

Master's degree program: MATHEMATICAL MODELING IN SCIENCE AND TECHNOLOGY

Qualification obtained upon graduation: MASTER

Type of master's degree program: PROFESSIONAL

Duration of studies: 2 years

Number of ECTS credits: 120

Form of education: IF (full-time education)

Language of instruction: English

Science field classification:

- **Fundamental field: Mathematics and natural sciences**
- **Branch of science: Mathematics**
- **Field of master's degree: Mathematics**
- **ISCED F-2013 broad field of study: 05 Natural sciences, mathematics and statistics**
- **ISCED F-2013 narrow field of study: 054 Mathematics and statistics**
- **ISCED F-2013 detailed field of study: 0541 Mathematics**

MISSION STATEMENT

The teaching and research mission of the master study programme in question fits the profile and speciality of the Faculty of Exact Sciences and aims the enhancement of the research capacity within the field of „Mathematics” and the improvement of the educational process and last but not least the opening of european opportunities through its international dimension.

OBJECTIVES

- Developing the analysis and synthesis capacity;
- Forming professionals in the field of mathematics that are recognized as such in the labour market;
- Perfecting communication skills (in English) specific for the activity domain as a mean to access more attractive jobs;
- Preparing for career opportunities in domains that do not necessarily have mathematics as the primary development goal.

COMPETENCES AND EXPECTED LEARNING OUTCOMES DEVELOPED WITHIN THE STUDY PROGRAM

Professional competences

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|---|---|
| C1. Performs analytical mathematical calculations | C7. Applies statistical analysis techniques |
| C2. Synthesizes information | C8. Performs data analysis |
| C3. Thinks abstractly | C9. Identify statistical models |
| C4. Communicates mathematical information | C10. Apply scientific methods |
| C5. Studies relationships between quantities | C11. Conducts scientific research |
| C6. Uses data processing techniques | C12. Apply the principles of ethics and scientific integrity in research activities |

Transversal competences

- | | |
|-------------------------------------|---------------------------|
| CT1. Think analytically | CT4. It works efficiently |
| CT2. Approach challenges positively | CT5. Work in teams |
| CT3. He is attentive to details | |

ACADEMIC CAREER DEVELOPMENT

The graduates of the Master of Science (MSc) program in “**Mathematical modeling in science and technology**”, according to the Romanian Occupational Catalogue (COR – ISCO-08), can be hired in the following positions:

- 2120 – cod 212002 – expert mathematician
- 2120 – cod 212013 – statistical inspector