

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 | Computer programming and programming languages (2) | | | | | Course code | | 1ISI10DF | |
| Course type ² | DF | Category ³ | DI | Year of study | 1 | Semester | 2 | Number of credit points | 6 |

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|----------------|----------------------------------|--|--|--|--|----|---|----|---|----|
| Faculty | Material Science and Engineering | | | | Number of teaching and learning hours ⁴ | | | | | |
| Field | Industrial Engineering | | | | Total | L | T | LB | P | IS |
| Specialization | Security Engineering in Industry | | | | 150 | 28 | | 28 | | 94 |

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|---|-------------|--|
| Pre-requisites from the curriculum ⁵ | Compulsory | |
| | Recommended | - Computer programming and programming languages (1) |

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|----------------------------------|---|
| General objective ⁶ | Knowledge and learning the concept of the mathematical statistics calculus with applications assisted by computer in the industrial engineering. These techniques allow the construction of mathematical models through empirical methods in order to optimize the technological processes in the science of materials and engineering. |
| Specific objectives ⁷ | Elements of the probability theory. The probability of random events. Random variables and distributions. Mathematical statistics. Methods of statistical analysis of security in industry. |
| Course description ⁸ | Elements of the probability theory. The probability of random events. Random variables and distributions. Mathematical statistics. Methods of statistical analysis of security in industry. |

| Assesment | | | Schedule ⁹ | Percentage in the final grade (minimum grade) ¹⁰ |
|--|--|-----|-----------------------|---|
| A. Final assessment form ¹¹ : | Class tests along the semester | 25% | Week 7 | 70% |
| | Home works | 10% | Week 9 | |
| | Examination procedures and conditions: Colloquium, Oral examination; Two subjects; percent of the final grade 50% per subject; | 65% | Week 14 | |
| C. Laboratory | Activity during laboratory: Weeks 1-14 | | | 30% |

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| Course organizer | Lecturer PhD. Eng. Vasile MANOLE | |
| Teaching assistants | Lecturer PhD. Eng. Vasile MANOLE | |

¹Course name from the curriculum

²DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)

³DI – imposed, DO – optional, DL – facultative (from the curriculum)

⁴Points 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)

⁵According to 4.1 – Pre-requisites - from the Course guide – extended form

⁶According to 7.1 from the Course guide – extended form

⁷According to 7.2 from the Course guide – extended form

⁸Short description of the course, according to point 8 from the Course guide – extended form

⁹For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period

¹⁰A minimum grade might be imposed for some assessment stages

¹¹Exam or colloquium