

SYLLABUS

1. Data about the program of study

| | | |
|-----|---------------------------------|---|
| 1.1 | Institution | Technical University of Cluj-Napoca |
| 1.2 | Faculty | Faculty of Electrical Engineering |
| 1.3 | Department | Electrotechnics and Measurements |
| 1.4 | Field of study | Electrical Engineering |
| 1.5 | Cycle of study | Bachelor of Science |
| 1.6 | Program of study/ Qualification | Electrical System Cluj-Napoca in English language |
| 1.7 | Form of education | Full time |
| 1.8 | Subject code | 61.00 |

2. Data about the subject

| | | | | |
|----------------------|--|---|---|--|
| 2.1 | Subject name | Practice for Development of Graduation Project | | |
| 2.2 | Course responsible/ lecturer | Teaching staff involved in thesis coordination – Prof. Dr. Eng. Dan Doru Micu – Dan.Micu@ethm.utcluj.ro | | |
| 2.3 | Teachers in charge of Seminars/ Laboratory/ Project | | | |
| 2.4 Year of study | 4 | 2.5 Semester | 2 | 2.6 Type of assessment (<i>E – exam, C – colloquium, V – verification</i>) |
| 2.7 Subject category | <i>DF – fundamental, DD – in the field, DS – specialty, DC – complementary</i> | | | DS |
| | <i>DI – compulsory, DO – elective, Dfac – optional</i> | | | DI |

3. Estimated total time

| | | | | | | | | | | |
|--|----|----------|------------|--|-------------|--|----------------|--|-------------|--|
| 3.1 Number of hours per week: | | of which | 3.2 Course | | 3.3 Seminar | | 3.3 Laboratory | | 3.3 Project | |
| 3.2 Total hours per semester | 70 | of which | 3.5 Course | | 3.6 Seminar | | 3.6 Laboratory | | 3.6 Project | |
| 3.7 Individual study: | | | | | | | | | | |
| (a) Manual, lecture material and notes, bibliography | | | | | | | | | | |
| (b) Supplementary study in the library, online and in the field | | | | | | | | | | |
| (c) Preparation for seminars/laboratory works, homework, reports, portfolios, essays | | | | | | | | | | |
| (d) Tutoring | | | | | | | | | | |
| (e) Exams and tests | | | | | | | | | | |
| (f) Other activities | | | | | | | | | | |
| 3.8 Total hours of individual study [<i>sum (3.7(a) to 3.7(f))</i>] | | | | | 55 | | | | | |
| 3.9 Total hours per semester [<i>sum of 3.4 and 3.8</i>] | | | | | 125 | | | | | |
| 3.10 Number of credit points | | | | | 5 | | | | | |

4. Prerequisites (where applicable)

| | | |
|-----|-------------|-----|
| 4.1 | Curriculum | N/A |
| 4.2 | Competences | N/A |

5. Requirements (where appropriate)

| | | |
|-----|----------------------|--|
| 5.1 | For the course | |
| 5.2 | For the applications | Attendance at research activities is mandatory |

6. Specific competences

| | |
|--------------------------|---|
| Professional competences | |
| Cross competences | <p>Identifying the objectives to be achieved, available resources, completion conditions, work stages, timelines, deadlines, and associated risks.</p> <p>Efficient use of informational sources and resources for communication and professional training (Internet portals, specialized software applications, databases, online courses, etc.), both in Romanian and in an international language.</p> |

7. Discipline objectives (based on specific competencies acquired)

| | | |
|-----|---------------------|--|
| 7.1 | General objective | Completion of the technical documentation for the bachelor thesis and its practical application |
| 7.2 | Specific objectives | <p>Synthesizing the documentation related to the bachelor thesis</p> <p>Monitoring the achievement of the research objectives and the entire research program</p> <p>Preparing the written and graphical documentation for the bachelor thesis</p> |

8. Contents

| 8.1. Course (Lectures) | | Number of hours | Teaching methods | Additional remarks |
|--|---|-----------------|---|--------------------|
| 1 | | | | |
| Bibliography | | | | |
| It is established by each bachelor thesis supervisor individually. | | | | |
| 8.2. Applications - Seminar /Laboratory/Project | | Number of hours | Teaching methods | Additional remarks |
| 1 | Monitoring the achievement of research objectives and the entire research program. Theoretical and practical study of relevant electromechanical systems | 20 | Experimentation, discussions, involvement in practical activity | |
| 2 | Use of specialized software tools. Following the steps of the research program | 20 | | |
| 3 | Preparation of technical documentation. Editing and presenting the completed technical documentation | 20 | | |
| Bibliography | | | | |

9. Alignment of course content with expectations of the epistemic community, professional associations, and representative employers in the field

The requirements and expectations of the industrial and academic environments are taken into account: well-known companies in the field, collaborators from industrial and economic sectors, and colleagues from other university centres.

10. Assessment

| Activity type | 10.1 Assessment criteria | 10.2 Assessment methods | 10.3 Weight in the final grade (%) |
|--|--------------------------------------|---|------------------------------------|
| 10.4 Course | N/A | | |
| 10.5 Laboratory | | | |
| 10.5 Project | Practical activity (PASSED / FAILED) | Activity monitoring and periodic evaluation | 100% |
| 10.6 Minimum standard of performance: Completion of the technical documentation related to the bachelor thesis project. | | | |

| Date of completion | Lecturers | Title/ Surname/ Name: | Signature |
|--------------------|---|-----------------------|-----------|
| 16.09.2024 | Course | All teaching staff | |
| | Applications Seminar/ Laboratory/ Project | All teaching staff | |
| | | | |

| | | |
|--|--|---|
| Date of approval in the ETHM Department Council September 2024 | | Head of Department: Prof. Eng. MICU Dan Doru, PhD |
| Date of approval in the Faculty of Electrical Engineering Council September 2024 | | Dean: Assoc. Prof. Eng. CZIKER Andrei, PhD |