Austria

# **Quality Assurance in Higher VET**

Presented on the examples of the master craftsperson qualification and the WIFI *Fachakademie* 

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**Quality Assurance in Higher Vocational Education and Training** 



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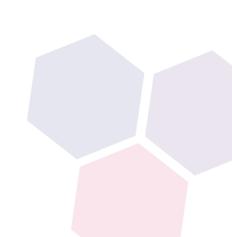






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### **Example 1: Master craftsperson qualification**

The qualification group "master craftsperson" in a nutshell:

Qualification awarding body	Trade association of the Federal Economic Chamber
Legal basis	This qualification is legally regulated in the master craftsperson examination regulations and in the Trade, Commerce and Indus- try Regulation Act.
NQF-level / EQF-level	Not yet allocated
ISCED-2011	ISCED 5
Qualification focus	Expert in technical/subject-specific matters, entrepreneur and IVET trainer
Entitlements	Setting up a company, training apprentices, replaces specialist area exam of <i>Berufsreifeprüfung</i> examination (entry requirement for universities)

The master craftsperson exam and certificate are part of the vocational education and training (VET) system and are the highest form of qualification in skilled crafts. People holding a master title have the right to run their own business and train apprentices. At the centre of the qualification, therefore, is preparation for the fulfilment of technical/subject-specific and entrepreneurial leadership tasks in a craft business and the proficiency to independently adapt job-related capacity to new demands. For this it is necessary to have top-level expert knowledge in their specialist area. Their knowledge, skills and competence enable them to deal with extensive tasks independently and with full responsibility. The list of occupations/sectors in which there is the option of taking a master craftsperson exam is legally regulated in the Trade, Commerce and Industry Regulation Act (Gewerbeordnung). There is no compulsory training needed for acquiring this qualification: Every person from the age of 18 is entitled to take the master craftsperson exam. In practice, almost all exam candidates have completed a relevant apprenticeship and gathered a few years of professional experience. The master craftsperson exam comprises five modules and is held by the offices responsible for the master craftsperson examination in the economic chambers. In the non-formal sector, preparatory courses are offered by a number of CET institutions; in the formal sector, this task is assumed by master craftsperson schools. Theoretically the exam can be taken without attending a course beforehand. However, in this case the exam candidates are not very likely to pass the exam; in reality practically no candidate sits the master craftsperson exam without taking part in a preparatory course.

The presentation of the quality assurance (QA) mechanism follows the **lifecycle of the qualification**, i.e. from the needs analysis to the review of the qualification. In order to structure the information provided the four phases of the **European Quality Assurance Reference Framework (EQARF)**<sup>1</sup> were taken:

Phase 1: planning Phase 2: implementation Phase 3: evaluation Phase 4: review

<sup>&</sup>lt;sup>1</sup>) The EQARF is a reference instrument to help Member States and VET providers to promote and monitor continuous improvement of their VET systems and/or VET provision based on common European references (cf. <u>http://www.eqavet.eu/gns/policy-context/european-quality-assurance-reference-framework.aspx</u>).





### **1. PLANNING**

#### Needs analysis

<b>1. Labour market information</b> : Do you collect data at this stage of the qualification development process? If so which data? How do you collect data? Who is in charge of collecting data? Are stakeholders involved? What are the roles of companies and of business organisations?	The master craftsperson examination regulations ( <i>Meisterprüfungs- ordnungen</i> , MPOs) are adopted by those federal guilds with relevant responsibility. In their capacity as representatives of the interests of the companies active in the market, they are familiar with the re- quirements of the world of work/professional activity and therefore with qualification requirements. They regularly exchange information and take part in discussions concerning relevant subjects at meetings of federal guild committees, which are held at least twice a year, as well as on other occasions. This enables changing requirements in professional activity to be taken into consideration by adopting amendments to the MPOs. Statistical data are not collected when new qualifications are introduced or existing qualifications modified.
2. Justification: Is it necessary to justify the introduction of a new programme/qualification or update an existing one? Who is in charge of the justification/motivation report? Are stakeholders involved?	One part of the federal guilds is the work committees on VET and CET. They are entitled – if relevant need is seen – to amend existing MPOs on application by the federal guilds. Firstly, the implementation of these amended MPOs must be decided on by the competent federal guild committee. These new drafts are then submitted for official review, which must involve all relevant internal and external organisations (professional associations, provincial guilds, offices responsible for the master craftsperson exam, etc.).
3. Piloting / pre-testing: Is there a pilot stage before the qualification is "formally" introduced? If so, who is involved in this phase? How is the qualification tested/piloted/ evaluated? What does this pilot phase involve? What consequences does this have?	Pilot phases are not foreseen as part of the introduction of master craftsperson qualifications.

## 2. IMPLEMENTATION

#### 2.1 Design of new and updating of existing curricula and trainings regulations

2.1.1 Legal basis / competent	Acquisition of the master craftsperson qualification is not preceded by
authority:	any compulsory training. Preparatory courses – most of which are
Who is responsible for the design	provided by the CET institutions of the social partners – are designed
of the curriculum/training	by the providers themselves. There are no regulations regarding the
regulation? What exactly is legally	contents they should cover or their scope. The respective provider is
regulated (examination areas,	responsible for the entire design of the courses. The master crafts-
KSC standards, etc.)?	person exam, on the other hand, is regulated.
	The Gewerbeordnung defines the basic design criteria for a master





