



THE SCHOOL OF COMPUTER ENGINEERING (ICT)

Departments:

1. Department of Computer Maintenance: Soft Ware Engineering
2. Department of Computer Maintenance: Hardware Engineering
3. Department of E-Commerce and Digital Marketing
4. The Department of Computer Graphics and Web Design

1.Department of Computer Maintenance: Soft Ware Engineering

The objective of the training

This specialty trains senior technicians who, with the help of their capability to study the needs of the society, can analyze (MERISE, UML), design and implement computer applications in various fields

Organization of teachings

- **FIRST SEMESTER**

Field: Computer Engineering		Specialty: Computer Engineering Option: Software Engineering					
Course Code	Course titles	Number of hours					Number of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
SWE111	Engineering Maths I	45	25	0	5	75	5
SWE112	Basic environment I	20	10	25	5	60	4
Professional courses 60% (4 UC) 18 credits 270 hours							
SWE113	Digital electronics	30	10	0	5	45	3
SWE114	Introduction to algorithms	40	30	0	5	75	5
SWE115	Introduction to software engineering	70	30	0	5	105	7
SWE116	Multi-media data processing	20	5	20	0	45	3
SWE117	English and general accounting	30	10	0	5	45	3
Total		225	120	45	30	450	30

• **SECOND SEMESTER**

Field: Computer Engineering		Specialty: Computer Engineering Option: Software Engineering					
Course Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
SWE121	Engineering maths II	35	20	0	5	60	4
SWE122	Basic environment II	35	20	15	5	75	5
Professional courses 60% (4 UC) 18 credits 270 hours							
SWE123	Architecture	20	10	25	5	60	4
SWE124	Database and MERISE I	40	15	15	5	75	5
SWE125	Programming I	20	15	35	5	75	5
SWE126	Maintenance and legal regulations	25	15	15	5`	60	4
Transversal Courses 10% (1 UC) 3 credits 45 hours							
SWE127	Economics and Enterprise Organization (EEO) and French	30	10	0	5	45	3
Total		205	105	105	35	450	30

• **THIRD SEMESTER**

Field: Computer Engineering		Specialty: Computer Engineering Option: Software Engineering					
Course Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
SWE231	Engineering Maths III	45	25	0	5	75	5
SWE232	Basic environment III	40	20	0	0	60	4
Professional courses 60% (4 UC) 18 credits 270 hours							
SWE233	OOM UML	40	10	5	5	60	4
SWE234	Data structure and SQL language	40	25	5	5	75	5
SWE235	Programming II	15	15	40	5	75	5
SWE236	Systems and Networks	40	10	5	5	60	4
Transversal Courses 10% (1 UC) 3 credits 45 hours							
SWE237	Enterprise creation and civics and moral education	30	10	0	5	45	3
Total		250	115	55	30	450	30

• **FOURTH SEMESTER**

Field: Computer Engineering		Specialty: Computer Engineering Option: Software Engineering					
Course Code	Course titles	Number of hours					Number of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
SWE241	mobile terminals and application security	25	10	35	5	75	5
SWE242	Project management	30	10	15	5	60	4
Professional courses 60% (4 UC) 18 credits 270 hours							
SWE243	Network and system administration	30	10	15	5	60	4
SWE244	OOP and advanced database	25	5	25	5	60	4
SWE245	Data structure and HCI	30	10	15	5	60	4
SWE246	Internship			60	30	90	6
Transversal Courses 10% (1 UC) 3 credits 45 hours							
SWE247	General economics and Law	30	10	0	5	45	3
Total		170	55	165	60	450	30

2.Department of Computer Maintenance: Hardware Engineering

Objective of the training

This specialty trains senior technicians capable of maintaining and repairing computer equipment. They can also install new equipment or provide training for users

1. Organization of teachings

- FIRST SEMESTER**

Field: Computer Engineering		Specialty: Computer maintenance Option: Hardware maintenance					
Course Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
HWM111	Engineering maths I	35	20	0	5	60	4
HWM112	Circuit theory and Digital electronics	20	10	40	5	75	5
Professional courses 60% (4 UC) 18 credits 270 hours							
HWM113	Maintenance methodology	40	10	20	5	75	5
HWM114	Networking	30	10	15	5	60	4
HWM115	Electronic circuit I	30	15	10	5	60	4
HWM116	Basic environment	45	25	0	5	75	5
Transversal Courses 10% (1 UC) 3 credits 45 hours							
HWM117	English and general accounting	30	10	0	5	45	3
Total		230	100	85	35	450	30

