Semestre 1

Teaching Unit	Subject Course Title	Credits	Coefficient	Weekly Hours Course	 Rec	 Lab	Semester Hours (15 Weeks)	Additional Work (15 Weeks)	Evaluation Continu Control	 Exam
TU Fundamental Code: TUF 1.1.1 Credit: 10 Coefficients: 5	Electrical Energy Transmission and Distribution Networks	4	2	1h30	1h30		45h00	55h00	40%	60%
	Advanced Power Electronics	4	2	1h30	1h30		45h00	55h00	40%	60%
	µ-processors and µ-controller's	2	1	1h30			22h30	27h30		100%
TU Fundamental Code: TUF 1.1.2 Credi: 8 Coefficients: 4	Advanced Electrical Machines	4	2	1h30	1h30		45h00	55h00	40%	60%
	Numerical and Differential Methods and optimization	4	2	1h30	1h30		45h00	55h00	40%	60%
Methodological Unit Code: MU 1.1 Credi: 9 Coefficients: 5	Lab: Electrical Energy Transmission and Distribution Networks	1	1			1h00	15h00	10h00	100%	
	Lab: Advanced Power Electronics	2	1			1h30	22h30	27h30	100%	
	Lab: µ-processors and µ-controller's	2	1			1h30	22h30	27h30	100%	
	Advanced Electrical Machines	2	1			1h30	22h30	27h30	100%	
	Lab: Numerical and Differential Methods and optimization	2	1			1h30	22h30	27h30	100%	
Exploratory Unit Code : EU 1.1 Credi : 2 Coefficients : 2	**Industrial Automation and Computer Science**	1	1	1h30			22h30	02h30		100%
	Optional Course	1	1	1h30			22h30	02h30		100%
Cross-disciplinary Unit Code : CDU 1.1 Credi : 1 Coefficients : 1	Technical English and Terminology	1	1	1h30			22h30	02h30		100%
Total semester 1		**30**	**17**	**12h00**	**6h00**	**7h00**	**375h00**	**375h00**		

Semestre 2

Teaching Unit	Subject	Credits	Coefficient	Weekly Hours			Semester Hours (15 Weeks)	Additional Work (15 Weeks) Course Title	Evaluation	
	Course Title			**Course**	**Rec**	**Lab**			Continu Control	Examen
TU Fundamental Code : TUF 1.2.1 Credi : 10 Coefficients : 5	Modeling and Identification of Electrical Systems	4	2	1h30	1h30		45h00	55h00	40%	60%
	Electrical Control Techniques	6	3	3h00	1h30		67h30	82h30	40%	60%
TU Fundamental Code : TUF 1.2.2 Credi : 8 Coefficients : 4	Sampled Control Systems and Digital Regulation	4	2	1h30	1h30		45h00	55h00	40%	60%
	Fault Diagnosis of Control Systems	4	2	1h30	1h30		45h00	55h00	40%	60%
Methodological Unit Code : MU 1.2 Credi : 9 Coefficients : 5	Lab: Modeling and Identification of Electrical Systems	2	1			1h30	22h30	27h30	100%	
	Lab: Electrical Control Techniques	3	2			2h30	37h30	37h30	100%	
	Lab: Sampled Control Systems and Digital Regulation	2	1			1h30	22h30	27h30	100%	
	Lab: Fault Diagnosis of Control Systems	2	1			1h30	22h30	27h30	100%	
Exploratory Unit Code : EU 1.2 Credi : 2 Coefficients : 2	**Transient Regimes of Electrical Systems**	1	1	1h30			22h30	02h30		100%
	Electrical Machines in Dynamic Operation	1	1	1h30			22h30	02h30		100%
Cross-disciplinary Unit Code : CDU 1.2 Credi : 1 Coefficients : 1	**Compliance with Standards, Ethics, and Integrity Rules**	1	1	1h30			22h30	02h30		100%
Total semestre 2		**30**	**17**	**12h00**	**6h00**	**7h00**	**375h00**	**375h00**		

Semestre 3

Teaching Unit	Subject	Credits	Coefficient	Weekly Hours			Semester Hours (15 Weeks)	Additional Work (15 Weeks) Course Title	Evaluation	
	Course Title			**Course**	**Rec**	**Lab**			Continu Control	**Examen**
TU Fundamental Code : TUF 2.1.1 Credi : 8 Coefficients : 4	**Nonlinear and Advanced Con-trol**	**6**	**3**	**3h00**	**1h30**		**67h30**	**82h30**	**40%**	**60%**
	Automate programmable	**2**	**1**	**1h30**			**22h30**	**27h30**		**100%**
TU Fundamental Code : TUF 2.1.2 Credi : 10 Coefficients : 5	Artificial Intelligence Techniques	4	2	1h30	1h30		45h00	55h00	40%	60%
	Electrical Control of Industrial Systems	6	3	3h00	1h30		67h30	82h30	40%	60%
Methodological Unit Code : MU 2.1 Credi : 9 Coefficients : 5	**Lab : Nonlinear and Advanced Con-trol**	**4**	**2**			3h00	45h00	55h00	100%	
	Lab : Artificial Intelligence Tech-niques /Lab : Implementation of a Real-Time Digital Control	2	1			1h30	22h30	27h30	100%	
	Lab : Electrical Control of Indus-trial Systems	2	1			1h30	22h30	27h30	100%	
	Lab Automate programmable industrials (API)	**1**	**1**			1h00	15h00	10h00	100%	
Exploratory Unit Code : EU 2.1 Credi : 2 Coefficients : 2	**Industrial Automation**	1	1	1h30			22h30	02h30		100%
	Control of Future Energy Sys-tems	1	1	1h30			22h30	02h30		100%
Cross-disciplinary Unit Code : CDU 2.1 Credi : 1 Coefficients : 1	Documentary Research and The-sis Design	1	1	1h30			22h30	02h30		100%
Total semestre 3		**30**	**17**	**13h30**	**4h30**	**7h00**	**375h00**	**375h00**		

Semestre 4

Internship in a Company with Thesis and Defense.

Master's Final Project Evaluation:

- Scientific Value (Jury Evaluation) /6
- Thesis Writing (Jury Evaluation) /4
- Presentation and Q&A (Jury Evaluation) /4
- Supervisor's Assessment /3
- Internship Report Presentation (Jury Evaluation) /3