	craftsperson exam (see next section). Statutory responsibility for the general examination regulation (registration for the exam, the exam fee, the costs for materials, etc.) rests with the Ministry of Economy. The respective sectoral federal guild (an employers' association) is responsible for designing the exam contents based on the <i>Gewerbeordnung</i> . Among other things, this Act specifies the subject-related sub-areas and the structure of the individual exam modules (such as the work samples/steps to be completed by the exam candidate in the course of the respective module, the maximum time available for this, the contents and duration of the oral exam, etc.) as well as the form in which candidates are assessed. In addition, it regulates credit transfer options for people who have already completed certain relevant specialist programmes.
212 Standards for the process	
2.1.2 Standards for the process of designing of curricula and training regulations: Are there standard procedures for the development of qualifications? Are there templates to be used?	As the master craftsperson qualification is not preceded by any com- pulsory training, there are also no binding guidelines concerning the design of the training contents. However, the <i>Gewerbeordnung</i> sets out the key design criteria for the master craftsperson exam with bind- ing effect. It must comprise five modules: Module 1 consists of the project-orientated, practical subject-related exam and comprises two parts: Part A covers the subject-specific skills in the respective craft, while Part B focuses on the subject-specific practical knowledge and skills required for business management. Module 2 comprises a sub- ject-related oral exam which consists of two parts: in Part A, candi- dates need to prove their professionalism in the subject-orientated area based on an example that is typical for the profession. In Part B they need to prove their knowledge and skills in (quality) manage- ment. Module 3 comprises a subject-related theoretical written exam with a minimum duration of five hours; Module 4 comprises the IVET trainer exam, Module 5 the entrepreneurial exam. There is a detailed template with specifications about how the master craftsperson exam- ination regulation needs to be drawn up – this template is the same for all master craftsperson exams.
2.1.3 Review and update of	The respective provider is responsible for designing training contents
<i>curricula:</i> Are curricula regularly assessed and reviewed?	for the non-compulsory preparatory courses. Therefore there are no relevant regulations concerning whether and when curricula need to be renewed/adapted etc.
	The exams are conducted by professional experts with comprehen- sive and state-of-the-art expert knowledge in the respective exam areas. In addition, regular meetings are held in which expert examin- ers from all over Austria exchange information on contents, ques- tions, procedures, etc. In addition, the respective federal guild is re- sponsible for adapting the contents of the master craftsperson exam to the current/new needs of the sector if necessary. There are no detailed regulations concerning whether, when and in what way the master craftsperson examination regulations need to be adapted/complemented/modified. Moreover, no statistical data are collected as a basis of which decisions are taken about re-orientating the exam.







2.1.4 Involvement of key stake- holders: Are stakeholders (social partners, companies, sector organisations, pedagogical experts, VET providers, etc.) involved in the design of new / in the update of existing curricula/training regulations? Note: If you refer to stakeholder involvement in each criterion, there is no need to have a separate criterion for this.	The respective professional organisation in the Economic Chamber is responsible for designing the contents of the master craftsperson exam and updating them if necessary. The draft of the new/adapted MPO is sent to a number of stakeholders involved in VET issues for review, including the Chamber of Labour and the Austrian Trade Un- ion Federation. Before the MPO is published, it needs to be approved by the Minister of Economy.
<b>2.1.5 Link to the labour market</b> : How is the curriculum linked to labour market needs? How is it guaranteed that the curriculum complies with labour market and company needs?	As the subject-related contents of the master craftsperson exam are adopted by way of an ordinance of the respective federal guild, this ensures that the contents meet the respective current requirements of the sector-specific labour market and its companies ("a qualification from the economy for the economy"). Subject experts in the federal guild define the standards to be met by the candidates to acquire the qualification. The <i>Gewerbeordnung</i> additionally specifies that the candidates prove their professionalism in the subject-oriented area based on an example that is typical for the profession in the first part of Module 2.
2.1.6 Application of learning outcome concept: Are LOs used in curricula/training regulations? How are they defined? Which domains of learning are used? Who is involved in the definition and what role do they have? Who is involved in the design of curricula/training regulations? How is the cooperation coordinated?	At the present time, LO formulations are not yet used in the MPOs. However, pilot projects have already been carried out in the course of which such a formulation of training contents has been implemented as one of the framework conditions for implementing the NQF, based on the respective MPO, to serve as an example (such as for the qualifications "master craftsman/craftswomen in motor vehicle engi- neering" and "master craftsman/ craftswomen in electrical engineer- ing").
<b>2.1.7 Information in curricula</b> <b>and training regulations</b> : What information is provided in curricula/training regulations (e.g. title, duration, entry requirements, learning contents, costs, etc.)?	The <i>Gewerbeordnung</i> sets out the structure of the master craftsper- son exam contents. The general examination regulation contains the organisation-related framework conditions for all master craftsperson exams (such as the registration mode, the exam procedure, fees, the issuing of certificates, and regulations related to the examiners).
	The respective occupation-specific MPOs set out the detailed exam contents for the subject modules (Modules 1 to 3) and refer to valid legal bases for Modules 4 (IVET trainer exam) and 5 (entrepreneurial exam). In addition, the MPOs also contain regulations concerning the assessment of exam candidates and the repetition of negative exam sections.
	The entrepreneurial exam is regulated in the Entrepreneurial Exami- nation Ordinance ( <i>Unternehmerprüfungsordnung</i> ), which is within the sphere of competence of the Ministry of Economy and contains both content-related objectives and organisational aspects of the exam (fees, certificate, the waiving of the exam, etc.) (see also the section "Entrepreneurial attitude and skills").





