



Department for studies and examination



Anton-von-Webern-Platz 1, 1030 Vienna, Tel.: +43-1-711 55 exts 6914/6918/6919
e-mail: studienabteilung@mdw.ac.at
homepage: <http://www.mdw.ac.at>

**INFORMATION SHEET
DIPLOMA STUDIES
TONMEISTER EDUCATION**

**Application deadline for the entrance examination in June 2012
for the 2012/13 academic year
24th of May 2012**

online registration under:

<http://www.mdw.ac.at> → programmes of study → registration for entrance exam

Department of Composition and Electro-acoustics
Anton-von-Webern-Platz 1
1030 Vienna
Office: Ms. Graschopf
Tel.: +43-1-711 55 DW 2101
e-mail: graschopf@mdw.ac.at

December 2011

What is a Tonmeister?

Unlike the profession of sound engineers or sound mixers, the profession of Tonmeister primarily demands a creative and artistic focus. Tonmeister represent the interests of music and the audio arts in the world of technology. After all, over 90% of music consumption comes from their hands/crosses their desks. They are comparable to an interpreting artist, arranger or composer; their instruments are microphones, mixing consoles, loudspeakers, sound effect equipment and computers, etc. When a work of music is translated into electroacoustic reality, Tonmeister occupy a central role, serving in a key advisory capacity. In addition to possessing absolute mastery of the technology, they are expected to be able to demonstrate their independent creativity. This is because Tonmeister are frequently required to cover a wide array of disciplines (e.g. in editing, arranging, image and lighting design, etc.) Furthermore, they are expected to have excellent people skills, as they often play a key role in handling composers and artists during production. More often than not Tonmeister work on a freelance basis and have to establish and operate their own studios, making it necessary to have the appropriate knowledge in business management and the law as well.

Because of the continued rapid advance of technology, the profession of Tonmeister also continues to widen; new branches of the profession are constantly opening, creating the need for specialists. The question of whether these new technologies will deliver improved results, however, depends on the mindset and the sensibilities of the people who use them. For that reason, versatility, creativity and artistic talent are the key criteria and skills needed for meeting the challenges posed by every new technological advancement.

The goal of this course of study is therefore to train balance engineers who are capable of working creatively in all branches of production, who are not merely technicians, but are rather able to take on the role of artistic production head.

Career possibilities:

Music balance engineer, recording engineer (and/or producer), sound director, live balance engineer, theatre balance engineer, film balance engineer, sound designer, broadcasting balance engineer and radio producer, etc. The fields of acoustics research (documentations, spatial acoustics, industrial acoustics, etc.), equipment and systems development and education offer further career possibilities. The degree programme in Tonmeister Education also provides graduates with an ideal foundation for other professions, such as studio manager, production manager for media and events, music editor or programming planner, lecturer for initial and further training programmes, composer and arranger, head of an ensemble or musician (in particular for electroacoustic or popular music)

What do we expect from you?

- Talent in both music and technology.
- Impeccable aural skills (at all frequencies), a good memory for sounds and a musical ear.
- A wide array of artistic interests, in particular in music, but also in the art of words and film, as well as the corresponding knowledge of literature.
- Your own ability to make music (with the mastery of at least one instrument or voice).
- Technical knowledge/Understanding of technology.
- Interest in computerised systems.
- Talent for handicrafts and hands-on activities
- Mental and physical ability to work under pressure
- Ability to improvise and flexibility

As the demands of the profession far exceed the ability of the entrance examination to scrutinize the prospective student's aptitude, we recommend that you ask yourself the following questions:

- Are you quick on the uptake and are you able to quickly size up a situation?
- Can you maintain a high level of concentration for a longer period of time?
- Are you able to keep your cool under great pressure?
- Are you a team player, can you assert yourself if needed?
- Are you in the habit of working efficiently?
- Are you willing to accept irregular working hours and often working in different locations?
- Are you willing to constantly work to stay current in your qualifications, in particular in as regards both technical, as well as economic-legal knowledge?

If you can answer these questions affirmatively and meet the above-listed qualifications, you are perfectly suited to a career in Tonmeister Education.

