| Year | Sem | Subject name | Weekly number of hours | | | | |
|------|-----|--|------------------------|----------|---------|---------|------|
| | | | Lecture | Tutorial | Labwork | Project | ECTS |
| | | First Year Compulsor | y subj | ects | | | |
| 1 | 1 | Linear algebra, analytical and differential geometry | 3 | 2 | - | - | 6 |
| 1 | 1 | Mathematical analysis | 3 | 2 | - | - | 6 |
| 1 | 1 | Chemistry | 2 | - | 1 | - | 3 |
| 1 | 1 | Computer aided graphics | 2 | 1 | 1 | - | 4 |
| 1 | 1 | Computers programming and programming languages I | 2 | - | 2 | - | 4 |
| 1 | 1 | Physical education and sport | - | 2 | - | - | 3 |
| 1 | 1 | Foreign language I (english) | 2 | 1 | - | - | 4 |
| 1 | 2 | Special mathematics | 3 | 2 | - | - | 6 |
| 1 | 2 | Physics | 3 | 2 | 1 | - | 6 |
| 1 | 2 | Fundamentals of electrotechnics | 3 | 2 | 1 | - | 6 |
| 1 | 2 | Computers programming and programming languages II | 2 | - | 2 | - | 5 |
| 1 | 2 | Physical education and sport II | - | 2 | - | - | 3 |
| 1 | 2 | Foreign language II | 2 | 1 | - | - | 4 |
| 1 | 1 | Psyhology of education (optional) | 2 | 2 | - | - | 5 |
| 1 | 1 | Volunteering 1 (optional) | - | - | - | 4 | 3 |
| 1 | 2 | Pedagogy I (optional) | 2 | 2 | - | - | 5 |
| 1 | 2 | Volunteering 2 (optional) | - | - | - | 4 | 3 |
| 2 | 1 | Computer architecture | 2 | - | 1 | - | 4 |
| 2 | 1 | Digital systems | 2 | - | 2 | - | 4 |
| 2 | 1 | Electrical circuit theory | 3 | 1 | 1 | - | 6 |
| 2 | 1 | Electronics I | 2 | 1 | 1 | - | 4 |
| 2 | 1 | Numerical methods | 2 | - | 2 | - | 5 |
| 2 2 | 1 | Database Computer interfaces and peripherals (optional) | 2 2 | - | 1 | - | 3 |
| 2 | 1 | Data transmissions and protocols (optional) | 2 | - | 1 | - | 3 |
| 2 | 1 | Pedagogy II (optional) | 2 | 2 | - | - | 5 |
| 2 | 1 | Volunteering 3 (optional) | - | - | - | 4 | 3 |
| 2 | 2 | Systems and control theory | 2 | - | 1 | - | 4 |
| 2 | 2 | CAD for electrical engineering | 2 | - | 1 | 1 | 5 |
| 2 | 2 | Electrical circuits simulation | 2 | - | 2 | - | 5 |
| 2 | 2 | Electronics II | 2 | 1 | 1 | - | 4 |
| 2 | 2 | Electromagnetic field theory | 3 | 1 | 1 | 1 | 6 |
| 2 | 2 | Electrical and electronic measurements | 3 | - | 2 | - | 6 |
| 2 | 2 | Didactics of specialization (optional) | 2 | 2 | - | - | 5 |
| 2 | 2 | Volunteering 4 (optional) | - | - | - | 4 | 3 |

| 3 1 Electric equipment | 3 | _ | 2 | 1 | 6 | |
|---|--------------------|--------------------|---|---|----------------------|--|
| 3 1 Static power converters | 2 | _ | 1 | - | 4 | |
| 3 1 Electrical machines | 3 | _ | 2 | 1 | 6 | |
| 3 1 Computer networks | 1 | - | 1 | - | 3 | |
| 3 1 Electrotechnical materia | ıls 3 | - | 2 | - | 6 | |
| 3 1 Soft architectures and p | | - | 1 | - | 2 | |
| Integrated systems I | | | | | | |
| 3 1 Finite element method i | n electrical 2 | - | 1 | - | 3 | |
| engineering (optional) | | | | | | |
| 3 1 Numerical modeling of | the 2 | - | 1 | - | 3 | |
| electromagnetic field (o | ptional) | | | | | |
| 3 2 Object oriented program | nming 2 | - | 2 | - | 3 | |
| 3 2 Digital signal processin | g 2 | - | 2 | 1 | 4 | |
| 3 2 Electric drives | 3 | - | 2 | 1 | 5 | |
| 3 2 Programmable logic con | itrollers 2 | - | 2 | - | 3 | |
| 3 2 Microprocessor systems | 2 | 1 | 1 | - | 4 | |
| 3 2 Advanced production sy | rstems 2 | - | 1 | - | 3 | |
| 3 2 Internship | | 360 hours in total | | | | |
| 3 1 Computer aided training | | 1 1 | | | | |
| 3 1 Pedagogical practice in | pre-university | 42h in total | | | | |
| education system (1) | | | | | | |
| 3 2 Pedagogical practice in | pre-university | 36h in total 3 | | | | |
| education system (2) | | | | | | |
| 3 2 Student class manageme | | 1 | - | - | 2 | |
| 3 2 Graduation exam: Leve | .1 - | - | - | - | 5 | |
| 3 2 Volunteering 6 | - | - 1 | - | 4 | 3 | |
| 4 1 Energy sources | 2 | 1 | 1 | - | 5 | |
| 4 1 Virtual instrumentation | in electrical 2 | - | 2 | - | 4 | |
| engineering (optional)4 1 Monitoring and diagnos | is of electrical 2 | | 2 | | 4 | |
| equipment (optional) | is of electrical 2 | - | 2 | - | 4 | |
| 4 1 Electrical installations | 2 | _ | 2 | | 4 | |
| 4 1 Optimization technique | | _ | 1 | 1 | <u>4</u> <u>1</u> | |
| engineering | , in decured 2 | _ | 1 | 1 | ⊣ T | |
| 4 1 Soft architectures and p | ogramming on 2 | _ | 1 | _ | 4 | |
| integrated systems II | 2 | | _ | | · · | |
| 4 1 Robotics (optional) | 1 | 1 | 1 | - | 4 | |
| 4 1 Electricity quality (option | | 1 | 1 | - | 4 | |
| 4 1 Control of electric | 2 | - | 2 | 1 | 5 | |
| 4 1 Industrial control | 2 | - | 2 | 1 | 5 | |
| 4 1 Quality and reliability | 2 | - | 2 | - | 4 | |
| 4 1 Volunteering 7 | - | - | - | 4 | 3 | |
| 4 2 Electromagnetic compa | ibility 2 | - | 2 | - | 4 | |
| 4 2 Electric and electronic e | quipment for 2 | - | 1 | - | 4 | |
| vehicles | | | | | | |
| | | | | | | |
| 4 2 Neural networks (option 4 2 Artificial intelligence (o | · · | - | 2 | 1 | 5 | |

| 4 | 2 | Management | 2 | - | - | 1 | 3 |
|---|---|--------------------------------|---|---|---|---|---|
| 4 | 2 | Production, transmission and | 2 | 1 | 1 | - | 4 |
| | | distribution of electricity | | | | | |
| 4 | 2 | Elaboration of diploma project | - | 4 | | 4 | |
| 4 | 2 | Diploma project stage | | 2 | | | |
| 4 | 2 | Volunteering 8 | - | - | - | 4 | 3 |