# C O U R S E  G U I D E  –  s h o r t  f o r m

Academic year 2024-2025

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| Course name[1] | **PROFESSIONAL PRACTICE** | | | | | Course code | | SITM PA 112 | |
| Course type[2] | DI | Category[3] | DS | Year of study | 1 | Semester | 2 | Number of credit points | 7 |

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| Faculty | Materials Science and Engineering | Number of teaching and learning hours[4] | | | | | |
| Field | Mechanical Engineering | Total | L | T | LB | P | IS |
| Specialization | SITM | 175 | | | | | |

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| Pre-requisites from the curriculum[5] | Compulsory | Not the case |
| | Recommended | Not the case |

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| General objective [6] | Development of professional skills in the field of materials investigation to support professional training. |
| Specific objectives[7] | Appropriate and efficient use of basic knowledge, criteria and methods specific to the field of Materials Science.<br>Cognitive (knowledge and appropriate use of notions related to the field):<br>Knowledge and understanding:<br>➢ the way of designing and manufacturing specific thermal and mechanical elements materials engineering;<br>➢ notions and terms specific to specific thermal and mechanical systems materials engineering;<br>➢ the technological principles underlying the manufacture and operation of the systems specific to materials engineering;<br>➢ criteria for choosing thermal and mechanical systems specific to engineering Materials;<br>➢ the performance and reliability of thermal and mechanical systems specific to engineering Materials.<br>Explanation and interpretation (the explanation and interpretation of ideas, projects, processes, such as and the theoretical and practical contents of the discipline):<br>➢ interdisciplinary phenomena involved in thermal and mechanical systems specific to materials engineering;<br>➢ training the ability to use and apply interdisciplinary knowledge;<br>➢ the performance of thermal and mechanical systems specific to materials engineering depending on the constructive functional solutions.<br>Technical/professional (design and evaluation of specific practical activities; use of methods, techniques and tools of investigation and application):<br>➢ ability to relate theoretical knowledge to practice;<br>➢ Ability to compare and choose specific thermal and mechanical systems materials engineering; the ability to maintain and repair devices that have systems in their structure specific to materials engineering;<br>Attitudinal – values (manifestation of a positive attitude towards the field):<br>➢ the formation of an ethical and responsible professional attitude;<br>➢ understanding the need for interdisciplinary collaboration with specialists in the fields Related;<br>• ➢ team building. |

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| Course description[8] | Chapter I: Workplace Safety Training and Company Overview<br>Chapter II: Mechanical Testing and Chemical Analysis Laboratories<br>Chapter III: Monitoring and carrying out technological manufacturing processes. Processes molding of parts of different shapes |

| Assesment | | | Sche-dule[9] | Percentage of the final grade (minimum grade)[10] |
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| A. Final assessment form [11]: | Class tests along the semester | % | | 100% (minimum 5) |
| | Home works | % | | |
| | Other activities | % | | |
| | Examination procedures and conditions:<br>Final Evaluation: | 100% (mini-mum grade 5) | | |
| B. Seminar | Activity during seminar | | | % (minimum 5) |
| C. Laboratory | Acttvity during laboratory | | | % (minimum 5) |
| D. Project | Activity during project | | | % (minimum 5) |

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| Course organizer | | |
| Teaching assistants | Professor Ph.D. Eng. Petrică VIZUREANU | |

[1]Course name from the curriculum
[2] DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)
[3] DI – imposed, DO –optional, DL – facultative (from the curriculum)
[4] Points 3.8, 3.5, 3.6a,b,c, 3.7 from the Course guide – extended form (L-lecture, T-tutorial, LB-laboratory works, P-project, IS-individual study)
[5] According to 4.1 – Pre-requisites - from the Course guide – extended form
[6] According to 7.1 from the Course guide – extended form
[7] According to 7.2 from the Course guide – extended form
[8] Short description of the course, according to point 8 from the Course guide – extended form
[9] For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period
[10] A minimum grade might be imposed for some assessment stages
[11] Exam or colloquium