2.1.8 Pathways, progression and bridges (permeability): What does this certificate entitle its holder to do (on the labour market and within the education system)? 2.1.9 Entrepreneurial attitude	The sphere of competence of the Ministry of Economy also includes the IVET Trainer Examination Ordinance ( <i>Ausbilderprüfungsord- nung</i> ), which comprises organisational and content-related regula- tions (such as the specification of training objectives based on the job profile [ <i>Berufsbild</i> ], planning of the training in the company, etc.). Successful graduates of a master craftsperson exam are entitled to run their own business in a self-employed capacity (which they may call <i>Meisterbetrieb</i> , i.e. master craftsperson company) and train ap- prentices. Those graduates who do not want to become self- employed have acquired knowledge and skills that qualify them for higher-level activities and/or that can earn them higher salaries. Fur- thermore, the specialist area exam of the <i>Berufsreifeprüfung</i> is waived for graduates of the master craftsperson exam. Those who want to study at a higher education establishment have the option of getting credits for certain contents of the master craftsperson exam. The entrepreneurial exam is part of the master craftsperson qualifica-
and skills: Do they play a role in the curriculum? In what way are they imparted?	tion. It aims to determine whether candidates understand the connec- tions between the various company areas and are able to apply this knowledge when setting up their own business and dealing with the most frequent tasks/problems in a company. This exam imparts the entrepreneurial knowledge required for exercising a trade on a self- employed basis. It comprises the topics of communication and behav- iour in the company and towards individuals/institutions who are not part of the company; marketing; organisation; entrepreneurial legisla- tion; accounting; staff leadership and human resource management. The examination comprises a written and an oral section.
2.1.10 Companies as learning sites: What is the share of practical learning (work-based, work-place learning)? How is it organised? How are practical learning phases quality assured? How are they assessed? How are they linked to the theoretical tuition?	In the preparatory courses provided by WIFI, for instance, one part of instruction (depending on the occupation/sector) is held in a practice- oriented way in WIFI's own laboratories or training workshops. For Exam Module 2 (Part A), the <i>Gewerbeordnung</i> specifies that the can- didates need to furnish proof of their professionalism in the subject- orientated area based on an example that is typical for the profes- sion. Here, the oral examination has to build on company practice and orientate itself towards the occupational requirements to be made on a skilled worker. As training is not compulsory, there are no practical work phases in the narrower meaning of the word. However, candidates for the mas- ter craftsperson exam have generally been working in industry for several years before taking the exam. As part of the exam, informally acquired competences and non-formally acquired knowledge (as part of the preparatory courses) are therefore certified.
<b>2.1.11 Entry requirements</b> : Who is accepted to the programme/qualifications? What criteria do learners have to fulfil (e.g. age, pre-qualification, etc.)? Is prior learning recognised?	The master craftsperson exam can be taken by individuals from the age of 18 (regardless of previous qualifications). Usually, however, the exam candidates have completed an apprenticeship or attended a subject-related school of intermediate vocational education ( <i>berufsbildende mittlere Schule</i> ) and gathered several years of practical experience. Furthermore, in most cases they have attended the preparatory courses for the master craftsperson exam offered by CET





institutions.
Certain areas of the first two exam modules can be waived for hold- ers of a relevant apprenticeship diploma. Module 3 can be replaced by certain study programmes, <i>Fachhochschule</i> programmes or col- leges of higher vocational education ( <i>berufsbildende höhere Schulen</i> ) specified in the exam regulation. In Modules 4 and 5, the legislator
has also provided for different options of recognition due to prior learning.

### 2.2 Implementation of tuition

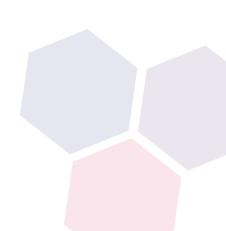
<b>2.2.1 Teachers and trainers</b> : Who can teach in the programme leading to the qualification in question? Which qualifications are they required to have? Is there obligatory in- service training for these teachers?	The largest provider of preparatory courses for the master craftsper- son exam (completion of which is not mandatory but is used by almost all exam candidates in practice) in the non-formal area are the Insti- tutes for Economic Promotion of the Federal Economic Chamber ( <i>Wirtschaftsförderungsinstitute</i> or WIFIs). In most cases, the trainers and programme managers of the WIFI courses are skilled workers and executives who are active in the economy, or pedagogues and experts from higher education institutions. This guarantees that their level of knowledge and involvement with the practice is fully up-to-date. It means that the trainers also practise their work on a part-time basis as far as possible. WIFI additionally offers its trainers an in-house CET programme on education/didactics free of charge and a price reduction for participating in certain subject-specific WIFI courses.
	In the formal sector, candidates can prepare for the master craftsper- son exam at two-year master craftsperson schools (i.e. special types of schools for engineering, arts and crafts). The training of teachers varies widely due to the differentiated range of subjects (such as uni- versity study plus a teaching diploma, university study plus a qualifica- tion for newly recruited teachers during the first two years of service, etc.). With the exception of teachers of general education subjects, teachers at VET schools and colleges are obliged to complete several years' business practice before entering the school service. Adapting the teaching at master craftsperson schools to the state of the art re- quires that the teachers continually update their subject-related knowledge and skills. Here the curriculum acts as a framework that points the way forward.
<b>2.2.2 Equipment and tools</b> : Is there special equipment required for the tuition?	The participants in the WIFI preparatory courses have lecture notes and learning material at their disposal which, in principle, are included in the tuition fee and are issued at the beginning of the event. When they take the master craftsperson exam, the exam candidates need to bear the costs for the materials and equipment required for carrying out the subject-specific work themselves.
2.2.3 Teaching and training materials: Who compiles these materials? Who guarantees that the contents are relevant and up-to- date?	The teaching materials and documents used in the preparatory cours- es are compiled by the institutions that provide them or by the train- ers/programme managers, taking into account the applicable exam regulation and current professional requirements.







