Mathematics-Informatics

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: 3-year program.
3. **Curriculum:**
    - **Core Courses:**

        Mandatory courses that all students in the program must take:
        - Real Analysis (Measure Theory)
        - Ordinary differential Equations
        - The Architecture of Computer Systems
        - Data Structures
        - Mathematical Modeling
        - Complex Analysis
        - Probability Theory
        - Formal Languages and Automata
        - Database Systems
        - Theoretical Mechanics
        - Number Theory
        - Functional Analysis
        - General Topology
        - Advanced Programming Techniques Differential Geometry
        - Computer Networks
        - Artificial Intelligence
    - **Electives:**

- WEB Technologies / Statistics
- Numerical Analysis / Scientific computing
- Elements of Approximation Theory / Ethics and Academic Integrity
- Applied Geometry/ Astronomy
- Elements of Group Theory / Distributions Theory
- Elements of Nonlinear Analysis / Mathematical Software

- **Major/Concentration:**
  - The Mathematics-Informatics study program offers a rigorous and interdisciplinary curriculum, seamlessly integrating theoretical mathematical concepts with practical applications in the field of informatics. The Mathematics-Informatics study program aims to produce graduates who are well-equipped with a solid mathematical foundation, strong programming skills, and the ability to apply these skills in diverse informatics contexts. This interdisciplinary approach prepares students for a range of careers, from software development and data analysis to research in emerging fields at the intersection of mathematics and informatics.
- **General Education Requirements:**
  - Effectively completing both compulsory courses and seminars.

4. **Credits:**
   - A minimum of 180 ECTS are needed to graduate, with 30 ECTS assigned to each semester.
5. **Internships and Practical Experience:**
   - Engaging in practical stages and internships provides invaluable hands-on experience and a real-world perspective. These opportunities offer a dynamic platform for students to apply theoretical knowledge in professional settings, fostering a bridge between academic learning and practical implementation.
6. **Research Requirements:**
   - In order to meet the criteria for presenting their bachelor's thesis, students are required to engage in extensive study, resulting in a thorough and coherent completion of their academic endeavors.
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, student scientific circles, 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. The grading system for a subject ranges from 10

to 1, with whole numbers assigned as marks. The minimum passing grade is 5, and the highest achievable mark is 10.

10. **Thesis Defense:**

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

- Attainment of 180 ECTS credits throughout the program.
- Obtaining the approval of the scientific supervisor to present the bachelor thesis.

11. **Graduation Requirements:**

- Graduation requires meeting all program criteria, which include completing the necessary credit hours, passing the final Bachelor exam, and successfully defending the Bachelor thesis.

12. **Degree Awarding:**

- Bachelor's Degree in Mathematics-Informatics.