ENTRANCE EXAMINATION

The entrance examination is a tool for evaluating the candidate's talent and aptitude for the course of study, in particular for evaluating the knowledge of music and skills s/he already possesses. The entrance examination is broken down into the following parts:

A) written:

1. Aural skills tests
 - a) Musical (e.g. intervals, atonal sequences of tones, rhythms, dictation of one-and two-part melodies, four-voice chords, pinpointing errors, repertoire knowledge, etc.)
 - b) Acoustic/technical (e.g. sounds, noises, tuning purities, acoustic characteristics of sound excerpts, recognising disruptions, etc.)

Candidates must first pass the aural skills test in order to be allowed to take the next part of the examination.

2. Written tests

- a) On the candidate's knowledge of general music theory (chords, general principle of voice leading, forms, organology and score reading, music history and musical styles, etc.)
- b) On the candidate's knowledge of mathematics, acoustics and physics (the difficulty level corresponds to that of upper level secondary school).

Candidates must first pass the written test in order to be allowed to take the oral examination.

B) Oral:

1. Musical part:

The candidate must demonstrate his/her skill on an instrument or in voice by performing two works of medium difficulty from different stylistic eras. If the candidate sings or plays an instrument other than a keyboard instrument, s/he must also demonstrate basic piano skills as well.

(Should the candidate's instrument be piano, for example, s/he is to perform pieces such as a three-part invention by J.S. Bach or two movements from a Mozart or Beethoven sonata, as well as a piece of his/her own choosing. If the candidate sings or plays an instrument other than a keyboard instrument, s/he is to play a two-part invention by Bach and a quick movement from a sonatina or easy sonata).

The candidate will also be asked questions from general music theory and the history of music and culture (including avant-garde, jazz, pop, cinema, theatre, verbal art, etc.)

2. Technical part:

The candidate must demonstrate his/her ability to understand technical correlations /relationships by solving an easy hand-on problem from studio engineering (e.g. elementary handling of studio equipment – with instruction – such as in remixing, etc.)

The candidate will also be asked technical questions (e.g. basics of electrical engineering, acoustics, studio engineering, etc.)

In addition, the entrance examination is a tool for evaluation the candidate's personal aptitude for a career as balance engineer.

The entrance examination also requires the candidate to demonstrate his/her proficiency in German
Further information see page 16.

PROGRAMME OF STUDIES

The degree programme is broken down into two stages of study:

The first stage of study covers 112 (or 110 or 108, depending) semester hours, takes four (4) semesters and ends when the student successfully passes the **first diploma exam**.

The second stage of study covers 112 (or 108, depending), takes six (6) semesters and enables students to both deepen and broaden their knowledge and specialise in a given field:

- a) by selecting an **area of specialisation**
The areas of specialisation represent course packages consisting of a core subject (course in the subject "Producing") and supplementary subjects.

Students are to select one of the following areas of specialisation:

Recording Engineer

Sound Direction

Film and Video

Radio

- b) by taking an **elective**
Students must choose their elective by taking a core subject not covered by their chosen areas of specialisation.

Students may choose from the following elective courses:

Music Recording, Sound Reinforcement, Film Soundtracking, Radio Producing

Depending on availability, students may also select several areas of specialisation or electives.

The second stage of studies ends when the student has successfully passed the **second diploma exam**, after which the university awards the graduate with the academic degree

"Magister (Magistra) artium" (abbreviated: Mag.art.)

Students are also required to complete a **technical work experience** during their first stage of studies and a **three-month work experience** with companies active in their chosen field for the purposes of gaining practical expertise based on the knowledge and skills learned in the classroom.

DEGREE PROGRAMME: TONMEISTER EDUCATION

1st Stage of Study (4 Semesters)

Fundamentals in the Areas of:

Music (music theory, ear training, instrumental/vocal practice, etc.)
Engineering (theory of sound engineering, acoustics, studio engineering etc.)

