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## 1. TITLE OF THE CERTIFICATE (DE)<sup>(1)</sup>

# Reife- und Diplomprüfungszeugnis der Höheren Lehranstalt für Maschinenbau Ausbildungsschwerpunkt Industriedesign

<sup>(1)</sup> in original language

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

# School Leaving Certificate and Diploma Certificate of the Higher Federal Technical College of Mechanical Engineering Specialist Subject Area: Industrial Design

<sup>(2)</sup> 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 industrial design, such as design, engineering mechanics and calculation, manufacturing engineering, machine tools and equipment, as well as in other priority areas
- of industrial design
- communicate about technical and economic matters orally and in writing in the English language

apply typical engineering principles in the fields of:

- Design, calculation and realisation of components and assemblies in the mechanical engineering sector
- Application of 3D-parametric design software
- Selection of materials, manufacturing methods, machine tools and equipment
- Design, implementation and application of pneumatic and hydraulic systems
- Basics of electrical engineering, automation technology, measuring, control and regulation technology
- Finding of ideas/concepts and brainstorming in the field of industrial design, concept development, modelling and implementation of design solutions
- Linking of ideas from the areas of research, design and development
- Application of design technologies for two and three-dimensional representations
- Production of design prototypes with different techniques and materials
- Implementation of safety requirements
- Application of methods of quality management, project management and process 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 teamwork, 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 fields of brainstorming, finding of ideas, concept work, design and development. Engineer for the design, development, calculation and realisation of machine tools and equipment in the mechanical engineering sector, including the production of design prototypes. Project manager. Senior employee and project leader.

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

<sup>(3)</sup> 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

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: <u>http://europass.cedefop.eu.int/</u> or <u>http://www.europass.at</u>

5. OFFICIAL BASIS O	F THE CERTIFICATE
Name and status of the body awarding the certificate	Name and status of the national/regional authority
Educational institution recognized by the State of Austria,	providing accreditation/recognition of the certificate
for address see certificate	Federal Ministry of Education, Science and Research
Level of the certificate (national or international)	Grading scale / Pass requirements 1 = excellent (excellent performance)
EQF/NQF 5 ISCED 55	2 = good (good performance throughout)
	3 = satisfactory (balanced performance)
	<ul> <li>4 = sufficient (performance meeting minimum pass levels)</li> <li>5 = not sufficient (performance not meeting minimum pass levels)</li> </ul>
	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	International agreements
In accordance with the School Organisation Act	
(Schulorganisationsgesetz), Federal Law Gazette no. 242/1962 as amended, this certificate entitles holders to	mas leading to Admission to Universities, Federal Law Gazette no. 44/1957
attend a university, a post-secondary VET course	<ul> <li>Convention on the Recognition of Qualifications</li> </ul>
(Kolleg), and a post-secondary VET college (Akademie); in accordance with the Act on Fachhochschule Study	concerning Higher Education in the European Region, Chapter IV, Federal Law Gazette III no. 71/1999
Programmes (Bundesgesetz über Fachhochschul-	• Training completed with this certificate is a regulated
Studiengänge), Federal Law Gazette no. 340/1993 as	education and training programme in accordance with
amended, to attend a Fachhochschule study programme;	Article 11, point (c) (ii) of Directive 2005/36/EC on the
and in accordance with the 2005 Higher Education Act (Hochschulgesetz), Federal Law Gazette I no. 30/2006 as	recognition of professional qualifications, as last
amended, to attend a university college of teacher educa-	amended by Directive 2013/55/EU. The level of training corresponds to point (c) of Article 11 of the
tion (Pädagogische Hochschule).	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

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1. Training and education as defined by the National Curriculum for Secondary Colleges of Mechanical Engineering – Specialist Subject Area: Industrial Design

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: <u>http://www.certificate.at</u> or at <u>http://www.edusystem.at</u> or at <u>http://www.bmbwf.gv.at</u>

 National Reference Point:
 info@zeugnisinfo.at

 National Europass Center:
 info@europass-info.at