

## Degree in Industrial Production Engineering

**Coordinator:**

- Prof. Eng. António Carlos Corte-Real de Sousa

**Duration:**

- 3 school Years

**Possible Careers:**

- Maintenance Engineer
- Production Engineer
- Design Engineer
- Mechanical Technician-design and Production
- Physics and Chemistry Research Technician for the Industry
- Technician of Numeric Modelling of Systems and Components

### Degree in Industrial Production Engineering: 1st year

| Code  | Identification              | Semester Type | Hours  | ects |
|-------|-----------------------------|---------------|--------|------|
| 41001 | Physics                     | Autumn        | 3 / TP | 6    |
| 41002 | Spreadsheets in Engineering | Autumn        | 2 / TP | 4,5  |
| 41004 | ELECTRIC SYSTEMS AND ENERGY | Autumn        | 2 / TP | 3,5  |
| 41005 | Materials Science           | Autumn        | 2 / TP | 4,5  |
| 41018 | Programming                 | Autumn        | 3 / TP | 4,5  |
| 41043 | Technical Drawing           | Autumn        | 4 / TP | 7    |
| 41044 | Machine Drawing             | Spring        | 3 / TP | 5,5  |
| 41045 | Statistics                  | Spring        | 3 / TP | 5,5  |
| 41046 | Operational Research        | Spring        | 2 / TP | 3    |
| 41008 | Electricity                 | Spring        | 2 / TP | 4    |
| 41010 | Mathematics I               | Spring        | 3 / TP | 6    |
| 41013 | Chemistry                   | Spring        | 3 / TP | 6    |

Degree in Industrial Production Engineering: **2nd year**

| Code  | Identification                  | Semester Type | Hours  | ects |
|-------|---------------------------------|---------------|--------|------|
| 41014 | Instrumentation                 | Autumn        | 2 / TP | 4    |
| 41017 | Thermodynamics                  | Autumn        | 2 / TP | 4,5  |
| 41019 | Mathematics II                  | Autumn        | 3 / TP | 6    |
| 41020 | Numeral Analysis                | Autumn        | 2 / TP | 3    |
| 41024 | Solid Mechanics                 | Autumn        | 3 / TP | 6    |
| 41047 | Mechanical Technology           | Autumn        | 4 / TP | 6,5  |
| 41048 | COMPUTER- ASSISTED DESIGN       | Spring        | 2 / TP | 3,5  |
| 41049 | STRUCTURAL CONNECTIONS          | Spring        | 3 / TP | 6    |
| 41050 | Fluid Mechanics                 | Spring        | 3 / TP | 5,5  |
| 41051 | Heat Transfer                   | Spring        | 2 / TP | 4,5  |
| 41026 | Corrosion and Coating Processes | Spring        | 3 / TP | 5    |
| 41021 | Automation and Control          | Spring        | 3 / TP | 5,5  |

Degree in Industrial Production Engineering: **3rd year**

| Code  | Identification                       | Semester Type | Hours  | ects |
|-------|--------------------------------------|---------------|--------|------|
| 41027 | Hydraulics and Pneumatics            | Autumn        | 3 / TP | 5,5  |
| 41052 | Machine Elements                     | Autumn        | 4 / TP | 7    |
| 41053 | ELECTRIC SYSTEMS AND ENERGY          | Autumn        | 3 / TP | 5,5  |
| 41054 | SEMINAR                              | Autumn        | 2 / TP | 5,5  |
| 41035 | Project and Industrial Cost Analysis | Autumn        | 2 / TP | 3    |
| 41036 | Industrial Maintenance               | Autumn        | 2 / TP | 3,5  |
| 41055 | CLIMATIZATION                        | Spring        | 4 / TP | 7    |
| 41056 | PROJECT                              | Spring        | 6 / TP | 12,5 |
| 41057 | Quality and Environment Management   | Spring        | 2 / TP | 3,5  |
| 41033 | Law, Ethics and Deontology           | Spring        | 2 / T  | 3    |
| 41034 | Production Management                | Spring        | 2 / TP | 4    |