1st Diploma Examination

2nd Stage of Study (6 Semesters)

Deepening of General Knowledge in the Areas of:

Music (music theory, ear training, instrumental/vocal practice, etc.) and **Dramaturgy**
Engineering (theory of sound engineering, acoustics, studio engineering etc.)
Business (law, business management, personality coaching)
Selection of one of four areas specialisation:

Specialisation **RECORDING ENGINEER**

*Recording engineer (producer),
Music balance engineer*

Music recording (classical/pop)
Live recording, studio producing
Production of electroacoustic
music
Voice recording
restoration

Specialisation **SOUND DIRECTING**

*Sound director, theatre balance
engineer, live balance engineer*

Sound reinforcement
(indoor and open air)
Live electronic music
Stagecraft, lighting
Multimedia
Installations
Communication Systems

Specialisation **FILM & VIDEO**

*Film balance engineer,
Sound designer*

Voice, music and
Noise processing
(sound design)
Original sound, dubbing,
Mixing
Multimedia

Specialisation **RADIO**

*Radio Producer,
Broadcasting balance engineer*

Editing
Station design (identifications,
Jingles etc.)
Producing
Broadcast control room
Presentations

Work Experience with companies active in these fields (broadcasting, audiovisual industry, etc.)

2nd Diploma Examination

Course Schedule

1st STAGE OF STUDIES

Courses:	1 st	2 nd	3 rd	4 th sem.
<i>Sound Engineering:</i>				
THEORY OF SOUND ENGINEERING 1-4	2.0	2.0	2.0	2.0
ELECTROACOUSTIC EQUIPMENT 1-4	2.0	2.0	2.0	2.0
MUSIC PROCESSING 1-4	2.0	2.0	2.0	2.0
<i>Fundamentals of Composition:</i>				
HISTORICAL COMPOSITIONAL PRACTICES 1-4	3.0	3.0	3.0	3.0
ANALYSIS 1-4	2.0	2.0	2.0	2.0
<i>Producing:</i>				
STUDIO ENGINEERING 1-4	2.0	2.0	2.0	2.0
<i>Other Required Courses:</i>				
Instrument or Voice 1-4 ¹	1.0	1.0	1.0	1.0
Piano 1-4 ²	1.0	1.0	1.0	1.0
Voice Training 1,2	1.0	1.0		
Choir 1,2			2.0	2.0
Aural Training 1-4	2.0	2.0	1.0	1.0
Recording Analysis 1-4	2.0	2.0	2.0	2.0
Music History 1-4	2.0	2.0	2.0	2.0
Organology 1,2	2.0	2.0		
Acoustics 1-4	2.0	2.0	2.0	2.0
Exercises for "Studio Engineering" 1-4	4.0	4.0	2.0	2.0
	30.0	30.0	26.0	26.0

¹ Depending on the courses available. You are allowed to change the instrument **once** in the whole study. Currently, the following instruments are offered in addition to piano: violin, viola, violoncello, flute, clarinet, organ and cembalo, as well as voice. For other instruments instructors must be taken from Institute 5 (Strings and Other Stringed Instruments) Institute 6 (Leonard Bernstein Institute for Wind and Percussion Instruments) or for instruments from the music education programmes of studies. As the number of places there is usually very limited students are recommended to speak to these instructors well before the entrance examination. Should the candidate select an instrument not offered by the Institute for Composition and Sound Engineering, written certification/verification is to be submitted at the entrance examination that the student has been granted admission to a degree programme at another institution or that the student has already fulfilled the requirements for a course of study of this kind.

² Not required if the student's instrument of choice is a keyboard instrument.

FIRST DIPLOMA EXAMINATION

The first diploma examination consists of the examinations from all of the required courses from the second stage of studies and the first jury diploma examination. Students must have completed all courses from the first stage of studies and the technical work experience in order to be admitted to the second jury diploma examination.

The subjects covered on the first diploma examination are “Fundamentals of Composition”, “Sound Engineering” and “Production”.

The examination consists of the following parts:

- 1st part: Fundamentals of Composition (Music Theory)
 - a) Written examination (e.g. four-part imitational vocal composition in the style of the 16th century or parts of a three-part instrumental fugue in the Baroque style, reduction of an orchestral score to two systems (“piano reduction”), analysis of a shorter work (Musical Forms))
 - b) Oral and practical examination (e.g. performing thoroughbass, modulation, repertoire knowledge, etc.)

- 2nd part: Sound Engineering
 - a) Written examination (electronics, analogue and digital audio engineering, studio engineering)
 - b) Oral examination (electronics, analogue and digital audio engineering, studio engineering)

- 3rd part: Submission of three recordings (one each from the areas of classical music, as well as jazz and pop) including appurtenant documentation.

