

1. TITLE OF THE CERTIFICATE (DE) ⁽¹⁾

Reife- und Diplomprüfungszeugnis der Höheren Lehranstalt für Mechatronik

⁽¹⁾ in original language

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

**School Leaving Certificate and Diploma Certificate of the
Higher Federal Technical College of Mechatronics**

⁽²⁾ This translation has no legal status.

3. PROFILE OF SKILLS AND COMPETENCES

A typical holder of the certificate is able to carry out typical engineering activities in the fields of mechanics and elements of mechanical engineering, electrical engineering, electronics, mechatronic systems and automation, manufacturing and industrial engineering, as well as applied computer sciences/informatics and subject-specific computer science/informatics. Other important work focuses on the planning, development, realisation, initial operation and maintenance of mechatronic systems, drives and devices related to precision engineering and automation technology, as well as on the programming of the latter.

Communicate about technical and economic matters orally and in writing in the English language.

Apply typical engineering principles in the fields of:

- Project planning, production, operation and maintenance of computer-controlled products and systems including the relevant hardware and software
- knowledge of specific materials, procedures and regulations for product and system development, thereby considering the guidelines of quality and product management
- application of sector-specific principles of design, construction, dimensioning, product design and economic efficiency
- sector-specific CAD applications
- knowledge of the theoretical and practical principles of mechatronics, electronics, measuring and control technology, computer engineering, manufacturing engineering and industrial engineering, as well as their links with intelligently controlled products
- construction, dimensioning, design and manufacturing of devices and assemblies of automation technology by combining different aspects of electronics, mechanics and fluid engineering/hydraulics
- structured and object-oriented programming of mechatronic systems
- detailed knowledge of mechanics, measurement and control technology, sensor technology, actuator technology and process control
- manufacturing of devices and systems for measuring, automation, real-time data processing and information/data processing
- application of the principles of project management, marketing, human resources management, negotiation techniques, contract management and financing, related to operational processes, thereby considering the guidelines of quality and product management.

Prepare to contribute their personal and social competences in the fields of:

- interdisciplinary work and activities in management, as well as
- their problem-solving skills, capacity for team-work, creativity, entrepreneurial thinking and acting, customer-orientation.

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE ⁽³⁾
Range of occupations:

Technical expert and senior manager in the field of mechatronics, expert in the implementation and application of mechatronic systems. Senior engineer for electrical, electronic and mechanical systems, as well as pneumatic and hydraulic systems. Manufacturing engineer focusing on the creation of interdisciplinary products and systems by using information technology skills. Calculation, design and dimensioning of mechanical, electronic, electrical and hydraulic systems. Development and design of automation solutions in a technical and economic environment, software development for automation and manufacturing systems. Product and project management.

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

⁽³⁾ if applicable

^(*) Explanatory note

This document is designed to provide additional information about the specified certificate and does not have any legal status in itself. The format of the description is based on the following texts: Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications, Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates, and Recommendation 2001/614/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers. More information on transparency is available at: <http://europass.cedefop.eu.int/> or <http://www.europass.at>

5. OFFICIAL BASIS OF THE CERTIFICATE	
Name and status of the body awarding the certificate Educational institution recognized by the State of Austria, for address see certificate	Name and status of the national/regional authority providing accreditation/recognition of the certificate Federal Ministry of Education, Science and Research
Level of the certificate (national or international) EQF/NQF 5 ISCED 55	Grading scale / Pass requirements 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) In addition, the overall performance at the final exam is rated as follows: Pass with distinction, Good pass, Pass, Fail
Access to next level of education/training In accordance with the School Organisation Act (Schulorganisationsgesetz), Federal Law Gazette no. 242/1962 as amended, this certificate entitles holders to attend a university, a post-secondary VET course (Kolleg), and a post-secondary VET college (Akademie); in accordance with the Act on Fachhochschule Study Programmes (Bundesgesetz über Fachhochschul-Studiengänge), Federal Law Gazette no. 340/1993 as amended, to attend a Fachhochschule study programme; and in accordance with the 2005 Higher Education Act (Hochschulgesetz), Federal Law Gazette I no. 30/2006 as amended, to attend a university college of teacher education (Pädagogische Hochschule).	International agreements <ul style="list-style-type: none"> • European Convention on the Equivalence of Diplomas leading to Admission to Universities, Federal Law Gazette no. 44/1957 • Convention on the Recognition of Qualifications concerning Higher Education in the European Region, Chapter IV, 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.
Legal basis National curriculum, Federal Law Gazette II no. 262/2015 current version Examination specification BMHS (concerning the final exams in vocational schools and colleges), Federal Law Gazette II no. 177/2012 current version	

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE
1. Training and education as defined by the National Curriculum for Secondary Colleges of Mechatronics 2. External certification as defined in Federal Law Gazette II no. 362/1979 current version
Additional information
Entry requirements: successful completion of school year 8; if necessary, entrance examination
Duration of Education: 5 years
Duration of compulsory work placement: totally 8 weeks
Educational objectives: Intensive five-year initial training programme in occupation-related practice and occupation-related theory, as well as in general education subjects, technical-scientific and business-related subjects. Independent use of thinking methods as well as attitudes towards work and decision-making which qualify graduates to immediately exercise professions at executive level in the engineering, arts and crafts sector in industry and trade as well as to take up higher studies. Use of personal and social competences in the way they are required for modern forms of work and communication – including in multicultural teams. Modern frames of mind and attitudes to work such as a cosmopolitan approach, creativity and innovation capacity.
Subjects include: see List of Subjects in the Reifeprüfung-Certificate and VET-Diploma
More information (including a description of the national qualification system) is available at: http://www.certificate.at or at http://www.edusystem.at or at http://www.bmbwf.gv.at
National Reference Point: info@zeugnisinfo.at National Europass Center: info@europass-info.at