| COURSE: Integrated Circuits and Microelectronic |
| :--- |
| PEGREE: Industrial Technology Engineering |

## DEGREE: Industrial Technology Engineering

| WEEKLY PLANNING |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week | Session | Description | Groups |  | Location | Weekly work for student |  |  |
|  |  |  | Lecture | Seminar |  | Description | Class hours | Homework hours |
| 1 | 1 | Introduction and basic concepts | X |  | Classroom | Acquire material (software tools, bibliography) | 1,67 | 3 |
|  | 2 | Basic concepts |  | X | Classroom | Chapter study | 1,67 |  |
| 2 | 3 | Combinational circuits | X |  | Classroom | Chapter study | 1,67 | 4 |
|  | 4 | Sequential circuits (1) |  | X | Classroom | Chapter study | 1,67 |  |
| 3 | 5 | Simulation | X |  | Classroom | Chapter study | 1,67 | 5 |
|  | 6 | Demo Simulation. Prepare lab session 1 |  | X | Computer room | Preparation of lab session. | 1,67 |  |
| 4 | 7 | VHDL problems | X |  | Classroom | Exercises | 1,67 | 5 |
|  | 8 | Lab session 1 |  | X | Lab. | Exercises | 1,67 |  |
| 5 | 9 | Sequential Circuits (II). Design organization, loops, generics. Problen | X |  | Classroom | Chapter study | 1,67 | 8 |
|  | 10 | Preparation of lab. Session 2 |  | X | Computer room | Preparation of lab. Session '́ | 1,67 |  |
| 6 | 11 | VHDL problems | X |  | Classroom | Preparation of lab. Session ' | 1,67 | 5 |
|  | 12 | Lab session 2 |  | X | Lab. | Exercises | 1,67 |  |
| 7 | 13 | Sequential Circuits (III) | X |  | Classroom | Exercises | 1,67 | 6 |
|  | 14 | VHDL problems |  | X | Classroom | Exercises, preparation of lab. Session : | 1,67 |  |
| 8 | 15 | VHDL problems | X |  | Classroom | Exercises | 1,67 | 7 |
|  | 16 | Lab session 3 |  | X | Lab. | Preparation of lab. Session : | 1,67 |  |
| 9 | 17 | CMOS review (1). Design at transistor level | X |  | Classroom | Preparation of lab. session 4 | 1,67 | 8 |
|  | 18 | Lab session 4 |  | X | Lab. | Exercices | 1,67 |  |
| 10 | 19 | Midterm Exam VHDL | X |  | Classroom | Chapter study | 1,67 | 5 |
|  | 20 | Integrated Circuits manufacturing, package |  | X | Classroom | Chapter study | 1,67 |  |
| 11 | 21 | Layout | X |  | Classroom | Chapter study | 1,67 | 8 |
|  | 22 | Layout exercises |  | X | Classroom | Exercices | 1,67 |  |
| 12 | 23 | Demo Microwind | X |  | Computer room | Exercises | 1,67 |  |
|  | 24 | ICs exercises |  | X | Classroom | Exercices | 1,67 | 8 |
| 13 | 25 | Midterm Exam ICs | X |  | Classroom | Exercices | 1,67 |  |
|  | 26 | Test |  | X | Classroom | Exercices | 1,67 | 6 |
| 14 | 27 | Test exercises | X |  | Classroom | Exercises | 1,67 |  |
|  | 28 | Exercises |  | X | Classroom | Exam preparatior | 1,67 | 6 |
|  | 29 | Exercises | X |  | Classroom | Exercises | 1,67 |  |
| SUBTOTAL |  |  |  |  |  |  | 48,43 | 84 |
|  |  |  |  |  |  |  |  |  |
| 16-18 |  | Assessment |  |  | Classroom |  | 3 | 15 |
| TOTAL |  |  |  |  |  |  | 150,43 |  |

