## COURSE: PROGRAMMING

| DEGREE: ELECTRONIC INDUSTRIAL ENGINEERING AND AUTOMATIC | YEAR: 1 ST | TERM: 1 ST |
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| WEEKLY PLANNING |  |  |  |  |  |  |  |  |
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| $\begin{gathered} \text { w } \\ \text { E } \\ \text { E } \\ \text { K } \end{gathered}$ | $\begin{aligned} & \mathrm{S} \\ & \mathrm{E} \\ & \mathrm{~S} \\ & \mathrm{~S} \\ & \mathrm{I} \\ & \mathrm{O} \\ & \mathrm{~N} \end{aligned}$ | DESCRIPTION | TEACHING (mark X) |  | SPECIAL ROOM <br> FOR SESSION <br> (Computer class room, audio-visual class room) | WEEKLY PROGRAMMING FOR STUDENT |  |  |
|  |  |  | L E C T U R E S | $\begin{gathered} \mathrm{S} \\ \mathrm{E} \\ \mathrm{M} \\ \mathrm{I} \\ \mathrm{~N} \\ \mathrm{~A} \\ \mathrm{R} \\ \mathrm{~S} \\ \hline \end{gathered}$ |  | DESCRIPTION | CLASS HOURS $(1,66=50+50$ $\min )$ | HOMEWORK HOURS (Max. Estim. 6,5h) |
| 1 | 1 | Presentation. Basic Concepts. Algorithm, program, instructions, code lines | X |  |  |  | 1,66 | 5,0 |
|  | 2 | Basic Concepts, pseudocode, ordinograms |  | X | computer |  | 1,66 |  |
| 2 | 3 | Structured Programming.C Language. C Program structure. Libraries. Syntax. Basic instructions. Data types. I/O Basic functions: scanf, printf | X |  |  | I/O basic examples | 1,66 | 5,0 |
|  | 4 | Pseudocde and ordinogram exercises |  | X | computer | Pseudocode and ordinogram examples | 1,66 |  |
| 3 | 5 | I/O functions | X |  |  |  | 1,66 | 5,0 |
|  | 6 | Introduction to dev cpp compiler. i/O basic examples |  | X | computer | I/O examples | 1,66 |  |
| 4 | 7 | Control Structures: Selection. Conditions. Relational Operators. Arithmetic Operators. IF, IF ELSE, SWITCH sentences. | X |  |  |  | 1,66 | 6,5 |
|  | 8 | Selection Sentences Exercises |  | X | computer | Selection examples | 1,66 |  |
| 5 | 9 | Control Structures: Iterations. Iterative sentences: WHILE. DO WHILE | X |  |  |  | 1,66 | 6,5 |
|  | 10 | Iteravtive sentences exercises. Introduction to first deliverable (algorithms in C) |  | X | computer | Iterative examples. Developing first deliverable. | 1,66 |  |
|  | 11 | Control Structures: Iterations. Iterative sentences: FOR | X |  |  |  | 1,66 |  |


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| $\begin{gathered} \text { W } \\ \text { E } \\ \text { E } \\ \text { K } \end{gathered}$ | $\begin{aligned} & \mathrm{S} \\ & \mathrm{E} \\ & \mathrm{~S} \\ & \mathrm{~S} \\ & \mathrm{I} \\ & \mathrm{O} \\ & \mathrm{~N} \end{aligned}$ | DESCRIPTION | TEACHING <br> (mark X) |  | SPECIAL ROOM <br> FOR SESSION <br> (Computer class room, audio-visual class room) | WEEKLY PROGRAMMING FOR STUDENT |  |  |
|  |  |  | L E C T U R E S | $\begin{gathered} \mathrm{S} \\ \mathrm{E} \\ \mathrm{M} \\ \mathrm{I} \\ \mathrm{~N} \\ \mathrm{~A} \\ \mathrm{R} \\ \mathrm{~S} \end{gathered}$ |  | DESCRIPTION | CLASS HOURS $\begin{gathered} (1,66=50+50 \\ \min ) \end{gathered}$ | HOMEWORK HOURS (Max. Estim. 6,5h) |
| 6 | 12 | FOR sentence examples. First deliverable |  | X | computer | Iterative examples. Developing first deliverable. | 1,66 | 6,5 |
| 7 | 13 | C Functions: Local and global variables. Parameters. Return sentence. | X |  |  |  | 1,66 | 6,5 |
|  | 14 | First deliver. Introduction to second deliverable (Functions) |  | X | computer | Functions examples. Developing second deliverable. | 1,66 |  |
| 8 | 15 | First Continuous Evaluation Exam | X |  |  |  | 1,66 | 6,5 |
|  | 16 | Exam solution. Developing second deliverable. |  | X | computer | Functions examples. Developing second deliverable. | 1,66 |  |
| 9 | 17 | C Functions: Value and reference parameters. Arrays: declaring and using. | X |  |  |  | 1,66 | 6,5 |
|  | 18 | Functions examples. Developing second deliverable. |  | X | computer | Functions examples. Developing second deliverable. | 1,66 |  |
| 10 | 19 | Vectors. Bidimensional arrays. Strings. String.h library. Arrays in functions. | X |  |  |  | 1,66 | 6,5 |
|  | 20 | Second deliver. Arrays examples.Introduction to third deliverable (arrays) |  | X | computer | Arrays examples. Developing third deliverable. | 1,66 |  |
| 11 | 21 | Data structures. Access. Structs in functions. | X |  |  |  | 1,66 | 6,5 |
|  | 22 | Structs examples. Developing third deliverable. |  | X | computer | Structs examples. Developing third deliverable. | 1,66 |  |
| 12 | 23 | Arrays of structs. External storing. Files | X |  |  |  | 1,66 | 6,5 |
|  | 24 | File examples. Developing third deliverable. |  | X | computer | Files examples. Developing third deliverable. | 1,66 |  |
| 13 | 25 | Second Continuous Evaluation Exam | X |  |  |  | 1,66 | 6,5 |
|  | 26 | Third deliver. Introduction to fourth deliverable (Structs) |  | X | computer | Developing fourth deliverable. | 1,66 |  |
| 14 | 27 | Pointers | X |  |  |  | 1,66 | 6,5 |
|  | 28 | Pointers examples. Developing fourth deliverable. |  | X | computer | Pointers examples. Developing fourth deliverable. | 1,66 |  |
|  | 29 | Developing fourth deliverable. |  | X | computer | Developing fourth deliverable. | 1,66 | 3,25 |



