

1. TITLE OF THE CERTIFICATE (DE) ⁽¹⁾

**Reife- und Diplomprüfungszeugnis der
Höheren Lehranstalt für Informationstechnologie in der Landwirtschaft**

⁽¹⁾ in original language

2. TRANSLATED TITLE OF THE CERTIFICATE (EN) ⁽²⁾

Matriculation and Diploma Certificate of the College of Information technology in agriculture – Higher Vocational Education

⁽²⁾ This translation has no legal status.

3. PROFILE OF SKILLS AND COMPETENCES

Graduates of the College of **Information technology in agriculture** can plan and carry out engineering activities in the field of Information technology in agriculture. They are able to communicate natural, formal, agricultural, forestry, information technology and economic issues using subject-specific terms in the language of instruction and in English, both orally and in writing.

They can analyse and interpret the meaning and interactions of culture, society, nature and technology, the economy and law, clarify simple legal questions from different perspectives, explain essential regulations of labour and trade law and apply them in the professional environment, as well as apply basic legislation and regulations related to the area specialisation.

Graduates are qualified to use modern information technologies confidently and competently in everyday working life and to participate in the technological developments of a networked society.

In particular, graduates have the professional skills and competences to

- compare and assess agricultural production methods economically and ecologically and plan, implement and evaluate agricultural production measures;
- assess the processes and requirements of plant and animal raw material production as well as cultivated landscape management for mechanisation, automation and digitalisation and implement them in agricultural information and system technologies;
- design, analyse and implement algorithms, data structures and software for agricultural purposes;
- explain and apply basic laws, components, basic circuits, measuring procedures and protective measures of electrical engineering and electronics;
- design components of electrical engineering and automation technology in agricultural machines, integrate them into the overall system for control and regulation and carry out technical examinations and testing tasks;
- assemble and set up computer systems and describe their components and how they work together;
- assess operating systems in their design and also select, install and maintain them;
- implement security concepts, realise fail-safe, also heterogeneous system architectures and use network management professionally;
- present the structure and functioning of network-compatible and real-time capable microcontroller systems as well as technical bus systems and develop solutions for typical problems in agricultural information technology and real-time data processing;
- manage and analyse agricultural data with databases, design database architecture models, develop queries with standardised, structured query languages, and install, configure and use interfaces and content management systems;
- apply project and quality management methods in the context of information technology projects and develop and implement necessary planning and integration strategies.

Graduates have the economic skills and competences in business management to

- describe the structure of the annual financial statements, draw conclusions from economic indicators, carry out cash-based accounting and assess the impact of business transactions on the results of the annual financial statements;
- explain tax law aspects and the main types of company financing, draw up simple liquidity plans and explain the statutory ancillary personnel costs and the structure of simple payroll accounting;
- explain the process of setting up a business and how marketing instruments work;
- characterise the main business areas and processes within the company in terms of strengths and weaknesses;
- explain the goals of sustainability as well as conflicts of use and ecological crises in economic terms and in the context of global development;
- plan parts of a quality management system for a company, prepare the documentation and explain the importance of audits and quality certificates;
- plan, implement and document projects in teams and evaluate them on the basis of results.

Graduates have personal and social competences to

- act responsibly in their various roles and assess and reflect on the consequences of their actions as well as lead employees in an appreciative manner and integrate them into operational processes.

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE ⁽³⁾
Professional fields:

Employment in fields of activity with a high degree of personal responsibility in agriculture production, marketing, the seed, fertiliser and animal feed industry, in resource and energy management, in information and communications technology and also software development, in the public service at federal, provincial and municipal level and in agricultural and forestry consulting at the chambers of agriculture.

Pursuit of regulated professions on a self-employed basis (see also www.gewerbeordnung.at):

The trade of engineering offices (consulting engineers) can be taken up after at least six years of professional activity (§ 18 para. 3 of the 1994 Trade, Commerce and Industry Regulation Act) in the relevant specialist field and after successfully passing a qualifying examination. As a result of the liberalisation of the Trade, Commerce and Industry Regulation Act, access to almost all master craftsperson examinations and certificate of competence examinations is possible if the general requirements for carrying out a trade are met. The entrepreneurial examination is waived.