<b>2.2.4 Pedagogy</b> : Which teaching methods are used? How much practical	According to the School Education Act ( <i>Schulunterrichtsgesetz</i> ), teaching materials in the formal school sector (master craftsperson schools) have to be appropriate in terms of material and presentation format and suitable for pupils of the school grade concerned or need to have been declared as suitable by the competent federal ministry for use in the classroom. The syllabus always needs to be selected in a practice-orientated manner based on the requirements and the state of the art. The teaching methods in the non-formal area can vary depending on the provider. The WIFI programmes are mostly orientated towards the immediate practical use of contents and their implementation in a day-
training (in companies, but also in laboratories, workshops, etc.) is foreseen?	<ul> <li>to-day job routine, while teaching is partly held in in-house labs and training workshops. The current learning model used at WIFI is LENA ("LEbendiges und NAchhaltiges Lernen" or "Lively and Sustainable Learning"): This model aims to motivate the learners and promote their independence. The goal is to link knowledge that already exists with knowledge that has been developed recently.</li> <li>Practice orientation and topicality are principles that apply to all subjects at master craftsperson schools, which are part of the formal education sector. Teaching projects are implemented in groups as preparation for the situation in the workplace. Elements of "blended learning" help establish a link between theoretical and practical phases. Excur-</li> </ul>
	sions and lectures by non-school experts aim to support insight into technical, company-specific and organisational connections as well as the social environment of the world of work.
<b>2.2.5 Learners' support</b> : Are career guidance and/or individualised and target-group oriented counselling services offered? What support service for potential drop-outs is foreseen?	Before the start of the preparatory courses, WIFI offers information events. These events provide information on admission requirements, the organisation and structure of the preparatory course as well as options for financial support. Another part is a self-assessment test, which covers the course participants' current level of knowledge, and a guidance talk that builds on the test result.





#### 2.3 Assessment

2.3.1 Examiners: Who is involved in the exam (single examiners/group of examiners)? What qualifications/which (professional) background are examiners required to have? Are they allowed to teach as well? How are they selected? How is their work assessed/ monitored?	The examiners are appointed by the head of the office responsible for the master craftsperson exam and need to be experts in one of the disciplines examined and active in professional practice. All examin- ers need to promise orally or in writing to the head of the office of the master craftsperson exam that they will exercise their position con- scientiously and impartially. Training programmes to prepare exam- iners are offered either directly by the offices responsible for the mas- ter craftsperson exam, via the WIFIs, or via the federal or regional professional organisations. In most cases these programmes focus on the organisational and pedagogical section. The examiner training concerning the subject-specific section is offered by several profes- sional organisations: This training deals especially with subject-spe- cific issues, the level of the questions, the state of the art, and as- sessment rules. If exam candidates also want to take the IVET trainer exam as part of the master craftsperson exam, at least one member of the examina- tion committee needs to meet the requirements set out in the Voca- tional Training Act ( <i>Berufsausbildungsgesetz</i> ), i.e. as well as the re- quired subject-related knowledge, either training practice of at least three years plus an apprenticeship diploma or training practice of at least six years).
<b>2.3.2 Entry requirement</b> : Who has access to the exam? Do candidates have to fulfil certain requirements (e.g. age, pre-qualification, etc.)? Is prior learning recognised?	Every person from the age of 18 is entitled to take a master crafts- person exam (regardless of previous qualifications). <i>De facto</i> , almost all candidates boast a professional qualification plus several years of practical professional experience. Almost all exam candidates have also completed (non-compulsory) preparatory courses beforehand. Credit transfer for prior learning is regulated in the ordinances (cf. the text above).
2.3.3 Standards (KSC): Who defines the standards? How are they linked to the LOs? How are they linked to the labour market? Are assessment criteria based on LOs and to what extent are they used in the assessment process?	The respective federal guild designs the actual contents of the sub- ject-specific section of the master craftsperson exam; therefore the design is closely associated with current developments in the labour market and the needs of companies.
2.3.4 Transparency of processes, assessment instruments, evaluation criteria: Is it necessary to make this information public?	All relevant legal provisions concerning the contents, structure and design of the master craftsperson exam can be found in the current legal documents on which they based and are generally accessible on the internet.
2.3.5 Appropriateness of assessment procedures: Which/How many assessment methods/ instruments are used? Do they correspond to real work- life situations?	The <i>Gewerbeordnung</i> specifies that the competent federal guild needs to specify the syllabus of the master craftsperson exam by taking into consideration the characteristic craft-related knowledge, abilities and experience that are required to practise the trade. In addition, candidates in Exam Module 2 (Part A) need to prove their professionalism in the subject-orientated area based on an example that is typical for the profession. Here, the oral examination needs to





	be developed from company practice and to orientate itself towards
	the occupational requirements made on a skilled worker. The exam-
	iners need to be experts in one of the disciplines examined and ac-
	tive in professional practice.
2.3.6 Competent institution: Who is in charge of the assessment? What rights does	The master craftsperson exams are carried out by the offices respon- sible for the master craftsperson exam. These are set up in the eco- nomic chambers but act in the sphere of competence delegated to
this institution have?	them on behalf of the Ministry of Economy. The office responsible for the master craftsperson exam organises the implementation of the master craftsperson exam (such as the appointment of exam commit- tee members). Furthermore, upon successful completion of a mod- ule, it issues the respective modular exam certificate and, upon sub- mission of all required modular certificates by the exam candidate, it
2 2 7 Complaint management	issues the related master craftsperson certificate.
2.3.7 Complaint management: Is it possible to view the assessment results? What can learners do if they do not agree with the assessment?	A transcript needs to be drawn up regarding the exam procedure and the consultation of the exam committee and signed by all examiners. The examinee needs to be informed in writing of the result of the written exam by the office responsible for the master craftsperson exam. Upon their request, exam applicants need to be allowed to view the assessment of their written exam papers at the office re- sponsible for the master craftsperson exam within one year. The oral section of the exam needs to be taken in front of the entire commit- tee. The exam applicant needs to be informed of the result of the exam by the chairperson in front of the entire committee. The exami- nee has no right to appeal against the committee's decision.

# 3. EVALUATION

#### Monitoring process

<b>1. Internal evaluation</b> : Statistical data on drop-outs and failure rates, satisfaction rate of individuals and employers with programme, the examination and the acquired skills/competences; results of complaint management. Are the results of internal evaluation measure made public?	Every year the economic chambers publish figures and statistics about the master craftsperson exams on their websites. These in- clude data concerning the number of exam attempts by module, sec- tor, gender and province, as well as information on exam success rates.
2. External evaluation:	Every year Statistics Austria publishes detailed statistics on educa-
Information on occupation	tion. These also include figures on completed master craftsperson
obtained by individuals after	exams. The annually updated ibw publication "Survey of Apprentice-
completion of training, according	ship Training" also contains graduation figures and success rates for
to type of training and individual	the master craftsperson exam. Evaluations of unemployment statis-
criteria (transition), type of	tics broken down by educational attainment are made available via a
employment. Are the results of	Public Employment Service Austria database and also provide infor-
external evaluation measure	mation on the labour market situation of master craftsperson exam
made public?	graduates.



