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

Academic year 2021-2022

| Course name | MICRO AND NANOMECHANICAL MATERIALS SYSTEMS | | | | | Course code | | MATAE IA 105 | |
|---|---|---|---|---|---|---|---|---|---|
| Course type | DID | Category | DI | Year of study | 1 | Semester | 1 | Number of credit points | 6 |

| Faculty | Materials Science and Engineering | Number of teaching and learning hours | | | | | |
|---|---|---|---|---|---|---|---|
| Field | Materials Engineering | Total | L | T | LB | P | IS |
| Specialization | Advanced materials and experimental analysis techniques | 28 | 14 | | 14 | | |

| Pre-requisites from the curriculum | Compulsory | |
|---|---|---|
| | Recommended | |

| General objective | Discipline "Micro And Nanomechanical Materials Systems " presents the current general trend regarding the obtaining of advanced materials with special properties. |
|---|---|
| Specific objectives | Discipline aims, besides forming a systemic thinking, is the making of a link between the theoretical and the practical side in the processing of materials at a nanometric level by specific technologies. This provides a flexibility of thinking and acting to the student, specialist defining features of a market economy. |
| Course description | Constitutive thin layers from micro and nanomechanical structures. Micromechanical structures typical production processes. Micromechanical systems. Nanoprocessing systems. Nanomechanical systems |

| Assesment | | | Sche-dule[1] | Percentage in the final grade (minimum grade)[2] |
|---|---|---|---|---|
| A. Final assessment form[3]: Exam / Colloquium | Class tests along the semester | 20% | Week 7 | 70% (minimum 5) |
| | Home works | % | - | |
| | Other activities | % | - | |
| | Examination procedures and conditions:<br>Probe 1: Oral examination with 2 subjects;<br>Probe 2:<br>Probe 3: | 50% (mini-mum 5) | | |
| B. Seminar | Activity during seminar | | | % (minimum 5) |
| C. Laboratory | Acttvity during laboratory | | | 30% (minimum 5) |
| D. Project | Activity during project | | | % (minimum 5) |

| Course organizer | Ioan Gabriel SANDU | |
|---|---|---|
| Teaching assistants | Mihai POPA | |

[1] For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period

[2] A minimum grade might be imposed for some assessment stages

[3] Exam or colloquium