

Field **Energy Engineering**
Year I - Semester I

Program

Energy Engineering

| No | Discipline | Cod | C.s.t. | Nr.Hour/week Semester I | | | | | Nr. sapt | Total hours | | | Individual study | Evaluation form |
|--------------------------------|---|-------------------|--------|----------------------------|---|---|---|------|----------|-------------|-------|-------|------------------|-----------------|
| | | | | C | S | L | P | Rese | | Cour | Appli | Total | | |
| Mandatory disciplines | | | | | | | | | | | | | | |
| 1 | Renewable Energies, Energy Scenarios and Climate Protection | UPB.05.S.11.O.020 | 4 | 2 | 1 | 0 | 0 | | 14 | 28 | 14 | 42 | 58 | V |
| 2 | Energy Technologies in Mechanical Engineering | UPB.05.S.11.O.021 | 4 | 2 | 0 | 1 | 0 | | 14 | 28 | 14 | 42 | 58 | E |
| 3 | Chemistry and Material Science for Energy Engineering | UPB.05.S.11.O.022 | 4 | 2 | 0 | 2 | 0 | | 14 | 28 | 28 | 56 | 44 | E |
| 4 | Energy Finance | UPB.05.S.11.O.023 | 4 | 2 | 1 | 0 | 0 | | 14 | 28 | 14 | 42 | 58 | V |
| 5 | Continuum Mechanics and Thermodynamics | UPB.05.S.11.O.024 | 4 | 2 | 1 | 0 | 0 | | 14 | 28 | 14 | 42 | 58 | V |
| 6 | Research | UPB.05.S.11.O.025 | 10 | | | | | 12 | 14 | 0 | 168 | 168 | 82 | V |
| Optional disciplines | | | | | | | | | | | | | | |
| 1 | | | | | | | | | 14 | 0 | 0 | 0 | 0 | |
| 2 | | | | | | | | | 14 | 0 | 0 | 0 | 0 | |
| Statistics | | | | | | | | | | | | | | |
| | PC, Nr.hours/week/act. (C,S,L,P,PL,studiu indiv.) | | 30 | 10 | 3 | 3 | 0 | 12 | 14 | 140 | 252 | 392 | 358 | E / V |
| | Nr. hours / week / semester | | | 28 | | | | | | | | | | 4 |
| Facultative disciplines | | | | | | | | | | | | | | |
| 1 | Projection and management of the educational programs | | 5 | 1 | 1 | 0 | 0 | | 14 | 14 | 14 | 28 | 97 | E |
| 2 | | | | | | | | | | | | | | |

Year I - Semester II

| No | Discipline | Cod | C.s.t. | Nr.Hour/week Semester I | | | | | Nr. Weeks | Total hours | | | Individual study | Evaluation form |
|--------------------------------|---|-------------------|--------|----------------------------|---|---|---|------|-----------|-------------|-------|-------|------------------|-----------------|
| | | | | C | S | L | P | Rese | | Cour | Appli | Total | | |
| Mandatory disciplines | | | | | | | | | | | | | | |
| 1 | Modelling turbulent flows and heat transfer | UPB.05.S.11.O.026 | 4 | 2 | 0 | 2 | 0 | | 14 | 28 | 28 | 56 | 44 | E |
| 2 | Energy Technologies in Buildings – Smart Buildings | UPB.05.S.11.O.027 | 4 | 2 | 0 | 1 | 0 | | 14 | 28 | 14 | 42 | 58 | E |
| 3 | Energy systems I (classical energy and low emissions) | UPB.05.S.11.O.028 | 4 | 2 | 0 | 1 | 0 | | 14 | 28 | 14 | 42 | 58 | E |
| 4 | Energy Supply and Environmental Protection | UPB.05.S.11.O.029 | 4 | 2 | 0 | 1 | 0 | | 14 | 28 | 14 | 42 | 58 | E |
| 6 | Research | UPB.05.S.11.O.030 | 10 | | | | | 12 | 14 | 0 | 168 | 168 | 82 | V |
| Optional disciplines | | | | | | | | | | | | | | |
| 1 | Energy systems II (regenerative energy) | UPB.05.S.11.O.031 | 4 | 1 | 2 | 0 | 0 | | 14 | 14 | 28 | 42 | 58 | V |
| 2 | Environmental and economical aspects of energy conversion | UPB.05.S.11.O.032 | 4 | 1 | 2 | 0 | 0 | | 14 | 14 | 28 | 42 | 58 | V |
| 3 | Electrical Engineering and Information Technologies | UPB.05.S.11.O.033 | 4 | 1 | 2 | 0 | 0 | | 14 | 14 | 28 | 42 | 58 | V |
| Statistics | | | | | | | | | | | | | | |
| | PC, Nr.hours/week/act. (C,S,L,P,PL,studiu indiv.) | | 30 | 9 | 2 | 5 | 0 | 12 | 14 | 42 | 84 | 126 | 174 | E / V |
| | Nr. hours / week / semester | | | 28 | | | | | | | | | | 2 |
| Facultative disciplines | | | | | | | | | | | | | | |
| 1 | Psychopedagogy of adolescents, young people and adults | | 5 | 1 | 1 | 0 | 0 | | 14 | 14 | 14 | 28 | 97 | E |
| 2 | Counseling and guidance | | 5 | 0.5 | 2 | 0 | 0 | | 14 | 7 | 28 | 35 | 90 | E |