- 4th part: Practical demonstration of acquired knowledge and skills by performing an artistic-technical task in the studio (e.g. digital editing, mixing, MIDI-systems, measuring, etc.) with time allowed for preparation.

The first diploma examination is also a means of evaluating the candidate’s aptitude for his/her chosen areas of specialization for the second stage of studies.

The selection of the candidate’s area of specialization depends on the number of places available.

2nd STAGE OF STUDIES

Courses:	5.	6.	7.	8.	9.	10. Sem.
<i>Sound Engineering:</i>						
THEORY OF AUDIO ENGINEERING 5-8	2.0	2.0	2.0	2.0		
ELECTROACOUSTIC EQUIPMENT 5,6	2.0	2.0				
MUSIC PROCESSING 5,6	2.0	2.0				
<i>Fundamentals of Composition:</i>						
HISTORICAL COMPOSITIONAL PRACTICES 5,6	2.0	2.0				
FUNDAMENTALS OF APPLIED MUSIC AND SOUND DESIGN 1,2			2.0	2.0		
JAZZ THEORY AND ARRANGING 1,2			2.0	2.0		
POP ARRANGING 1,2					2.0	2.0
<i>Producing:</i>						
STUDIO PRODUCING 1-4	2.0	2.0	2.0	2.0		
<i>Other Required Courses:</i>						
Analysis 5,6	2.0	2.0				
Music Theory of Electroacoustic Music 1,2	2.0	2.0				
Aural Training 5-8	1.0	1.0	1.0	1.0		
Jazz- Aural Training 1,2			1.0	1.0		
Noise and Atmosphere					2.0	
Acoustics 5,6	2.0	2.0				
Leadership Development in Communication and Behaviour 1,2	1.0	1.0				
Business Management and Marketing 1,2			1.0	1.0		
Safety and Ergonomics 1,2			1.0	1.0		
Law for Musicians 1,2			1.0	1.0		
<i>Elective:</i>						
Music Recording 1-6 or	2.0	2.0	2.0	2.0	2.0	2.0
Sound Reinforcement 1-6 or						
Film Soundtracking 1-6 or						
Radio Producing 1-6						
	20.0	20.0	15.0	15.0	6.0	4.0

Students are to select from one of the following areas of specialisation for the second stage of studies:

RECORDING ENGINEER:

Courses:	5.	6.	7.	8.	9.	10. Sem.
<i>Fundamentals of Composition:</i>						
PRACTICAL INSTRUMENTATION 1,2	2.0	2.0				
<i>Producing:</i>						
MUSIC RECORDING 1-6	2.0	2.0	2.0	2.0	2.0	2.0
<i>Other Required Courses:</i>						
Instrument or Voice 5-8 ¹	1.0	1.0	1.0	1.0		
Piano 5-8 ²	(1.0)	(1.0)	(1.0)	(1.0)		
Score Playing 1-4	1.0	1.0	1.0	1.0		
Radio Drama and Artwork for Radio 1,2			2.0	2.0		
	7.0	7.0	7.0	7.0	2.0	2.0

SOUND DIRECTING

Courses:	5.	6.	7.	8.	9.	10. Sem.
<i>Producing:</i>						
SOUND REINFORCEMENT 1-6	2.0	2.0	2.0	2.0	2.0	2.0
<i>Other Required Courses:</i>						
Keyboards 1-4	1.0	1.0	1.0	1.0		
Concepts in Directing Theatre and Multimedia 1,2	2.0	2.0				
Multimedia 1,2			2.0	2.0		
Live Electronics 1,2			2.0	2.0		
Stagecraft 1,2	1.0	1.0				
Lighting 1,2			1.0	1.0		
	6.0	6.0	8.0	8.0	2.0	2.0

FILM UND VIDEO

Courses:	5.	6.	7.	8.	9.	10. Sem.
<i>Producing:</i>						
FILM SOUNDTRACKING 1-6	2.0	2.0	2.0	2.0	2.0	2.0
<i>Other Required Courses:</i>						
Keyboards 1-4	1.0	1.0	1.0	1.0		
Film Analysis 1,2	2.0	2.0				
Theory and Practice in Film Editing 1,2			2.0	2.0		
Multimedia 1,2			2.0	2.0		
Film and Video Studio Engineering 1,2	2.0	2.0				
	7.0	7.0	7.0	7.0	2.0	2.0

¹ You are allowed to change the instrument **once** in the whole study.

