

FRENCH-GEORGIAN UNIVERSITY



# BACHELOR DEGREE IN FOOD TECHNOLOGIES

## PRODUCTION MANAGEMENT IN MILK INDUSTRY

UNIVERSITY OF RENNES 1 – GEORGIAN TECHNICAL UNIVERSITY



*In the framework of the **French-Georgian university (FGU)**, this Bachelor degree aims at providing the competences to the students through reinforcing their knowledge and mastery in dairy products that they need for succeeding in the industry, as well as providing them with transversal competencies they will need for taking manager's positions.*



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## DESCRIPTION

Georgia has a long tradition of making cheese and other dairy products through milk and cheese transformation. Most of them are produced in a traditional way in different parts of the country for a very small number of consumers. In order to respond to the growing demand of the local people and export prospective, several companies are now proposing industrial products to the market. This industrialization of the milk industry comes with challenges related to food quality, food safety, economic optimization, adapting to legal norms and new dairy products requirement, notably in the framework of the Deep and Comprehensive Free Trade Area (DCFTA) conducted with the EU in September 2014. The dairy production industry requires skilled workers that are able to both manage a global workshop activity and to manage teams.

## INTERNSHIP

To complete the program, the students will spend 16 weeks in a professional environment, writing their final bachelor thesis (internship report) that will be rewarded with 20 ECTS. This first work experience before graduation will enhance the profile of the students to access the job market after graduation.

## REQUIREMENTS

In order to be eligible for the program, the student must have an English level equivalent to B2 before the start of the 4th year. The proficiency must be proved either with a certificate from a certified institution such as TOIEC, IELTS, or by taking a test provided at the GTU. The selection of students for the double degree program (the 4th year) will depend on their academic achievement during the first three years of the program.

## OBJECTIVES

This degree prepares the students to work in the private sector, in governmental and non-governmental organizations such as dairy companies, cheese making plants, milk collecting cooperatives, companies, laboratories, geographical indication certification systems, associations working for the improvement of milk and products quality, Ministry of Agriculture and affiliated agencies.

The program taught in Georgia is based on the already existing program implemented in Rennes 1 University – IUT de Saint Briec. Therefore, by enrolling in this program of the French-Georgian University, the students will follow the same program as French students, directly in Georgia, adapted to the needs of the country.

## TUITION FEE

The students of the double-degree program will be enrolled at the GTU for 4 years of the program. Students enroll at the University of Rennes 1 in parallel for the final year of the program. Tuition fee at the University of Rennes 1 is 2770€/year for non-EU citizens, but in the framework of the French-Georgian University, the tuition fee in Rennes 1 University will be around 170€/year for Georgian students. At GTU, tuition fee is 2250 GEL per year. Students have the possibility to get a grant from the Georgian government.

## MOBILITY

Mobility is not mandatory for completing the program. Eligible students can nonetheless apply for a mobility scheme of their choice through the GTU administration. Mobility cannot take place during the 4th year of study.

# PROGRAM STRUCTURE

First three years are delivered by GTU and are taught in Georgian. 4th year – The last year of the program is **fully taught in English** and composed of 32 ECTS dedicated to compulsory specialty subjects, 8 ECTS are divided up to personal, individual and group projects and 20 ECTS - to the industrial practice. The industrial practice can be done in either milk factories, small-scale cheese production companies, hygiene and quality control organizations, etc.

## *Composition of the 4th year*

**Module 1:** **Harmonization and Upgrading** (applied statistics, units and conversions, IT, documentation approach and monitoring)

**Module 2:** **Knowledge of the enterprise and its environment, capacity to lead a team and workshop**

- 2.1 Enterprise knowledge (study of the dairy industry, economics of enterprise)
- 2.2 Management (human resources, hierarchic line, law regulation, social rights)
- 2.3 Communication in a professional situation (human resources, visual communication, participating management, conflict management, English professional communication)

**Module 3:** **Industrial and Technological knowledge in Dairy industry**

- 3.1 Milk and transformation (preparation treatments, main pathways of milk transformation)
- 3.2 Cheese, specialties and fresh products (management of co-products, new cheese production, technological gears control)
- 3.3 Milk concentration, drying and by-products
- 3.4 Milk fat production
- 3.5 Milk ingredient, functionality knowledge and control

**Module 4:** **Global performance management**

- 4.1 Mastering and controlling performance factors (microbiology, chemistry, sensorial analysis)
- 4.2 Project management (methodology, plant construction)
- 4.3 Performance measurement (production management, computer-aided production engineering, etc)
- 4.4 Planning and scheduling
- 4.5 Global performance management

**Module 5:** **Project leadership** (tutored project)

**Module 6:** **Work experience**

16 weeks – The student will have to elaborate a final professional report and defend it in front of a jury as the final examination of the project.

## GRADUATION

After the successful completion of the studies, students will obtain 2 degrees: one Bachelor Degree from the GTU and one Bachelor Degree from the University of Rennes 1. Both degrees grant access to graduate programs (Master's levels) in Europe and in all other international higher education institutions that recognize French and Georgian degrees.