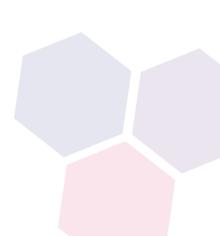


### 4. REVIEW

#### Conclusions

Where a need to update the master craftsperson examination regulation is perceived by the competent federal guilds, an amendment to the regulation can be initiated. This amendment process involves all relevant stakeholders (Ministry of Economy, professional organisations, the Austrian Federal Economic Chamber, adult learning establishments, etc.), contributing to a general consensus. Those adult learning establishments that provide preparatory courses regularly adapt their courses to changes in contents, a process in which they orientate themselves – as do the federal guilds – towards current labour market requirements. This comprehensive quality assurance process has proven successful. The master craftsperson training is one of the qualifications that are in great demand on this country's labour market.

This qualification also takes into account the latest developments in educational policy: Hence, for example, the master craftsperson exam was modularised in the course of the 2002 Amendment to the Trade, Commerce and Industry Regulation Act (*Gewerbeordnung*), which provides the option of awarding credits in individual modules for knowledge acquired at school and/or in company practice, among other things. Moreover, at this point, mention must be made of the pilot projects mentioned above. In the course of these, by way of example, learning outcome-orientated formulations of the contents of master craftsperson exams have been implemented as a contribution towards the forth-coming NQF implementation.





### **Example 2: WIFI-Fachakademie**

The qualification group "WIFI Fachakademie" in a nutshell:

Qualification awarding body	<i>Wirtschaftsförderungsinstitut</i> (WIFI) CET provider institute of the Economic Chamber
Legal basis	This qualification is not legally regulated; it is a qualification de- fined by WIFI.
NQF-level / EQF-level	Not yet allocated
ISCED-2011	Not classified in ISCED, as it has no legal basis
Qualification focus	Specialist training for holder of a (primarily) technical VET quali- fication, acquisition of entrepreneurial and in-company trainer competences
Entitlements	Setting up a company, training apprentices, replaces specialist area exam of <i>Berufsreifeprüfung</i> examination (entry requirement for universities)

With the Specialist Academy (*Fachakademie*, FA), the Institutes for Economic Promotion (*Wirtschafts-förderungsinstitute*, WIFIs, i.e. the CET providers of the Austrian Economic Chambers) offer part-time four-semester CET programmes for holders of VET qualifications (apprenticeship diploma, certificate of a school for intermediate vocational education) primarily in the technical area; these FA programmes also include the entrepreneurial examination and IVET trainer examination. The FA prepares people for work as specialist skilled workers, middle-tier executives and entrepreneurs. The programme is geared towards complex, interdisciplinary professional tasks, with contents based essentially on the three pillars of "further personal development", "specialist qualification", and "fundamentals of business management". FA graduates are awarded the title "Diplomierter Fachwirt/Diplomierte Fachwirtin" or "Diplomierter Fachtechniker/Diplomierte Fachtechnikerin". At present (as of April 2015) FAs are provided in the specialist areas of Applied Computer Science, Automation Engineering, Manufacturing Engineering and Production Management, Interior Design, Construction and Product Design, Marketing and Management, Media Informatics and Media Design. Successful completion of the FA replaces the specialist area exam of the *Berufsreifeprüfung*.

The presentation of the quality assurance (QA) mechanism follows the **lifecycle of the qualification**, i.e. from the needs analysis to the review of the qualification.

In order to structure the information provided the four phases of the **European Quality As**surance Reference Framework (EQARF)<sup>2</sup> were taken:

Phase 1: planning Phase 2: implementation Phase 3: evaluation Phase 4: review

<sup>&</sup>lt;sup>2</sup>) The EQARF is a reference instrument to help Member States and VET providers to promote and monitor continuous improvement of their VET systems and/or VET provision based on common European references (cf. <u>http://www.eqavet.eu/gns/policy-context/european-quality-assurance-reference-framework.aspx</u>).





### **1. PLANNING**

Needs analysis

<b>1. Labour market information</b> : Do you collect data at this stage of the qualification development process? If so which data? How do you collect data? Who is in charge of collecting data? Are stakeholders involved? What are the roles of companies and of business organisations?	"WIFI Österreich Bildungsmanagement", the development and coor- dination body for all Institutes for Economic Promotion (WIFIs) in Austria, regularly develops new education and training products for every business area (technology, management, languages, etc.) that are in demand on the market. Around twenty percent of the pro- grammes are newly developed every year and adapted to the current demand of the economy. All the other courses and programmes are adapted and revised at least once a year. Market observations are conducted regularly, and experience reports by interested students, companies and graduates of ongoing programmes are collected. In addition, studies are commissioned during which various research institutes (such as Gallup) interview employers, employees, experts, etc. about various topics.
	The development of the FA in 1992 was preceded by an inventory consisting of part-time CET programmes available for apprenticeship graduates at that time. Most of them were "evening schools" (such as colleges of engineering, colleges of business administration), which – from the viewpoint of WIFI – mainly covered theoretical know-how, whereas FAs have deliberately linked theory and modern-day practice with a focus on career guidance.
2. Justification: Is it necessary to justify the introduction of a new programme/qualification or update an existing one? Who is in charge of the justification/motivation report? Are stakeholders involved?	For WIFI as an education and training provider of the Federal Eco- nomic Chamber, market needs are ultimately decisive for develop- ing/adapting qualification offerings. The original idea in the course of developing the FA in 1992 was to offer apprenticeship graduates a further step in their educational career (under the motto "A career with apprenticeship"). Both at that time, and also for the FA pro- grammes that were created later, non-traditional job profiles (for which different qualification pathways already existed) have been selected deliberately. Therefore the development of the FA aimed to provide a completely new part-time specialist programme for Aus- tria's CET market.
3. Piloting / pre-testing: Is there a pilot stage before the qualification is "formally" introduced? If so, who is involved in this phase? How is the qualification tested/piloted/evaluated? What does this pilot phase involve? What consequences does this have?	A pilot phase in the narrower sense of the term (that is, defined as "pilot training/school pilot project) is not foreseen when a new FA specialist area is introduced. As the WIFI's qualification programmes are strongly market-orientated (that is, geared towards the interests of potential participants and/or the economy), demand is decisive for maintaining/modifying/re-orientating them. The <i>WIFI-Fachakademie</i> is a so-called non-formal qualification, which means it is not legally regulated. Consequently, any changes (such as to the curriculum, assessment procedure, etc.) can be realised very quickly.





