

Master's degree program: ADVANCED STUDIES IN APPLIED COMPUTER SCIENCE

Qualification obtained upon graduation: MASTER

Type of master's 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 of the study program:

- Fundamental field: Mathematics and natural sciences

- Branch of science: Computer science

- Master's degree field: Computer science

- ISCED F-2013 broad field of study: 06 Information and communication technology (ICT)

- ISCED F-2013 narrow field of study: 061 Information and communication technology (ICT)

- ISCED F-2013 detailed field of study: 0613 Software and application development and analysis

MISSION STATEMENT

The mission of the Master of Science (MSc) program in “Advanced Studies in Applied Computer Science (English)” is to provide academic, research and public service leadership in a field perfectly aligned with the Faculty of Exact Sciences. The aims of this program are to:

- foster research-oriented critical thinking in Informatics and related applications;
- enhancing the educational offer by developing and nurturing a professional environment conducive to scholarship in the pursuit of knowledge; and
- open the European and international dimensions by building communication skills to excel in the profession.

OBJECTIVES

- Constantly improving skills and expanding knowledge to analyze socio-economical facts and phenomena for discovering solutions and proposing alternatives;
- Applying the acquired knowledge in scientific/professional projects with the aim of finding solutions to the challenges raised by the Romanian as well as European economy
- Developing the skills to find and use methods, procedures and scientific instruments, as well as fostering the ability to propose and convey scientific explanations for socio-economical processes and phenomena
- Nurturing English professional communication proficiency, effective integration within multinational/international research teams.

COMPETENCES AND EXPECTED LEARNING OUTCOMES DEVELOPED WITHIN THE STUDY PROGRAM)

Professional Competences

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|---|---|
| C1. Create the process diagram | C10. Manage cloud data and its storage |
| C2. Analyze software specifications | C11. It uses software libraries |
| C3. Create software | C12. Design the user interface |
| C4. It uses application-specific interfaces | C13. Carry out scientific research |
| C5. Develop the prototype for the software | C14. Uses computer-aided software engineering tools |
| C6. Translates requirements into a visual model | C15. Performs risk analysis |
| C7. Create data models | C16. Perform data analysis |
| C8. Interprets technical texts | C17. Identify statistical models |
| C9. Design cloud databases | |

Transversal Competences

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| 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 “Advanced Studies in Applied Computer Science”, according to the Romanian Occupational Catalogue (COR – ISCO-08), can be employed in the following positions:

2512 – Code 251206: Computer project manager

2120 – Code 212011: Statistician adviser