

**Regulation on the occupational image and the examination requirements
in the practical and theoretical part of the master craftsman exam for
the profession of Hearing-Aid Acoustician
(Hörgeräteakustikermeisterverordnung-HörgAkMstrV)**

26. April 1994

On the basis of §45 of the Handicrafts Code in the version of 28 December 1965 (BGBl. 19966 I S. 1), which has last been amended by article 24 No. 1 of the law of 18 March 1975 (BGBl. I S. 705), decreed by the Federal Ministry of Education and Science:

1. Occupational Image

(1) The scope of practice of a Hearing-Aid Acoustician embraces the following services:

1. Selection and fitting of hearing devices and other devices of acoustic communication,
2. Diagnostic hearing testing to generate the data necessary in order to determine the adequate provision of hearing-aids,
3. Taking of ear-molds of the outer ear and production of ear fitting pieces
4. Making of in-situ devices and special hearing-aids,
5. Maintenance, repair and completion of hearing-aids, auxiliary and measuring devices,
6. Selection and fitting of hearing protection means after noise measurement and analysis.

(2) The following knowledge and skills are required in the profession of Hearing-Aid Acoustics:

1. Knowledge of physics and chemistry,
2. Knowledge of profession-related electronics and electro technique, especially of electro acoustics and hearing-aid circuitry,
3. Knowledge of general acoustics, physical and psychic acoustics,
4. Knowledge of the anatomy and pathology of the ear, the speech organs as well as knowledge of the physiology and patho-physiology of hearing,
5. Knowledge of auditory frequency, dynamic, intensity and demand interval capabilities,
6. Knowledge of psychological principles in psycho-acoustic measurements, when dispensing hearing-aids, the use and familiarization with hearing-aids,
7. Knowledge of profession related information technology,

8. Knowledge of the assembling and mode of action and application of hearing devices, otoplastics and the relevant accessories,
9. Knowledge of methods in order to generate acoustic data necessary to fit hearing-aids and protect the hearing,
10. Knowledge of profession related material and auxiliary material,
11. Knowledge of profession related regulations of the health and social law, especially of the legislation on non-medical practitioners, social welfare, social care as well as profession related regulations concerning the safety at work,
12. Knowledge of all profession related regulations of the German Association of Electricians (VDE), the German Industrial Association (VDI) as well as national and international norms and recommendations,
13. Measurement and calculation of profession related physical values in acoustic in the acoustic measurement and electronic amplifier technology,
14. Profession related testing of material,
15. Reading and making of wiring diagrams, diagrams and technical drawings,
16. Testing, maintenance and repair of hearing aids, auxiliary devices and measuring instruments,
17. Maintenance and repair of profession related machines, testing and measuring instruments as well of t he devices,
18. Reading of threshold and above threshold measurements as well as applications of subjective, objective and computer-aided measurements,
19. Selection and fitting of hearing-devices and hearing-aids,
20. Guidance and instruction of hearing impaired on how use the hearing devices and the hearing aids,
21. Taking of outer ear molds,
22. Production, fitting and maintenance of ear fitting pieces and adapters,
23. Installation of hearing-aids and their components into an ear fitting piece,
24. Maintenance of energy sources for hearing-aids and spare parts,
25. Measuring and analysis of noise,
26. Selection, making and fitting of hearing protection means,
27. Processing/Handling of plastics and metals,
28. Making of shells for hearing-aids,

29. Making and assembling of hearing devices and hearing-aids.

2. Exam requirements in part I und II of the master craftsman certificate Structure, duration and passing of the practical exam (part I)

(1) In part I of the master craftsmen exam an assigned task needs to be mastered and a work specimen has to be delivered.

(2) The completion of the assigned task for the master craftsmen certificate shall not take longer than two workdays; the completion of the work specimen shall not take longer than eight hours.

(3) Minimum requirement for the passing of part I is a performance rate, sufficiently' for the assigned task and the work specimen.

Master Craftsmen Exam – Assigned Task

As part of the assigned task assigned for the master craftsmen exam the following steps have to be completed:

1. Diagnostic hearing testing,
2. Selection of adequate hearing-aids on the basis of the generated data,
3. Pre-adjustment of the selected hearing-aids and measuring control,
4. Measurement comparison of the hearing-aids on the hearing-impaired,
5. Making of four exactly fitting outer-ear molds,
6. Making of a behind-the-ear otoplastic moulding, an in-the-canal-shell and a special form.

Work Specimen

(1) The four following tasks have to be completed as work specimen, most importantly numbers 1 and 2:

1. Diagnostic hearing testing,
2. Repair of a hearing-aid,
3. Fitting of a hearing-aid into an individually made shell,
4. Final assembling of a specified hearing-aid,
5. Measuring of the transmission behaviour of a hearing-aid on the ear,
6. Programming of hearing-aids, especially with the aid of information technology,

7. Profession related testing of material and auxiliary material.

(2) Only the skills and knowledge that were not or only insufficiently demonstrated in the task assigned for the master craftsmen exam, will be tested.

Exam of the theoretical knowledge (part II)

(1) In part II knowledge of the following four exam subjects has to be proven:

1. Psychology of hearing-impaired:

a) Psycho-social situation of hearing-impaired,

b) Psychology of ageing taking into account the specific situation of hearing-impaired people;

2. Profession Related Technology:

a) Physical and chemical coherences,

b) Acoustic, physio- and psycho acoustics,

c) Electronic, electro technical and wired coherences;

3. Provision of hearing-aids:

a) Anatomy and pathology of the ear as well as physiology and patho-physiological aspects of hearing, anatomy and pathology of speech generating organs of the human body and their function,

b) Methods in order to determine acoustic data,

c) Methods of hearing-aid fitting,

d) Construction and mode of operation of the hearing-aids;

4. Calculation:

Determination of cost taking into account all relevant factors for the pricing.

(2) The exam will be taken in writing and orally.

(3) The written exam shall take no longer than twelve hours; the oral exam shall not exceed half an hour per examinee. For the written exam, 6 hours per day shall not be exceeded. The examinee acquitted of the oral exam upon request if his/her written exams were graded with at least „good“.

(5) Minimum requirement in order to pass part II are at least „sufficient“ grades in the exam subject according to paragraph 1 No. 3.