### 2. IMPLEMENTATION

#### 2.1 Design of new and updating of existing curricula and trainings regulations

2.1.1 Legal basis / competent authority: Who is responsible for the design of the curriculum/training regulation? What exactly is legally regulated (examination areas, KSC standards, etc.)?	"WIFI Österreich Bildungsmanagement" is responsible for curriculum development. A general WIFI examination regulation is in force for the organisation of exams at the WIFIs. This is defined by the Presid- ing Committee of the Austrian Federal Economic Chamber and brought to the attention of the Ministry of Economy. In addition, provi- sions concerning implementation have been adopted that set out the content and duration of the final exams in the individual FA specialist areas and are also drawn up by the Economic Chamber and WIFI.
2.1.2 Standards for the process of designing of curricular and training regulations: Are there standard procedures for the development of qualifications? Are there templates to be used?	There is no nationwide uniform catalogue of questions as the exam syllabus is continually adapted to current economic conditions. Cur- ricula are also orientated towards the latest economic and industrial developments with a focus on career guidance. Only the exam mo- dalities are defined in a binding manner in the WIFI examination regulation.
<b>2.1.3 Review and update of</b> <i>curricula</i> : Are curricula regularly assessed and reviewed?	The contents of the latest WIFI course programmes are revised and updated at least once a year. The training content and syllabus is discussed and coordinated in regular meetings of the course man- agement team, teachers and examiners. Since their establishment, FAs have undergone a steady process of adaptation and reposition- ing in terms of content. Over the course of time, FAs have reduced their specialist areas considerably because the education system and consequently demand from participants and the economy have changed.
2.1.4 Involvement of key stake- holders: Are stakeholders (social partners, companies, sector organisations, pedagogical experts, VET providers, etc.) involved in the design of new / in the update of existing curricula/training regulations? Note: If you refer to stakeholder involvement in each criterion, there is no need to have a separate criterion for this.	The WIFIs – in their capacity as CET establishments of the economic chambers – translate current economic and technical developments in the labour market and the needs both of employers and employees into (continuing) education and training programmes. In this work, they cooperate closely with companies, HR managers, ministries, higher education institutions (HEIs), etc.
<b>2.1.5 Link to the labour market</b> : How is the curriculum linked to labour market needs? How is it guaranteed that the curriculum complies with labour market and company needs?	WIFI sees itself as a service organisation in the field of vocational education and training (VET) and continuing education and training (CET) on behalf of Austria's economy. In order to meet this objective, WIFI maintains regular contact with entrepreneurs and HR managers. The teaching is as practice-orientated as possible. Many of the lecturers/teachers at the WIFIs are practitioners from industry. The examiners are also experts with practical experience and know-how on pedagogical matters and exam implementation. As the FAs are de-
	signed as part-time programmes and learners therefore continue their professional activities while taking part in the training, they can apply the recently learned contents directly in the practical work environ-





2.1.6 Application of learning outcome concept: Are LOs used in curricula/training regulations? How are they defined? Which domains of learning are used? Who is involved in the definition and what role do they have? Who is involved in the design of curricula/training regulations? How is the cooperation coordinated?	ment of their company. Specifically equipped laboratories and teach- ing workshops are at their disposal for the practice-orientated part of the training. At the present time, LO formulations are not yet used in the FA cur- ricula. However, pilot projects have been launched with the objective of describing the training contents based on LOs (such as for the curriculum of the Automation Engineering <i>Fachakademie</i> pro- gramme). Trainers, examiners, course designers, WIFI representa- tives, and researchers are involved in these pilot projects. They all participate actively in the LO description process, which is accompa- nied by researchers.
2.1.7 Information in curricula and training regulations: What information is provided in curricula/training regulations (e.g. title, duration, entry requirements, learning contents, costs, etc.)?	Publicly accessible course materials and documents are available for each of the FA programmes. They also include general information on the training, such as the course title, the objective of the training, and the title awarded to graduates. These publications also contain information on the target group and access requirements for the train- ing, the programme structure and the allocation of hours per subject, training contents, methodology and didactics, and exam modalities. In addition, they include information on financial aspects of the train- ing, such as costs and funding options. The general WIFI examination regulation includes binding information on the forms of exams, the exam committee, registration and admis-
<b>2.1.8 Pathways, progression</b> <b>and bridges (permeability)</b> : What does this certificate entitle its holder to do (on the labour market and within the education system)?	sion to the exam, the exam syllabus, the exam procedure, and the determination of the exam result, certificates and exam fee, which apply to all exams held at the WIFIs. The provisions concerning implementation at the individual specialist FA areas contain specific information about the final exams (contents and duration). The FA graduates are awarded the title <i>"Diplomierte/r Fachwirt/in"</i> or <i>"Diplomierte/r Fachtechniker/in"</i> . This qualification replaces the specialist area exam as a part of the <i>Berufsreifeprüfung</i> as well as the entrepreneurial exam and IVET trainer exam. The FA training prepares people for work as specialist skilled workers, middle-tier executives and entrepreneurs.
2.1.9 Entrepreneurial attitude and skills: Do they play a role in the curriculum? In what way are they imparted?	The fields of business planning, organisation, human resources, ac- counting, law, and marketing as well as the entrepreneurial exam form an integral element of all FA programmes. These course con- tents impart the ability to understand business administration pro- cesses in the company and their incorporation in the business envi- ronment.
2.1.10 Companies as learning sites: What is the share of practical learning (work-based, work-place learning)? How is it organised? How are practical learning phases quality assured? How are they assessed? How are they linked to the theoretical tuition?	Specifically equipped laboratories and teaching workshops are at the students' disposal for the practice-orientated part of the training. Training is deliberately geared towards complex, interdisciplinary professional tasks and current labour market requirements. For example, training as part of the FA for Automation Engineering is conducted using state-of-the-art industrial components; the theoretical part of learning is frequently followed immediately by practical exercises.