⁽³⁾ if applicable

(*) Explanatory note

This document has been developed with a view to providing additional information on individual certificates; it has no legal effect in its own right. These explanatory notes refer to the Council Resolution No. 2241/2004/EG of the European Parliament and the Council of 15 December 2004 on a single Community framework for the transparency of qualifications and competences (Europass).

Any section of these notes which the issuing authorities consider irrelevant may remain blank.

More information on transparency is available at: <http://europass.cedefop.europa.eu> or www.europass.at

5. OFFICIAL BASIS OF THE CERTIFICATE

<p>Name and status of the body awarding the certificate</p> <p>Educational institution recognized by the State of Austria, for address see certificate</p>	<p>Name and status of the national/regional authority providing accreditation/recognition of the certificate</p> <p>Federal Ministry of Education, Science and Research</p>
<p>Level of the certificate (national or international)</p> <p>EQF/NQF 5 ISCED 55</p>	<p>Grading scale / Pass requirements</p> <p>1 = excellent (excellent performance) 2 = good (good performance throughout) 3 = satisfactory (balanced performance) 4 = sufficient (performance meeting minimum pass levels) 5 = not sufficient (performance not meeting minimum pass levels)</p> <p>In addition, the overall performance at the final exam (matriculation and diploma exam) is rated as follows: Pass with distinction, Good pass, Pass, Fail</p>
<p>Access to the next level of education/training</p> <p>In accordance with the Federal Agriculture and Forestry Schools Act, BGBl. (Federal Law Gazette) No. 175/1966 as amended, this certificate entitles holders to attend a university or post-secondary VET college (Akademie); in accordance with the School Organisation Act, BGBl. (Federal Law Gazette) No. 242/162 as amended to attend a post-secondary VET course (Kolleg); in accordance with the Federal Act on University of Applied Sciences Degree Programmes, BGBl. (Federal Law Gazette) No. 340/1993 as amended to attend a university of applied sciences degree programme; and in accordance with the 2005 Higher Education Act, BGBl. (Federal Law Gazette) I, No. 30/2006 as amended to attend a university college of teacher education including the University College for Agrarian and Environmental Pedagogy Vienna.</p>	<p>International agreements</p> <ul style="list-style-type: none"> ▪ European Convention on the Equivalence of Diplomas, BGBl. (Federal Law Gazette) No. 44/1957 ▪ Convention on the Recognition of Qualifications concerning Higher Education in the European Region, Chapter IV, BGBl. (Federal Law Gazette) III, No. 71/1999 ▪ Training completed with this certificate is a regulated education and training programme in accordance with Article 11, point (c) (ii) of Directive 2005/36/EC on the recognition of professional qualifications, as last amended by Directive 2013/55/EU. The level of training corresponds to point (c) of Article 11 of the Directive.
<p>Legal basis</p> <p>National curriculum, BGBl. (Federal Law Gazette) II, No. 201/2016, current version; Regulation on Examinations BMHS, BGBl. (Federal Law Gazette) II, No. 177/2012, current version.</p>	

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

<p>1. Training and education within the framework of the prescribed curriculum at the College of Information technology in agriculture concluding with a matriculation and diploma examination;</p> <p>2. The external procedures according to External Testing Certification as defined in BGBl. (Federal Law Gazette) No. 362/1979, current version.</p>
<p>Additional information</p> <p>Entry requirements: Successful completion of a school year 8, if necessary entry examination;</p> <p>Duration of education: 5 years;</p> <p>Duration of compulsory work placements: Compulsory work placement for a total of 22 weeks during the holidays;</p> <p>Educational goals: Intensive five-year vocational training in general education, specialist theoretical and practical agricultural, forestry, information technology and economic subjects. Teaching of methods, competences and skills, which enable graduates both to directly exercise a high-level profession in the fields of agriculture, forestry and also information technology and electrical engineering/electronics or related fields and to take up academic studies. Key objectives are professional competence, personal and social skills, entrepreneurial thinking and acting, the ability of professional mobility and flexibility, the ability to respond positively to criticism, personal responsibility, social commitment, creativity, ability to work in a team, communication skills in the language of instruction and in at least one foreign language, learning competence and willingness to undergo continuous education and training.</p> <p>Subjects include: See curriculum in the matriculation and diploma certificate;</p> <p>More information (including a description of the national qualification system) is available at: http://www.zeugnisinfo.at and http://www.edusystem.at</p> <p>National Europass Centre: europass@oead.at Ebendorferstraße 7, A-1010 Vienna</p>