SECOND SEMESTER

Field: Computer Engineering		Specialty: Computer maintenance Option: Hardware maintenance					
Course Code	Course titles	Number of hours					Number of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
HWM121	Engineering maths II	35	20	0	5	60	4
HWM122	Programming	20	10	40	5	75	5
Professional courses 60% (4 UC) 18 credits 270 hours							
HWM123	electronic circuit II	40	10	20	5	75	5
HWM124	Digital electronics II	40	10	20	5	75	5
HWM125	Networks, Design and conception of maintenance methodology	40	10	20	5	75	5
HWM126	Microprocessor	20	10	10	5	45	3
Transversal Courses 10% (1 UC) 3 credits 45 hours							
HWM127	Economics and Enterprise Organization (EEO) and French	30	10	0	5	45	3
Total		225	80	110	35	450	30

THIRD SEMESTER

Field: Computer Engineering		Specialty: Computer maintenance Option: Hardware maintenance					
Course Code	Course titles	Number of hours					Number of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
HWM231	Engineering Maths III	35	20	0	5	60	4
HWM232	Operating system and database, I	25	15	30	5	75	5
Professional courses 60% (4 UC) 18 credits 270 hours							
HWM233	electronic III	25	15	30	5	75	5
HWM234	Control and networks	10	5	55	5	75	5
HWM235	Assembly language programming	15	10	30	5	60	4
HWM236	Programming I	10	10	35	5	60	4
Transversal Courses 10% (1 UC) 3 credits 45 hours							
HWM237	Enterprise creation and civics and moral education	30	10	0	5	45	3
Total		150	85	180	35	450	30

• FOURTH SEMESTER

Field: Computer Engineering		Specialty: Computer maintenance Option: Hardware maintenance					
Course Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
HWM241	Engineering maths IV	35	20	0	5	60	4
HWM242	Operating system and database II	25	15	30	5	75	5
Professional courses 60% (4 UC) 18 credits 270 hours							
HWM243	Programming II	20	15	20	5	60	4
HWM244	Computer assembly and peripherals	35	15	20	5	75	5
HWM245	Regulation and installation /Administration	25	15	0	5	45	3
HWM246	professional internship	0	0	60	30	90	6
Transversal Courses 10% (1 UC) 3 credits 45 hours							
HWM247	General economy an Law	30	10	0	5	45	3
Total		170	90	130	60	450	30

3.Department of E-Commerce and Digital Marketing

The objective of the training

An HND in Digital marketing will provide you with a strong foundation in the core concepts of digital marketing. It will give you an in-depth understanding of how to effectively strategize and implement powerful digital marketing campaigns that convert. From social media marketing to search marketing, you'll learn everything you need to excel at your digital marketing career.

Organization of teachings

- FIRST SEMESTER**

Field: Computer Engineering		Specialty: E-Commerce and Digital Marketing					
Course Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
EDM111	Mathematics for computing I	45	25	0	5	75	5
EDM112	Basic Environment I	15	10	30	5	60	4
Professional courses 60% (4 UC) 18 credits 270 hours							
EDM113	Database and SQL language	30	15	10	5	60	4
EDM114	System analysis and design	30	30	10	5	75	5
EDM115	Introduction to Web Programming	20	20	30	5	75	5
EDM116	Small business management	20	10	25	5	60	4
Transversal Courses 10% (1 UC) 3 credits 45 hours							
EDM117	English and general accounting	30	10	0	5	45	3
Total		190	120	105	35	450	30

• **SECOND SEMESTER**

Field: Computer Engineering		Specialty: E-Commerce and Digital Marketing					
Course Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
EDM121	Mathematics for computing II	35	20	15	5	75	5
EDM122	Basic Environment II	20	15	20	5	60	4
Professional courses 60% (4 UC) 18 credits 270 hours							
EDM123	Object oriented programming	30	15	40	5	90	6
EDM124	Digital Economy	30	15	10	5	60	4
EDM125	Legal regulations	30	25	0	5	60	4
EDM126	Strategic management	35	20	0	5	60	4
Transversal Courses 10% (1 UC) 3 credits 45 hours							
EDM127	Economics and Enterprise Organization (EEO) and French	30	10	0	5	45	3
Total		210	120	85	35	450	30

• **THIRD SEMESTER**

Field: Computer Engineering		Specialty: E-Commerce and Digital Marketing					
Course Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
EDM231	Mathematics for computing III	45	25	0	5	75	5
EDM232	Applied Mathematics and quantitative finance	20	20	15	5	60	4
Professional courses 60% (4 UC) 18 credits 270 hours							
EDM233	E – Commerce technology I	20	10	25	5	60	4
EDM234	E – Commerce	40	20	10	5	75	5
EDM235	Digital Marketing I	40	20	10	5	75	5
EDM236	ERP Technologies	20	20	15	5	60	4
Transversal Courses 10% (1 UC) 3 credits 45 hours							
EDM237	Enterprise creation and civics and moral education	30	10	0	5	45	3
Total		215	125	75	35	450	30