	There are no practical work phases in the narrower sense of the term (alternating with theoretical instruction) as the FAs are designed as career-integrated programmes and are mainly attended by people who work in the relevant field anyway.
<b>2.1.11 Entry requirements</b> : Who is accepted to the programme/qualifications? What criteria do learners have to fulfil (e.g. age, pre-qualification, etc.)? Is prior learning recognised?	The FA mainly targets holders of a subject-specific apprenticeship diploma or a certificate from a school of intermediate vocational edu- cation, with the programme management of the respective training pathway specifying the apprenticeships that may be considered as subject-specific. In addition, candidates need to provide proof of at least one year of relevant specialist experience in the profession. However, graduates of upper secondary schools and university de- gree holders with professional practice are also admitted. Before entering the FA, applicants either have to have an interview with the programme management team that aims to examine the subject- specific requirements, or take an orientation test.
	Interested students who have not completed a subject-specific ap- prenticeship or attended a school of intermediate vocational educa- tion, but can prove lengthy subject-specific practice, can be admitted as special-status students, with the proviso that they receive their apprenticeship certificate within the first two semesters. The appren- ticeship certificate needs to be submitted to the programme man- agement team by the end of the second semester at the latest. If learners fail to do so, they are not entitled to progress to the third semester.

### 2.2 Implementation of tuition

<b>2.2.1 Teachers and trainers</b> : Who can teach in the programme leading to the qualification in question? Which qualifications are they required to have? Is there obligatory in-service training for these teachers?	The trainers are skilled workers and executives who are active in the economy, pedagogues and experts from higher education institu- tions; in the majority of cases they come directly from the sector con- cerned. Therefore they have access to the latest level of knowledge and an involvement with the practice; the trainer activity is usually carried out on a part-time basis.
	As well as specialist qualifications, specific pedagogical expert knowledge is also required of trainers and programme managers: When the FA was developed, it was already taken into account that work in these programmes especially is appropriate for adults and motivates the participants. WIFI additionally offers its trainers an in- house CET programme on education/didactics free of charge and a price reduction for access to relevant WIFI courses.
2.2.2 Equipment and tools:	The working material and documents required for the respective pro-
Is there special equipment required for the tuition?	gramme are always included in the participation fees.
2.2.3 Teaching and training	WIFI makes available and selects the scripts and learning materials.
materials:	The training content and syllabus is discussed and coordinated in
Who compiles these materials?	regular meetings of the course management team, teachers and
Who guarantees that the contents are relevant and up-to-date?	examiners. The course materials and documents are updated and





<b>2.2.4 Pedagogy</b> : Which teaching methods are used? How much practical training (in companies, but also in laboratories, workshops, etc.) is foreseen?	adapted to the requirements of the business sphere on a regular basis. Teaching at FAs is very practice-orientated and is also partly held in specifically equipped laboratories and teaching workshops. Practical examples from the professional environment are solved – alone or in the team – on an interdisciplinary basis. As part of FA programmes, it is also taken into account that work in these programmes needs to be especially appropriate for adults. Based on the WIFI learning scheme
	"LENA – Lively & Sustainable" ("LENA – LEbendig & NAchhaltig"), the trainers support the participants in their work on the contents with suitable learning methods and, in this way, they develop self-learning skills.
<b>2.2.5 Learners' support</b> : Are career guidance and/or individualised and target-group oriented counselling services offered? What support service for potential drop-outs is foreseen?	Before entering the FA, applicants either have to have an interview with the programme management team that aims to examine the subject-specific requirements, or take an orientation test.

#### 2.3 Assessment for certification

<b>2.3.1 Examiners</b> : Who is involved in the exam (single examiners/group of examiners)? What qualifications/which (professional) background are examiners required to have? Are they allowed to teach as well? How are they selected? How is their work assessed/ monitored?	An exam committee is responsible for the exam. It comprises the WIFI's Managing Director or his/her authorised representative as the chairperson and at least one examiner who is appointed by WIFI. The examiners are experts with practical experience and know-how on pedagogical matters and exam implementation. They are also mostly lecturers in the FK programme. The members of the exam committee are obliged to exercise their function in an objective and impartial manner and maintain secrecy about the entire exam procedure. The examiners are prepared for their work in training courses held at regular intervals. This training also aims to facilitate exchanges and coordination between examiners.
<b>2.3.2 Entry requirement</b> : Who has access to the exam? Do candidates have to fulfil certain requirements (e.g. age, pre- qualification, etc.)? Is prior learning recognised?	Registration for the exam needs to include proof of identity and proof of payment of the exam fee. In case of exams where previous at- tendance of a programme is compulsory, only those individuals will be admitted who have attended at least three quarters of the previous programme or course. Where additional admission requirements need to be fulfilled based on the provisions concerning implementa- tion, relevant proof also needs to be enclosed to the exam registra- tion. In case of subjects that have already been completed during the programme, credits are awarded for the relevant exam in the final qualification.
2.3.3 Standards (KSC): Who defines the standards? How are they linked to the LOs? How are they linked to the labour market? Are assessment criteria based on LOs and to what extent are they used in the assessment process?	In its capacity as the owner of the FA qualification, WIFI is also re- sponsible for organising the assessment procedure. To date, stand- ards related to knowledge, skills and competence that are formulated in a learning outcome-orientated manner have not yet been specified – but the experienced examiners have implicit knowledge of what has to be proven by candidates to obtain the qualification. The subject-related contents of the FA exam are orientated towards





