

UNIVERSITY OF ORADEA
FACULTY OF ENERGY ENGINEERING AND INDUSTRIAL MANAGEMENT
Cycle's Master Degree

Master's Degree Program: **ENERGY SYSTEMS MANAGEMENT**

Fundamental Field:

Master's Field: **ENERGY ENGINEERING**

Secondary Master Field:

Master Type: **research**

Duration of studies / no. of credits: **4 semestre/120 credits**

Type of education: **Full-time learning (IF)**

Valid from academic year
 2025-2026
 Beginning with 1st year of study

CURRICULUM **
Year of study I

| Code | Disciplines* | Type | Sem. I [hours / week] | | | | Total of hours / sem. | Type of Exami- nation | Cre- dits | IS [hours / sem.] | Condi- tioning |
|-----------|--|------|--------------------------|----------|----------|----------|-----------------------------|-----------------------------|--------------|----------------------------|-------------------|
| | | | C | S | L | P | | | | | |
| | OBLIGATORII IMPUSE | | | | | | | | | | |
| IEMI-0739 | Sustainable development and energy competitiveness | SYD | 2 | 2 | - | - | 56 | Ex | 5 | 69 | |
| IEMI-0065 | Energy market and exchange | THD | 2 | 1 | - | - | 42 | Vp | 5 | 83 | |
| IEMI-0141 | Efficient energy conversion technologies | THD | 2 | - | 1 | 1 | 56 | Ex | 6 | 94 | |
| IEMI-0789 | Ethics and integrity in scientific research | SYD | 1 | - | - | - | 14 | Ex | 1 | 11 | |
| IEMI-0852 | Professional practice I | THD | - | - | - | - | 154 | Vp | 8 | 46 | |
| | TOTAL | | 7 | 3 | 1 | 1 | 322 | | 25 | 303 | |
| | OBLIGATORII OPȚIONALE | | | | | | | | | | |
| IEMI-0129 | Integrated energy-environment management | SYD | 1 | 2 | - | - | 42 | Ex | 5 | 83 | |
| IEMI-0252 | Ecology and the Environmental Protection | SYD | 1 | 2 | - | - | 42 | Ex | 5 | 83 | |
| | TOTAL | | 1 | 2 | - | - | 42 | | 5 | 83 | |

| Code | Disciplines* | Type | Sem. II [hours / week] | | | | Total of hours / sem. | Type of Exami- nation | Cre- dits | IS [hours / sem.] | Condi- tioning |
|-----------|---|------|---------------------------|----------|----------|----------|-----------------------------|-----------------------------|--------------|----------------------------|-------------------|
| | | | C | S | L | P | | | | | |
| | OBLIGATORII IMPUSE | | | | | | | | | | |
| IEMI-0740 | Energy systems engineering | SYD | 2 | 1 | - | - | 42 | Ex | 5 | 83 | |
| IEMI-0075 | Simulation and optimisation of energy systems I | SYD | 2 | - | 1 | - | 42 | Ex | 5 | 83 | |
| IEMI-0060 | Modelling of energy processes | THD | 2 | 1 | 1 | - | 56 | Ex | 6 | 94 | |
| IEMI-0853 | Professional practice II | THD | - | - | - | - | 168 | Vp | 8 | 32 | |
| | TOTAL | | 6 | 2 | 2 | - | 308 | | 24 | 292 | |
| | OBLIGATORII OPȚIONALE | | | | | | | | | | |
| IEMI-0134 | Renewable energy sources | SYD | 2 | - | 2 | - | 56 | Ex | 6 | 94 | |
| IEMI-0897 | Geothermal Energy and Heat Pumps | SYD | 2 | - | 2 | - | 56 | Ex | 6 | 94 | |
| | TOTAL | | 2 | - | 2 | - | 56 | | 6 | 94 | |

Legend: C - Course; S - Seminar; L - Practical (laboratory); P - Project; IS - Individual Study;

THD - Thoroughgoing Disciplines; SYD - Synthesis Disciplines;

Type of Examination - Verification Form, Ex. - examination; Cv. - Colloquium, Vp. - Continuous Assessment, Pr - Project; A/R- Passed/Failed; Credits - number of ECTS credits; IS - Individual study.

**Head of department ,
 Lecturer Rancov Nicolae, PhD, Eng.**

**RECTOR,
 Professor Dr. BUNGĂU Constantin**

**DEAN,
 Associate Professor Dr.
 HORA Cristina Mirela**