Universidad Carlos III de Madrid
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COURSE: Programming		
BACHELOR'S DEGREE: Bachelor's Degree in Mechanical Engineering	YEAR: 1	SEMESTER: 1

WEEKLY PROGRAMMING

WEEK	SESSION	DESCRIPTION	GROUPS		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	Inidicate YES/NO If the session needs 2 teachers: Maximum 4 sessions	GROUPS		
			LECTURE	SEMINAR			DESCRIPTION	CLASS HOURS	HOMEWORK HOURS Maximum 7 H
1	1	Introduction Programming foundations: What computer programming means	X			NO		1,66	3
	2	Computer algorithms		X		NO		1,66	
2	3	Programming foundations: Design, coding, and testing	X			NO	Solving exercises on algorithms	1,66	7
	4	Exercises on algorithms		X		NO		1,66	
3	5	Programming foundations: Information and data representation	X			NO	Solving exercises on algorithms	1,66	7
	6	Exercises on algorithms		X		NO		1,66	

4	7	Introduction to the programming languages	X			NO	Solving exercises on algorithms Self-working to prepare the first partial exam	1,66	7
	8	Exercises on algorithms		X		NO		1,66	
5	9	Programming language syntax: data program and operators	X			NO	Self-working to prepare the first partial exam	1,66	7
	10	Development environment: compiling, debugging and execution		X	Computer lab	NO		1,66	
6	11	First midterm exam Test about programming foundations	X			NO	Setting up development environment	1,66	7
	12	Coding exercises: data program and operators		X	Computer lab	NO		1,66	
7	13	Programming language syntax: advanced data structures	X			NO	Solving coding exercises	1,66	7
	14	Coding exercises: advanced data structures		X	Computer lab	NO		1,66	
8	15	Programming language syntax: selection statements	X			NO	Solving coding exercises	1,66	7
	16	Coding exercises: selections statements		X	Computer lab	NO		1,66	
9	17	Programming language syntax: iteration statements	X			NO	Solving coding exercises	1,66	7
	18	Coding exercises: loops		X	Computer lab	NO		1,66	
10	19	Programming language syntax: selection and iteration statements (examples)	X			NO	Solving coding exercises Self-working to prepare the second partial exam	1,66	7
	20	Coding exercises: Nested control statements		X	Computer lab	NO		1,66	
11	21	Programming language syntax: subprograms	X			NO	Self-working to prepare the second partial exam	1,66	7
	22	Coding exercises: Nested control statements		X	Computer lab	NO		1,66	

12	23	Programming language syntax: subprograms	X			NO	Solving coding exercises	1,66	7
	24	Coding exercises: subprograms		X	Computer lab	NO		1,66	
13	25	Second midterm exam Test about the programming language syntax	X			NO	Solving coding exercises	1,66	7
	26	Coding exercises: subprograms		X	Computer lab	NO		1,66	
14	27	Questions and doubts	X			NO	Solving coding exercises	1,66	7
	28	Coding exercises: subprograms		X	Computer lab	NO		1,66	
15	29	Questions and doubts	X			NO		1,66	
							Subtotal 1	**48,14**	**94**
							Total 1	142,14	

15								9	
16		Final exam	X			NO	Prepare final exam	3	**8**
17									
18									
							Subtotal 2	**3**	**17**
					Total 2			20	
TOTAL *(Total 1 + Total 2)*								**162,14**	