**BEM Micro-credential**

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| **BEM content**  **(for all partners)** | Title/name of the credential | **Installation of Plumbing Systems** | | | |
| Function of the micro-credentials / purpose | Program is designed on the needs of industry-specific skills. It is vocational training program. | | | |
| Possible target groups | Any interested person, idividuals can study on the program. | | | |
| Branch/sector of application | Architecture and construction | | | |
| Fields of application / work environment | Person can be employed in the construction sectory. | | | |
| Typical work/professional tasks | 1. This involves detailing the various components and functionalities of plumbing systems, ensuring a comprehensive understanding of their operation.  2. This task requires interpreting blueprints and plans to accurately assess and quantify the necessary construction materials for plumbing installations.  3. This entails arranging the workspace in accordance with labor safety regulations to ensure a safe and efficient working environment for all personnel involved.  4. This task focuses on the proper installation of plumbing infrastructure within the internal water supply network, with an emphasis on incorporating thermal insulation to enhance efficiency.  5. This involves both the setup and removal of fixtures such as sinks, toilets, and other sanitary appliances, ensuring they are properly connected to the plumbing system.  6. This task includes the installation and removal of systems designed for heating water, ensuring they are integrated effectively within the overall plumbing framework. | | | |
| Learning outcomes (personal and job related) | Knowledge | Skills | | competences |
| **Knowledge**   1. **Plumbing systems and features:**    * Understanding the characteristics, design, and functionality of plumbing systems, including water supply, sanitary equipment, and water heating systems. 2. **Technical drawing literacy:**    * Knowledge of how to read architectural and construction drawings to calculate material quantities accurately. 3. **Thermal insulation principles:**    * Awareness of the importance and application of thermal insulation in internal water supply networks. 4. **Labor safety standards:**    * Understanding labor safety norms and their application to plumbing-related tasks.   **Skills**   1. **Plumbing system installation and dismantling:**    * Proficiency in installing and dismantling risers, pipes, outlet pipes, and water heating systems.    * Skilled in the installation and dismantling of various types of sanitary equipment. 2. **Material estimation:**    * Ability to calculate the amount of materials required for plumbing projects based on construction drawings. 3. **Worksite organization:**    * Practical skills in organizing a safe and efficient working environment.   **Competencies**   1. **Safe and efficient task execution:**    * Competence in performing plumbing tasks independently while adhering to safety regulations. 2. **Problem-solving in plumbing systems:**    * Ability to address issues during the installation or dismantling of plumbing systems, ensuring high-quality outcomes. 3. **System optimization:**    * Capability to plan and implement plumbing installations with consideration for efficiency, functionality, and compliance with technical standards. 4. **Technical adaptability:**    * Ability to adapt skills to diverse plumbing systems and work environments. | | | |
| Validation | criteria | | procedures | |
| There is formative and determinative assessment. Formative assessment may be conducted using both scoring and counting principles. Determinative evaluation provides for the use of a system based only on the principles of inclusion (based on the confirmation of competences) and allows the following two types of evaluation:  a) the learning outcome has been confirmed;  b) The learning outcome could not be confirmed.  In case of receiving a negative result during the assessment, the student has the right to request an additional assessment of the achievement of learning outcomes before the end of the program. | | | |
| Recognised/accepted (documented by MoU) | Name of companies  LLC “Gorgia” | | | |
| Provider(s) | LLC “Gorgia” training center | | | |
| **Additional information**  **(if needed)** | Entry level / prerequisites | Prerequisites for admission to the program: basic education and age 18 years and above.  Program duration in hours: 96 h.  Program duration in weeks: 8 weeks. | | | |
| Possible duration (recommendation) |
| **Specific content (national)**  **(if needed)** | Position in the chain of educational programmes | Level III – Vocational education (NQF) | | | |
| Reference to NQF |
| Credits |