BEM Micro-credential

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| **BEM content (for all partners)** | Title/name of the credential | **Gluten-Free Bread and Pastry Production in Compliance with Green Standards** |
| Function of microcredit / purpose | This micro-credential provides practical and professional skills for producing gluten-free bread and pastries, emphasizing sustainable practices, waste reduction, and the use of local and sustainable raw materials. The program integrates green and digital skills, including energy-efficient technologies and software tools for production management, enabling a modern approach to this field. Participants will master a combination of traditional techniques and innovative methods, including recipe adaptation and using gluten-free flour alternatives like buckwheat, millet, and quinoa.Special attention is given to developing entrepreneurial initiatives through training on market trends and the demand for specialized products, as well as understanding the dietary needs of people withceliac disease, gluten intolerance, and other dietary restrictions. Graduates of this program will be equipped to develop sustainable solutions that meet modern industry demands with innovative ideas. |
| Possible target groups | * Professionals and bakery employees wishing to improve skills and expand offerings.
* Health-conscious individuals interested in practical skills for gluten-free diets.
* Entrepreneurs aiming to start ventures in gluten-free and sustainable production.
* Individuals with limited access to employment and educational resources, including the unemployed, elderly, migrants, returnees, people with disabilities, and rural residents.
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| Branch/sector ofapplication | Food industry, bakery, healthcare (food for people with special dietary needs), specialized gluten-free production. |
| Fields of application / work environment | * Bakeries specializing in gluten-free products.
* Food production facilities focused on healthy nutrition.
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|  |  | * Supermarkets and specialty stores offering gluten-free programs.
* Hotels and restaurants providing special menus for people with celiac disease and gluten intolerance.
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| Typical work/professional tasks | * Preparation and processing raw materials for gluten-free baking, understanding their properties.
* Application of techniques for making gluten-free bread and pastries, including basic methods for adopting recipes to gluten-free flour
* Monitoring food safety standards and implementing basic HACCP procedures relevant to gluten- free production
* Managing the storage and packaging of gluten-free products, with a focus on preventing cross- contamination with gluten
* Understanding the basic nutritional value of gluten-free products and their role in the diet of individuals with dietary restrictions
* Implementing sustainable practices to reduce waste and ensure energy-efficient operations in small- scale production facilities
* Basic use of digital tools for inventory tracking and simple management of production processes
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| Learning outcomes (personal and job related) | **Knowledge:*** Distinguishing between gluten- containing and

gluten-free flours and their properties (nutritional value, behavior in baking processes).* Basic principles of technological processes tailored to gluten-free production.
* Understanding the fermentation process in the context of
 | **Skills:*** Proper preparation and processing of gluten-free raw materials in accordance with hygiene and technological requirements.
* Efficient application of techniques for producing gluten-free bread and pastries, including recipe adaptation and management of product texture and structure.
* Application of HACCP principles and procedures
 | **Competencies:*** Independent organization and execution of production processes in compliance with gluten-free industry standards.
* Establishing quality control systems with HACCP protocol implementation.
* Developing innovative and sustainable solutions for gluten-free production
* Identifying market and consumer needs and adapting recipes accordingly.
* Using digital tools to optimize production processes and resource management.
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|  |  | gluten-free baking.* HACCP standards and procedures specific to gluten- free production.
* National and EU standards for labeling and safety of gluten- free products.
* Impact of various gluten-free raw materials (buckwheat, millet, quinoa) on texture, taste, and product quality.
* Basic sustainability principles in production processes, including waste reduction and resource optimization.
* Role of digital tools in production management

(inventory tracking, quality analysis). | to prevent cross- contamination with gluten.* Organization of storage, packaging, and labeling of gluten-free products in accordance with EU and national standards
* Use of digital tools for planning and monitoring production processes, inventory management, and nutritional analysis
* Application of sustainable practices in daily operations  waste reduction, energy efficiency, and the selection of local and sustainable raw materials.
 | * Proactively introducing innovations in business models and bakery technologies
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| Validation | Criteria:* Successful performance of professional tasks in a real or

simulated environment | Procedure:* Establishment of the examination committee
* Implementation of a practical project on a given topic
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|  |  | * Demonstration of acquired knowledge through practical work
* Reliability and precision in working with equipment for the production of

gluten-free bread and pastries | * Assessment of competencies and issuance of a certificate or digital badge
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| Recognized/accepted (documented by MoU ) | Vocational Education and Training Centre Education CentreEmployers in the Bakery Sector |
| Provider(s) | Educational institutions specialized in bakery and food technology, bakery training centers, privatesector, or food companies that provide training. |
| **Additional information (if needed)** | Entry level / prerequisites | It is necessary for the individual to have basic knowledge and skills in baking or the food industry and computer skills.Theoretical and practical training: 80 hours. Validation: 20 hours.Total duration: 100 hours. |
| Possible duration (recommendation) |
| **Specific content (national) (if needed)** | Position in the chain of educational programs | NQF level III–VThe micro-credential can be linked to the National Qualifications Framework (NQF) in the field of bakery and food technology. |
| Referring to NQF |
|  | Credits | 4 Credits.It is possible to add credits based on an agreed scoring system according to the national education system. |