Agricultural Products Processing Technology

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:
        - Food Biochemistry
        - Food Microbiology
        - Principles and Methods of Food Preservation
        - Unit Operations in Food Processing
        - Quality Control of Food Products
        - Additives and Ingredients in the Food Industry
    - **Electives:**
        - Food for Special Purpose
        - Bee Products Technology
        - Food Traceability
        - Technology of Pastry and Confectionery Products

- Food Rheology

- **Major/Concentration:**
  - The program is meticulously crafted to nurture experts for both state and privately-owned food industry units, alongside research and design institutes. Committed to delivering a high standard of university education, our program is facilitated by a dedicated teaching staff. Our primary aim is to empower future food industry engineers, instilling in them the capacity for lifelong learning, a commitment to excellence and innovation in problem-solving, the ability to make informed decisions within the contemporary social and global context, and the development of leadership qualities in professional practice.
  - This comprehensive program integrates academic training with practical skills, covering the gamut of technological processes in every facet of the food industry. Encompassing optimization techniques, physico-chemical analysis, food chemistry, biochemistry, and microbiology, our curriculum ensures graduates are well-equipped to contribute significantly to diverse aspects of food production. From raw material conditioning to quality control and food product expertise, the training is designed to prepare individuals who can navigate the complexities of the dynamic food industry landscape. The overarching objective is to mitigate risks and elevate the safety standards of food consumption in this ever-evolving field.
- **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. An additional 10 ECTS is allocated to the diploma exam.
5. **Internships and Practical Experience:**

   The students benefit from a comprehensive 300 hours of practical experience, spanning from the first to the third year of study. This hands-on learning is strategically divided into field practice and specialty practice, designed to immerse students in a diverse range of tasks relevant to their future professions. To enrich this practical exposure, collaborative agreements exist between the Faculty of Environmental Engineering and Food Science and numerous food engineering enterprises, spanning various sectors such as bakery, dairy product manufacturing, meat processing, and beer technology. These partnerships aim to enhance students' practical understanding in real-world settings.

Moreover, within the framework of specific European projects, agreements have been established for entrepreneurship activities. This initiative, particularly involving students in their third and fourth years of study, facilitates practical experiences that bridge the gap between the specifics of their field of study and the dynamic demands of the labor market. This multifaceted approach not only enriches their academic journey but also cultivates skills essential for success in their future careers.

6. **Research Requirements:**
    - The Bachelor thesis is an intricate engineering project meticulously structured into vital components, covering raw and auxiliary materials, processing technology, packaging characteristics, material balance, thermal balance, quality control on technological flow, economic calculation, valorization of by-products, and hygiene in the food sector. In accordance with the curriculum, a dedicated 120 hours (equivalent to 10 ECTS) are assigned to the practice specifically designed to prepare students for the Bachelor thesis. This allocation ensures a comprehensive and well-rounded readiness for this pivotal academic milestone.
7. **Academic Advising:**
    - During each academic year, students are paired with a dedicated tutor from the teaching staff. This tutor serves as a guiding resource, assisting students in course selection, mapping out their academic trajectory, and addressing both professional and administrative concerns. This academic advisor provides continuous support from the first year of study through the fourth year. Acting as the intermediary between students and academic representatives, including teachers and management, communication is facilitated through various channels such as phone, email, and social media.
8. **Extracurricular Activities:**
    - Students enrolled in the Agricultural Products Processing Technology program actively participate in a variety of extracurricular activities closely aligned with their field of study. These activities include engaging in workshops focused on food production, attending symposia such as the Student Research Symposium and conferences addressing distinct topics such as Food waste. Additionally, students contribute to school dropout prevention activities and projects and actively participate in Special Event Days, such as International Food Day and Health World Day. This multifaceted involvement enriches their educational experience and provides valuable insights into the practical applications of their studies.
    - Complementing their involvement in academic and environmental initiatives, students maintain their own university-level organization—the Students League. This platform serves as a hub for student collaboration,

fostering a sense of community and providing an avenue for collective engagement beyond the confines of their academic pursuits.

9. **Examinations:**
    - The specific requirements for exams in a given discipline are explicitly outlined in the discipline syllabi. Professors communicate these requirements to students during the initial course session. Students must meet various criteria before taking the exam, which include active participation in all laboratory sessions, successful defense of the lab colloquium, and the satisfactory completion and presentation of the semester project with a minimum acceptable grade. The specific criteria vary based on the nature and intricacies of each discipline.
10. **Thesis Defense:**
    - The bachelor thesis undergoes a plagiarism check using specialized software before the decision is made to present it before a committee.
    - The bachelor thesis is expected to fulfill all required content chapters with a focus on scientific rigor. It should demonstrate accurate calculations, draw conclusions grounded in evidence, and present information in a clear manner. The presentation is an opportunity to showcase the graduate's professional knowledge and cross-disciplinary skills.
11. **Graduation Requirements:**
    - Students are required to accumulate all 240 ECTS, demonstrating successful completion of exams for all curriculum disciplines. The final examination is twofold, encompassing the assessment of fundamental and specialty knowledge alongside the defense of the bachelor thesis.
12. **Degree Awarding:**
    - Bachelor's Degree (Engineer) in Food Engineering (Agricultural Products Processing Technology).