Year II - Semester II

| No | Discipline | Cod | C.s.t. | Nr.Hour/week | | | | | Nr. Wee ks | Total hours | | | Individual study | Evaluation form |
|---|--|-------------------|--------|--------------|---|---|---|------|------------|-------------|-------|-------|------------------|-----------------|
| | | | | Semester I | | | | | | Cour | Appli | Total | | |
| | | | | C | S | L | P | Rese | | | | | | |
| Mandatory disciplines | | | | | | | | | | | | | | |
| 1 | Electrochemistry | UPB.05.S.11.O.034 | 4 | 2 | 0 | 1 | 0 | | 14 | 28 | 14 | 42 | 58 | E |
| 2 | Chemical kinetics | UPB.05.S.11.O.035 | 4 | 2 | 0 | 1 | 0 | | 14 | 28 | 14 | 42 | 58 | E |
| 3 | Electro-chemistry in energy applications – converter | UPB.05.S.11.O.036 | 4 | 2 | 0 | 1 | 0 | | 14 | 28 | 14 | 42 | 58 | E |
| 4 | Material science of thin films and Rheology | UPB.05.S.11.O.037 | 4 | 2 | 0 | 2 | 0 | | 14 | 28 | 28 | 56 | 44 | E |
| 5 | Research | UPB.05.S.11.O.038 | 10 | | | | | 12 | 14 | 0 | 168 | 168 | 82 | V |
| Optional disciplines | | | | | | | | | | | | | | |
| 1 | Electro-chemistry in energy applications – storage devices | UPB.05.S.11.O.039 | 4 | 2 | 0 | 1 | 0 | | 14 | 28 | 14 | 42 | 58 | V |
| 2 | Principles of Carbon Capture and Storage | UPB.05.S.11.O.040 | 4 | 2 | 0 | 1 | 0 | | 14 | 28 | 14 | 42 | 58 | V |
| Statistics | | | | | | | | | | | | | | |
| PC, Nr.hours/week/act. (C,S,L,P,PL,studiu indiv.) | | | 30 | 10 | 0 | 6 | 0 | 12 | 14 | 56 | 28 | 84 | 116 | E / V |
| Nr. hours / week / semester | | | 28 | | | | | | | | | | | 2 |
| Facultative disciplines | | | | | | | | | | | | | | |
| 1 | Psychoopedagogy of adolescents, young people and adults | | 5 | 1 | 1 | 0 | 0 | | 14 | 14 | 14 | 28 | 97 | E |
| 2 | Counseling and guidance | | 5 | 0.5 | 2 | 0 | 0 | | 14 | 7 | 28 | 35 | 90 | E |

Year II - Semester II

| No | Discipline | Cod | C.s.t. | Nr.Hour/week | | | | | Nr. Wee ks | Total hours | | | Individual study | Evaluation form |
|---|---|-----|--------|--------------|---|---|---|------|------------|-------------|-------|-------|------------------|-----------------|
| | | | | Semester I | | | | | | Cour | Appli | Total | | |
| | | | | C | S | L | P | Rese | | | | | | |
| Mandatory disciplines | | | | | | | | | | | | | | |
| 1 | Psychoopedagogy of adolescents, young people and adults | | 28 | | | | | 27 | 14 | 0 | 378 | 378 | 322 | V |
| 1 | Counseling and guidance | | 2 | 1 | | | | | 14 | 14 | 0 | 14 | 36 | V |
| Optional disciplines | | | | | | | | | | | | | | |
| 1 | | | | | | | | | 14 | 0 | 0 | 0 | 0 | |
| 2 | | | | | | | | | 14 | 0 | 0 | 0 | 0 | |
| Statistics | | | | | | | | | | | | | | |
| PC, Nr.hours/week/act. (C,S,L,P,PL,studiu indiv.) | | | 30 | 1 | 0 | 0 | 0 | 27 | 14 | 0 | 0 | 0 | 0 | E / V |
| Nr. hours / week / semester | | | 28 | | | | | | | | | | | 1 |
| Facultative disciplines | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | |