

Multimedia Systems Engineering

1. Admission Requirements:

• Prerequisites:

- Successful completion of high school studies and obtaining a baccalaureate degree or equivalent.
- Non-EU Citizens - Contingent upon the presentation of the Graduation Certificate from the preparatory year (excluding those who have completed their previous studies in the Romanian language) and obtaining the Letter of Acceptance issued by the Ministry of Education.
- EU Citizens + Swiss Confederation - Contingent upon the presentation of the Graduation Certificate from the preparatory year (excluding those who have completed their previous studies in the Romanian language) and the recognition of their studies by the National Centre for Recognition and Equivalence of Diplomas (CNRED).

• Entrance Exams:

- The admission average of registered candidates is made up of: average of the baccalaureate exam - weight 100%.
- Admission to undergraduate studies is strictly in descending order of the general admission averages obtained by the candidates respecting the capacity of tuition for each study program

2. Degree Levels:

- Bachelor's Degree: 4-year program.

3. Curriculum:

• Core Courses:

Mandatory courses that all students in the program must take:

- 3D Graphics and Animation
- Algorithm Design
- Analysis and Synthesis of Numeric Devices
- Applied Informatics
- Audio-Video Fundamentals
- Automatic Control Engineering
- Chemistry
- Coding, Editing, and Audio-Video Production
- Computer-Aided Graphics
- Computer Architecture
- Computer Networks
- Computer Programming and Programming Languages
- Databases
- Digital Electronics
- Diploma Project Development
- Dynamic Systems with Discrete Events
- Electrotechnics

- Instrumentation
- Linear Algebra, Analytical, and Differential Geometry
- Linear Electronic Circuits
- Management of Projects
- Mathematical Analysis
- Measurements and Transducers
- Mechatronics
- Microprocessor Systems
- Modeling, Identification, and Simulation
- Multimedia Application Programming
- Multimedia Equipment
- Numerical Methods
- Operating Systems
- Physics
- Project Management
- Software Systems Engineering
- Specialized Mathematics
- Systems Theory
- Virtual Reality
- Web Technologies
- Human-Machine Interfaces
- Practice for the Diploma Project
- Specialized Practice.

- **Electives:**

- Artificial Intelligence
- Communication
- Culture and Civilization
- Data Transmission
- Design, Aesthetics, and Semiotics of Audio-Visuals
- Distributed Systems
- Economics
- E-learning Multimedia Technologies
- Entrepreneurship and Copyright Protection
- Ethics and Academic Integrity
- Environmental Protection
- Expert Systems
- General Economy
- Intelligent Process Control Systems
- Intelligent Process Leadership
- Image Processing and Pattern Recognition
- Information Systems Analysis and Design
- Information Technologies for E-Services
- Journalism Radio-TV
- Management

- Multimedia Technologies in E-learning
- Protocols of Communications
- Radio-TV Technologies and Techniques
- Security of Information Systems
- Techniques of Diagnosis and Decision
- Advanced Communication Systems for Industrial Environment
- Cultural and Environmental Protection
- Transmissions of Data.

• **Major/Concentration:**

- The program aims to provide the essential knowledge for conceiving and developing advanced information systems that integrate elements of computer graphics, multimedia, and virtual reality. Focused on educating highly-trained specialists in a rapidly evolving field, crucial for both industry and information technology research, the program emphasizes the utilization of innovation in companies involved in the development of highly complex software products. The objectives of the Multimedia Systems Engineering bachelor's program are twofold: first, to instill exceptional technical competencies necessary for practical application development and scientific research in these cutting-edge domains, and second, to cultivate adaptability to rapid technological advancements. Furthermore, the program seeks to foster a broad understanding of the societal implications of these technologies, promoting their efficient, innovative, and ethical use in contemporary society.

• **General Education Requirements:**

- Successful completion of the mandatory courses, seminars and labs, completion of the three internships and the bachelor thesis.

4. **Credits:**

- Each semester carries a weight of 30 ECTS, with a total of 240 ECTS required for graduation.

5. **Internships and Practical Experience:**

- Students have the opportunity to carry out their internship in companies and enterprises in Teleorman county and its surroundings, as well as in the teaching and research laboratories of the faculty.

6. **Research Requirements:**

- Students carry out research activities in order to prepare their bachelor thesis.

7. **Academic Advising:**

- A supervising teacher is assigned to each year of study and partially assisted activities are coordinated by supervising teachers.
- The bachelor thesis is also supervised by a scientific supervisor.

8. **Extracurricular Activities:**

- Students have the option to participate in clubs, organizations, or extracurricular activities related to their field of study or personal interests.

9. **Examinations:**

- The courses will span 14 weeks during each semester and conclude with oral, written, or practical examinations. Successful completion of these exams is mandatory to earn study credits.

10. Thesis Defense:

The prerequisites for presenting a bachelor thesis before a committee include:

- Attainment of 240 ECTS credits throughout the program.
- Obtaining the approval of the scientific supervisor to present the bachelor thesis.

11. Graduation Requirements:

- Graduation necessitates the fulfilment of all program requirements, encompassing the completion of the required credit hours and the successful completion of the bachelor thesis.

12. Degree Awarding:

- Bachelor's Degree in Multimedia Systems Engineering.