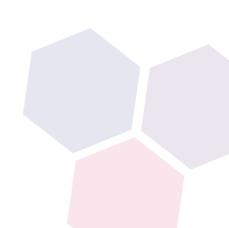
2.3.4 Transparency of	the current labour market requirements of the sector. Thus, for ex- ample, the subject-specific assignment to be solved as part of the project work (which is part of the exam) needs to be directly orientat- ed towards practical application, and the approaches towards solu- tions that the examinees develop in the course of their work also need to be viable in the company. The examination regulations, the implementation provisions and the
processes, assessment	information brochures for the individual FA programmes can be ac-
instruments, evaluation criteria:	cessed on the internet. The examinations themselves are not public
Is it necessary to make this	but the chairperson is entitled to admit guests.
information public?	but the charperson is chilled to durint guests.
2.3.5 Appropriateness of	The examiners are experienced experts from practice and thus en-
assessment procedures:	sure that the current labour market requirements are met. The final
Which/How many assessment	certificate is also very clearly designed with orientation towards the
methods/instruments are used?	professional requirements of the company (see explanations further
Do they correspond to real work-	above).
life situations?	auuve).
2.3.6 Competent institution:	An exam committee (EC) needs to be set up for carrying out the re-
Who is in charge of the	spective oral exam. This exam committee comprises the WIFI's Man-
assessment? What rights does	aging Director or his/her authorised representative as the chairperson
this institution have?	and at least one examiner who is appointed by WIFI. The written
	exam is prepared by the programme management team in coopera-
	tion with experts/trainers who are competent in the respective subject
	matter.
	maller.
	The exams need to be announced in an appropriate and timely man- ner. If the required minimum number of candidates has not registered for the exam within the registration period as expected, the exam date can be postponed. The decision on the approval of exam mate- rials is made by the EC chairperson.
	The assessment of the project work and of the written exam is carried out by the examiner. The result of the oral exam is determined in a secret session of the EC by a majority of votes. In the event of a tie, the chairperson shall have the casting vote. The decisions of the EC are final. The event assessment is determined based on the availa
	are final. The overall assessment is determined based on the availa- ble individual assessments. A positive overall assessment can only be awarded where candidates have achieved a positive assessment in all sections of the exam.
2.3.7 Complaint management:	Any exams that have been negatively assessed can be repeated
Is it possible to view the	three times. The EC must decide in each case if the overall exam,
assessment results? What can	exam sections or individual exam subjects need to be repeated.
learners do if they do not agree	
with the assessment?	Minutes have to be taken about the exam, including the results of the
	exam sections and the overall exam.



# **3. EVALUATION**

#### **Monitoring process**

<b>1. Internal evaluation</b> : Statistical data on drop-outs and failure/success rates in the exam, satisfaction rate of individuals and employers with programme, the examination and the acquired skills/competences; results of complaint management. Are the results of internal evaluation measure made public?	<ul> <li>Feedback is obtained as part of participant surveys at regular intervals. Questions that are asked in the course of these surveys relate, for example, to the improvement of the professional situation after graduation from an FA or the success of knowledge transfer during the training. Regularly conducted market research aims to gather information about the customers' wishes and satisfaction.</li> <li>Every WIFI event is evaluated by using written assessment sheets from participants and trainers. Quality assurance teams visit events to obtain direct feedback from the participants during the event. All feedback, wishes, ideas and suggestions from participants and trainers are recorded electronically and examined for their viability and the frequency of mistakes at periodical intervals.</li> </ul>
2. External evaluation: Information on occupation obtained by individuals after completion of training, according to type of training and individual criteria (transition), type of employment. Are the results of external evaluation measure made public? On which level is external evaluation carried out (national/regional/provider)? Is external evaluation carried out systematically? Are graduate surveys made? How is the feedback of the labour market taken into account? To what extent and how are LOs used in this process?	Different quality management systems are used at the individual re- gional WIFIs: OENORM EN ISO 9001:2008, EFQM and different quality labels awarded at regional level (CERT-NÖ, wien-cert). Graduate surveys are made, however, not systematically and regu- larly. Feedback from the labour market is neither collected systemati- cally but since trainers and examiners are practitioners from compa- nies, their feedback is considered in the revision of the programme and the examination.







### 4. REVIEW

#### Conclusions

WIFI keeps track of the changes in CET requirements and adapts education and training programmes accordingly. The contents of current courses on offer are revised and adapted at least once a year. Market observations are carried out at regular intervals, also in the form of commissioned studies as well as surveys among participants, trainers and graduates. As the trainers and examiners mainly come from professional practice – and are supported by regular exchanges in meetings of the programme management team, teachers and examiners – it is possible for the contents of the teaching, learning and examinations to be kept fully up-to-date.

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The changing CET requirements of the participants are reflected in the continual adaptation and repositioning process at the *Fachakademien* (FAs). Since the scheme began in 1992, FAs have reduced their specialist areas considerably because the education system is undergoing further development and, as a result, the demands of participants and the economy have also changed: Thus, for example, the curricula have been shortened to two years at the expense of general education and in favour of subject-specific, vocational subjects, because market observations and experience reports from interested learners and companies have revealed over the years that the FAs are mainly used as a professionalisation instrument and a practice-orientated higher qualification option while at work.