• **FOURTH SEMESTER**

Field: Computer Engineering		Specialty: E-Commerce and Digital Marketing					
Cours e Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
EDM241	Technical Communication	30	15	10	5	60	4
EDM242	Introduction to Computer Application	20	20	30	5	75	5
Professional courses 60% (4 UC) 18 credits 270 hours							
EDM243	E – Commerce technology II	40	20	10	5	75	3
EDM244	Technological infrastructure for e-commerce	30	15	15	0	60	4
EDM245	Digital Marketing II	10	10	20	5	75	5
EDM246	Professional Internship	0	0	60	30	90	6
Transversal Courses 10% (1 UC) 3 credits 45 hours							
EDM247	General economics	30	10	0	5	45	3
Total		160	90	145	55	450	30

4.The Department of Computer Graphics and Web Design

The objective of the training

This specialty train senior technicians mastering the various aspects of the web design and that can develop a creativity in web design by using the CMS and the framework of the most requested in the companies for the creation of dynamic websites and responsive (adaptive tablet/smartphone). They are also able to manipulate the scripts and modules to add interactivity in the Achievements (slideshows, slides...) and master the techniques of strengthening natural.

Organisation of Teachings

• FIRST SEMESTER

Field: Computer Engineering		Specialty: Computer graphic and web design					
Course Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
CWD111	Computer graphics basic tools	40	30	0	5	75	5
CWD112	algorithms and information systems	25	30	0	5	60	4
Professional courses 60% (4 UC) 18 credits 270 hours							
CWD113	multimedia	15	20	35	5	75	5
CWD114	Computer graphic design I	20	10	25	5	60	4
CWD115	pictures and animations	20	20	30	5	75	5
CWD116	photography and web programming, I	20	10	25	5	60	4
Transversal Courses 10% (1 UC) 3 credits 45 hours							
CWD117	English and general accounting	30	10	0	5	45	3
Total		170	130	115	35	450	30

• **SECOND SEMESTER**

Field: Computer Engineering		Specialty: Computer graphic and web design					
Course Code	Course titles	Number of hours					Number of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
CWD121	Computer systems	35	20	0	5	60	4
CWD122	photography and photography II	20	20	30	5	75	5
Professional courses 60% (4 UC) 18 credits 270 hours							
CWD123	Drawing I	20	10	25	5	60	4
CWD124	Graphics animations	15	20	35	5	75	5
CWD125	Web integration and special effects	20	20	30	5	75	5
CWD126	Video editing	20	15	20	5	60	4
Transversal Courses 10% (1 UC) 3 credits 45 hours							
CWD127	Economics and Enterprise Organization (EEO) and French	30	10	0	5	45	3
Total		160	115	140	35	450	30

• **THIRD SEMESTER**

Field: Computer Engineering		Specialty: Computer graphic and web design					
Course Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
CWD231	Physical science and streaming	25	15	15	5	60	4
CWD232	Programming and project	25	15	30	5	75	5
Professional courses 60% (4 UC) 18 credits 270 hours							
CWD233	Graphics animation II	15	20	35	5	75	5
CWD234	Programming II	25	10	35	5	75	5
CWD235	Computer graphic design II	20	15	20	5	60	4
CWD236	Computer Aided Presentation	20	15	20	5	60	4
Transversal Courses 10% (1 UC) 3 credits 45 hours							
CWD 237	Enterprise creation and civics and moral education	30	10	0	5	45	3
Total		160	100	155	35	450	30

• **FOURTH SEMESTER**

Field: Computer Engineering		Specialty: Computer graphic and web design					
Course Code	Course titles	Number of hours					Number Of Credits
		L	T	P	SPW	Total	
Fundamental Courses 30% (2 UC) 9 credits 135 hours							
CWD241	Entrepreneurship	25	10	35	5	75	5
CWD242	Computer Systems II	20	10	25	5	60	4
Professional courses 60% (4 UC) 18 credits 270 hours							
CWD243	Drawing II and graphics animation III	25	20	25	5	75	5
CWD244	Video editing and graphic design	25	20	25	5	75	5
CWD245	programming and administration of a web site	10	5	25	5	45	3
CWD246	Internship			60	30	90	6
Transversal Courses 10% (1 UC) 3 credits 45 hours							
CWD247	General economics and Law	30	10	0	5	45	3
Total		160	100	155	35	450	30