

## COURSE: PROGRAMMING

DEGREE: GRADE IN INDUSTRIAL TECHNOLOGY ENGINEERING YEAR	'EAR: 1	TERM: 1
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	WEEKLY PLANNING									
<			GROUPS		Indicate YES/NO	WEEKLY PROGRAMMING FOR STUDENT				
WEEK	SESION		LECTURES	COMPUTER LAB	If the session needs 2 teachers	DESCRIPTION	CLASS HOURS	HOMEWORK HOURS		
1 Sep 16 <sup>th</sup>	1	Course Overview: Contents, bibliography, teaching materials, course planning, methodology	x	Virtual Room	NO	Read Guide "How to study Unit 1 and 2" Read material for Unit 1	1.66	6.5		
		Introduction to Units 1. Introduction to computer science and programming Unit 3. Introduction to Programming in C. Basic program structure. Variables and constants. Operators: arithmetic and assignment operators								
1 Sep 18 <sup>th</sup>	2	Computer Lab. Session 1. U3. Introduction to the DevC++ (Development Environment)		Virtual Room	NO	Download and install DevC++ (Our Developing Environment)	1.66			
2 Sep 23 <sup>rd</sup>	3	Unit 3. Simple data types. Operators, expressions and instructions. Relational operators. Logical Operators. Input and output instructions	x	Virtual Room	NO	Read material for Unit 2 Revise Unit 3 Prepare Lab Session 2.	1.66	6.5		
2 Sep 25 <sup>th</sup>	4	Computer Lab. Session 2. T3. Structure and main characteristics of a C program.		Virtual Room	NO	Revise Lab Session 2 and complete any unfinished exercises	1.66			
3 Sep 30 <sup>th</sup>	5	Unit 4. Flow Control structures. Session 1 Conditional structures: if-else, switch	x	Virtual Room	NO	Revise Unit 4. Part 1. Problems: input and output instructions	1.66	6.5		
4 Oct 5 <sup>th</sup> Oct 6 <sup>th</sup>	6	Computer Lab. Session 3.T4. Conditional structures if-else, switch		Presencial	NO	Understand and complete all the proposed exercises	1.66			

4 <i>Oct,</i> 7 <sup>th</sup>	7	Unit 4. Flow Control structures. Session 2. Loops Loop instructions: for, while and do-while	x	Virtual Room	NO	Revise Unit 4. Part 2. Problems: control structures	1.66	6.5
4 <i>Oct, 9</i> <sup>th</sup>	8	Computer Lab. Session 4. T4. Loops.		Virtual Room	NO	Revise Lab Session and complete any unfinished exercises	1.66	
5 <i>Oct, 14</i> <sup>th</sup>	9	Unit 4. Flow Control structures. Session 3. Control structure nesting Exercises (Magic number)	x	Virtual Room		Revise Unit 4. Exercises' about control structures	1.66	6.5
6 <i>Oct, 19<sup>th</sup></i> <i>Oct, 20<sup>th</sup></i>	10	Computer Lab. Session 5. T4. Nested control flow and loops: Exercises.		<mark>Presencial</mark> .	NO	Understand and complete all the proposed practical exercises	1.66	
6 Oct 21 <sup>st</sup>	11	Unit 5. Functions. Session 1 Parameters: call by value. Pointer type. Parameters: call by reference. Scope of variables in functions: Library functions and standard C libraries	x	Virtual Room	NO	Revise Unit 5. Part 1 Problems: functions	1.66	6.5
6 <i>Oct, 23<sup>th</sup></i>	12	Computer Lab. Session 6a. T5. Functions (Parsons)		x Virtual Room	NO	Revise Lab Session and complete any unfinished exercises	1.66	
7 Oct, 28 <sup>th</sup>	13	Unit 5. Functions. Session 2 Pointer type. Parameters: call by reference. Scope of variables in functions: Library functions and standard C libraries	x	Virtual Room	NO	Revise Unit 5. Part 2. Parameters: call by reference	1.66	6.5
8 <mark>Nov,3<sup>nd</sup></mark>	14	Computer Lab. Session 6b. T5. Functions		Presencial.	NO	Understand and complete all the proposed practical exercises	1.66	
8 Nov,4 <sup>th</sup>	15	Unit 6. Advanced Data Types. Session 1. Arrays Introduction: structured vs. simple data types. Arrays: definition and use. Arrays as function parameters. Character strings	x	Virtual Room	NO	Revise Unit 6. Part 1	1.66	7
8 Nov, 6 <sup>th</sup>	16	Computer Lab. Session 7 T5. Arrays I (Parsons)		x Virtual Room	NO	Revise Lab Session and complete any unfinished exercises	1.66	
9 Nov,9 <sup>th</sup> Nov,10 <sup>th</sup>	17	Computer Lab. Session 8. T6. Arrays II.(LibroMix)		Presencial		SESION 29. Revise Lab Session and complete any unfinished exercises		
9 <i>Nov,11<sup>st</sup></i>	18		x	Virtual Room		Revise Units 3, 4, 5, 6.	1.66	6.5
10 Nov,16 <sup>th</sup> Nov,17 <sup>th</sup>		First Continuous Assessment Exam (20% of the final grade)		. Presencial	NO	Revise Lab Session and complete any unfinished exercises	1.66	
10 Nov,18 <sup>th</sup>	20	Unit 6. Advanced Data Types. Session 2. Structures Structures: definition and use. Arrays of structures. Structures as function parameters	x	Virtual Room	NO	Revise Unit 6. Part 2	1.66	6.5
10 Nov,20	21	Computer Lab. Session 10. U6. Structures (I)		Virtual Room	NO	Revise Lab Session and complete any unfinished exercises	1.66	

11 <i>Nov,25<sup>th</sup></i>	22	Ejercicios de Estructuras (Discografia)	х	Virtual Room		Reading of the corresponding chapters. Problems of strctures	1.66	13
11 Nov,27 <sup>th</sup>	23	Computer Lab. Session 11. Arrays of structures (II)		x Virtual Room	YES	Revise Lab Session and complete any unfinished exercises	1.66	
12 Dic, 2 <sup>nd</sup>	24	Unit 7. Search, Sort and Merge Algorithms.	x	Virtual Room	NO	Revise Unit 7	1.66	6.5
12 Dic, 4 <sup>th</sup>	25	Computer Lab. Session 12. Search, Sort and Merge Algorithms: Exercises		x Virtual Room	YES	Revise Lab Session and complete any unfinished exercises	1.66	
13 Dic, 9 <sup>th</sup>	26	Arrays, Structures and Sort. Exercises (e-learning)	X	Virtual Room	NO	Problems: structures and search and sort algorithms Exam Exercises'	1.66	6.5
13 Dec, 11 <sup>st</sup>	27	Resolución de Dudas de la práctica		Virtual Room.	YES	Revise Lab Session and complete any unfinished exercises	1.66	
14 Dic, 16 <sup>th</sup>	28	Unit 2 Software and Hardware Unit 8. Advanced topics	X	Virtual Room	NO	Reading of the corresponding chapters	1.66	6.5
14 Dic, 18 <sup>th</sup>	29	Second Continuous Assessment Exam. (20% of the final grade).		Virtual Room	YES	Revise Lab Session and complete any unfinished exercises	1.66	
						Subtotal 1	48.1	97.5

<b>Total 1</b> (Hours of class plus student homework hours between
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TOTAL (Total 1 + Total 2.)						159,6			
Total 2 (Hours of class plus student homework hours between weeks 15-18)							14		
							Subtotal 2	4	10
18									
17		Exam preparation and exam						4	10
16									

145.64