

II - Semester-Based Teaching Organization

(Please complete forms for all 4 semesters)

1 - Semester 1

Education Units (EU)	SHV	Weekly Contact Hours (WCH)				Coeff	Credits	Assessment Method	
	14-16 week	Course	TD	TP	Others			Continuous	Final exam
Fondamental EU						09	18		
UEF 11(O/P)									
Advanced Electromagnetism	45h00	01h30	01h30			02	04	33%	67%
Physical Optics	45h00	01h30	01h30			02	04	33%	67%
UEF 12(O/P)									
Solid State Physics	67h30	03h00	01h30			03	06	33%	67%
Advanced Fluid Mechanics	45h00	01h30	01h30			02	04	33%	67%
Methodology EU						05	09		
UEM 11(O/P)									
Signal Processing	45h00	01h30	01h30			01	02	50%	50%
Scientific Programming I	45h00			03h00		02	03	100%	
UEM 12(O/P)									
Workshop I: Electronic Circuits	45h00			03h00		02	04	100%	
Discovery EU						01	01		
UED 11(O/P)									
Measurements & Uncertainties	22h30	01h30				01	01		100%
Transversal EU						02	02		
UET 11(O/P)									
Scientific Writing & Analysis	45h00			03h00		02	02	100%	
Total Semester 1	405h00	10h30	07h30	09h00		17	30		

2- Semester 2

<i>Education Units (EU)</i>	SHV	Weekly Contact Hours (WCH)				Coeff	Credits	Assessment Method	
	14-16 week	Course	TD	TP	Others			Continuous	Final exam
Fondamental EU						09	18		
UEF 21(O/P)									
Advanced Semiconductor Physics	45h00	01h30	01h30			02	04	33%	67%
Physical Properties of Materials	67h30	03h00	01h30			03	06	33%	67%
UEF 22(O/P)									
Matter-Radiation Interactions	45h00	01h30	01h30			02	04	33%	67%
Heat Transfer	45h00	01h30	01h30			02	04	33%	67%
Methodology EU						05	09		
UEM 21(O/P)									
Materials Characterization & Analysis	45h00	01h30	01h30			01	02	50%	50%
Scientific Programming II	45h00			03h00		02	03	100%	
UEM 22(O/P)									
Workshop II: Electronic Development Boards	45h00			03h00		02	04	100%	
Discovery EU						01	01		
UED 21(O/P)									
Quantum Computing	22h30	01h30				01	01		100%
Transversal EU						02	02		
UET 21(O/P)									
Renewable Energies	45h00	01h30	01h30			02	02	50%	50%
Total Semester 2	405h00	12h00	09h00	06h00		17	30		

3- Semester 3

<i>Education Units (EU)</i>	SHV	Weekly Contact Hours (WCH)				Coeff	Credits	Assessment Method	
	14-16 week	Course	TD	TP	Others			Continuous	Final exam
Fondamental EU						09	18		
UEF 31(O/P)									
Nanotechnologies	45h00	01h30	01h30			02	04	33%	67%
Dielectric & Magnetic Materials	45h00	01h30	01h30			02	04	33%	67%
UEF 32(O/P)									
Energy Materials	45h00	01h30	01h30			02	04	33%	67%
Heat Exchanger Systems	67h30	03h00	01h30			03	06	33%	67%
Methodology EU						05	09		
UEM 31(O/P)									
Advanced Rheology	45h00	01h30	01h30			01	02	50%	50%
Scientific Data Processing & Analysis	45h00			03h00		02	03	100%	
UEM 32(O/P)									
Workshop III: Physical Signal Acquisition & Measurement	45h00			03h00		02	04	100%	
Discovery EU						01	01		
UED 31(O/P)									
Management	22h30	01h30				01	01		100%
Transversal EU									
UET 31(O/P)									
Scientific Communication	45h00			03h00		02	02	100%	
Total Semester 3	405h00	10h30	07h30	09h00		17	30		

4 - Semester 4

Field: Matter Sciences

Brach: Physics

Specialization: Applied Physics

Supervised industrial internship assessed through a written thesis and oral defense examination

Component	Semestre Contact Hours	Coeff	Credits
Independent Research	420	20	20
Industry Placement	160	08	08
Professional Seminars	20	02	02
Others			
Total	600	30	30 (25%)

5 - Degree Program Overview(*Instructional hours across 3 academic semesters*)

EU					
Contact hours	FEU	MEU	DEU	TEU	Totals
Courses	337h30	67h30	67h30	22h30	495h00
Tutorials (TD)	270	67h30		22h30	360h00
Laboratory	-	270h00		90h00	360h00
Independent Research					
Others					
Totals	607h30	405h00	67h30	135h00	1215h00
Credits	54	27	03	06	90
% in credits for each EU	60%	30%	3.03%	6.06%	100%