1h30			22h30
Transversale Unit	General construction procedures / Norms and regulations	1	1	1h30			22h30

## Six Semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
<b>Fundamental Unit</b>	Calculation of Structures	4	3	1h30	1h30		67h30
	Metal Constructions	4	2	1h30	1h30		45h00
	Reinforced concrete 2	6	2	3h00	1h30		45h00
	Foundations and geotechnical structures	4	2	1h30	1h30		45h00
Methodological unit	End of cycle project	4	2			3h00	45h00
	computer-assisted calculation	3	1			2h30	22h30
	Quantity Survey and Price Estimate	2	1	1h30			15h00
Discovery unit	Roads and Miscellaneous Networks	1	1	1h30			22h30
	Sites Organization	1	1	1h30			22h30
Transversale Unit	Professional project and business management	1	1	1h30			22h30