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Series of the Certificate \_\_\_\_\_\_\_\_\_\_\_\_ No \_\_\_\_\_\_\_\_\_\_\_\_\_

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| **1. Title of the Certificate(1)** |
| ☐ Atestāts par arodizglītību  ☐ Profesionālās kvalifikācijas apliecība  Profesionālā kvalifikācija: **Biotehnoloģisko procesu operators** |
| (1) in the original language |

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| **2. Translated title of the Certificate(2)** |
| ☐ Certificate of vocational basic education  ☐ Certificate of professional qualification  Professional qualification: **Biotechnological Process Operator** |
| (2) If applicable. This translation has no legal status. |

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| **3. Profile of competences** |
| A biotechnological process operator prepares and uses simple biotechnological process raw materials, equipment and facilities (media, fermentation raw materials, etc.) and documents the results of the production process in accordance with the instructions.  Has acquired the competences required to perform the following professional duties and tasks:  3.1. Preparing equipment for operation according to the technological process:  ̶ check the technical condition of production equipment and auxiliary facilities;  ̶ prepare technological communications for work;  ̶ connect equipment and technological communications;  ̶ set technological parameters for equipment and technological communications;  ̶ clean and sterilise equipment and auxiliary facilities;  ̶ complete the biotechnological production process documentation for equipment preparation.  3.2. Preparation of materials for biotechnological production process:  ̶ weigh and measure fermentation raw materials;  ̶ prepare and sterilise the medium;  ̶ take samples of the prepared medium for quality control purposes;  ̶ prepare the necessary reagents and materials;  ̶ complete the biotechnological production process documentation for material preparation.  3.3. Execution of the biotechnological production process:  ̶ perform biotechnological production processes in accordance with the technological documentation and the work  assignment;  ̶ load the medium and feed the spawn into the reactor;  ̶ ensure the supply of necessary materials and reagents;  ̶ monitor equipment measurements and complete biotechnological production process documentation;  ̶ take samples for process control purposes in accordance with the technological documentation and the work  assignment;  ̶ monitor the operation and technical condition of equipment during the biotechnological production process.  3.4. Processing of the final product according to technological requirements:  ̶ store the final product in the reactor in accordance with the regulatory documentation;  ̶ unload or remove the final product for further processing in accordance with the regulatory documentation;  ̶ separate biomass from the culture solution;  ̶ carry out the separation and purification of the final product in accordance with the regulatory documentation;  ̶ process the final product in accordance with the regulatory documentation;  ̶ pack, label and package the final product in accordance with the regulatory documentation;  ̶ take samples of the final product for quality control purposes in accordance with the technological documentation and the work assignment.  3.5. Maintenance of equipment and auxiliary facilities after the biotechnological production process:  ̶ carry out cleaning and decontamination (destruction of microorganisms) of equipment and auxiliary facilities in  accordance with the regulatory documentation;  ̶ disconnect and clean technological communications;  ̶ prepare the residues from the biotechnological production process for further processing and/or disposal in accordance with the environmental requirements and regulatory documentation.  3.6. Compliance with the industry's binding quality system requirements:  ̶ comply with standard operating procedures, instructions and other regulatory documentation;  ̶ adhere to the principles of good manufacturing practice;  ̶ comply with hygiene requirements for staff, premises and equipment;  ̶ follow the procedure for identifying poor-quality products;  ̶ follow procedures for identifying poor-quality process communications, equipment and auxiliary facilities.  3.7. Implementing and adhering to the fundamental principles of the company's operation:  ̶ comply with labour protection rules;  ̶ comply with environmental protection rules;  ̶ comply with fire and electrical safety regulations;  ̶ provide first aid;  ̶ organise one's work complying with deadlines, resources and quality requirements;  ̶ use collective and personal protective equipment;  ̶ cooperate with colleagues;  ̶ maintain a clean and tidy working environment.  Additional competences:  *<<To be completed by the education institution>>;*  *̶ ...;*  *̶ ...;*  *̶ ...* |

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| **4. Employment opportunities in line with the professional qualification(3)** |
| Work in the chemical, biochemical, pharmaceutical, cosmetics and perfumery industries. |
| (3) If possible |

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| **5. Description of the Certificate** | |
| **Name and status of the body issuing the Certificate** | **National authority providing recognition of the Certificate** |
| *<<Full name, address, telephone number, website address; e-mail address of the issuing body.* *Legal status of the issuing body>>* | Ministry of Education and Science of the Republic of Latvia, website: *www.izm.gov.lv* |
| **Level of the Certificate**  **(national or international)** | Grading scale/Grade attesting fulfilment of the requirements |
| State-recognised document, corresponding to the third level of the Latvian Qualifications Framework (LQF level 3) and the third level of the European Qualifications Framework (EQF level 3). | A mark of at least "average - 5" in the vocational qualification examination (using a 10-point scale). |
| **Access to the next level of education** | **International treaties or agreements** |
| Certificate of vocational basic education or secondary education enables further education at LQF level 4/ EQF level 4. | *<<If applicable.* *To be completed by the education institution in case international treaties or agreements provide for the issue of additional certificates. If not applicable, delete comment>>* |
| **Legal basis** | |
| Vocational Education Law (Section 6) | |

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| **6. Means of obtaining the Certificate** | | | |
| ☐ Formal education:  ☐ Full-time  ☐ Full-time (work-based training)  ☐ Part-time | | ☐ Education acquired outside the formal education system | |
| **Total duration of training\*\*** (hours/years) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| **A: Description of the vocational training received** | B: Percentage of total (100%) programme | | C: Duration (hours/weeks) |
| Part of the education programme completed in the education institution | *<<Indicate the amount (%) of the education programme completed on the premises of the education institution>>* | | *<<Indicate the amount (in hours or training weeks) of the education programme completed on the premises of the education institution>>* |
| Part of the education programme completed in workplace internship, including work-based training | *<<Indicate the amount (%) of the education programme completed outside the premises of the education institution,*  *i.e. practical training in enterprises, workplace internships, work-based training>>* | | *<<Indicate the amount (in hours or training weeks) of the education programme completed outside the premises of the education institution,*  *i.e. practical training in enterprises, workplace internships, work-based training>>* |
| **\*\*** Applicable to formal education.  **Further information available at:**  [*www.izm.gov.lv*](http://www.izm.gov.lv)  [*https://visc.gov.lv/profizglitiba/stand\_saraksts\_mk\_not\_626.shtml*](https://visc.gov.lv/profizglitiba/stand_saraksts_mk_not_626.shtml)  **National Information Centre:**  National Europass Centre in Latvia, [*http://www.europass.lv/*](http://www.europass.lv/) | | | |