² Not required if the student's chosen instrument is a keyboard instrument.

RADIO

Courses:	5.	6.	7.	8.	9.	10. Sem.
<i>Producing:</i>						
RADIO PRODUCING 1-6	2.0	2.0	2.0	2.0	2.0	2.0
<i>Other Required Courses:</i>						
Radio Drama and Artwork for Radio 1,2			2.0	2.0		
Radio and Network Engineering 1,2	2.0	2.0				
Keyboards 1-4	1.0	1.0	1.0	1.0		
Speech Training 1-4	1.0	1.0	1.0	1.0		
Moderation 1,2			2.0	2.0		
	6.0	6.0	8.0	8.0	2.0	2.0

ELECTIVES:

Students are to take 25 semester hours of **elective courses**.

The following courses are particularly recommended:

From the courses offered at the University of Music and Performing Arts Vienna:

Analysis 7,8
Recording Engineering 1,2
Introduction to 20th Century Art 1-4
Introduction to Media Studies
History of the Cinema 1-4
Film Theory 1,2
History of Synthetic Film
Design Criteria in Directing
Jazz Theory and Arranging 3,4
Live Electronic Music 3,4
Media Analysis 1-4
Methods and Practices in Academic Research
Music Psychology 1,2
Music Sociology 1,2
Music Theory for Electroacoustic Music 3,4
Contemporary Music from 1950
Personal Computers in Producing 1
Popular Music 1-3
Tutorial for Repetitorium Studio Engineering 1-4
Comparative Study of the Arts 1-4

From the courses offered at the University of Applied Arts in Vienna:

Courses from the fields of History of Art and Culture, as well as Visual Media Art.

From the courses offered at the University of Vienna:

Courses from the fields of Mass Media, Mass Communication and Society, as well as Musicology, Art History and the History of Literature.

From the courses offered at the Vienna University of Technology:

Courses from the fields of Electrical Engineering, Communications Engineering and Computer Science.

Work Experience:

During the second stage of studies students are to complete a **three-month work experience** with companies active in these fields (broadcasting, audiovisual industry, etc.). Completion of the work experience is to be documented by written certification/ a letter of confirmation.

SECOND DIPLOMA EXAMINATION

The second diploma examination consists of the examinations from all of the required courses from the second stage of studies and the second jury diploma examination. Students must have completed all courses from the second stage of studies, the three-month work experience and the diploma thesis in order to be admitted to the second jury diploma examination.

The second jury diploma examination is broken down into the following parts:

1. Artistic Diploma Thesis

Area of specialisation "Recording Engineer":

Six recordings and documentation thereof, one from each of the following areas:

- a) Orchestral music
- b) Chamber music (e.g. string quartet, wind chamber music)
- c) Piano music
- d) Vocal music
- e) Pop- or jazz-production
- f) Radio drama

Area of specialisation "Film and Video":

Six film soundtracks and documentation thereof, one from each of the following areas:

- a) Film (dialogue, effects and music production)
- b) Documentation or video documentation (original sound)
- c) Experimental film/video art (also experimental) e.g. video clip
- d) Cartoon or animated film
- e) Television commercial, trailers or station identification
- f) A project of own choice from the film sound area

Area of specialisation "Sound Direction":

Six sound reinforcement designs, one from each of the following areas:

- a) Theatre production (production of a playback recording and sound reinforcement)
- b) Sound design for a musical
- c) Multimedia open-air event
- d) Sound reinforcement for a concert (classical or popular music)
- e) Sound direction for an electroacoustic composition using live electronics.
- f) Informational event (installation, performance or conference)

The projects are to be completed in the second stage of studies in the presence of the members of the examining board.

Area of specialisation "Radio":

Six production projects and documentation thereof, one from each of the following areas:

- a) Music programme (design and presentation)
- b) Radio programme (design and presentation)
- c) Interview or reportage (original sound, moderation)
- d) Radio drama
- e) Radio commercial
- f) Radio design (sequence of identifications, e.g. interval signals or a jingle)

2. Practical task

The candidate is also to perform a hands-on artistic-technical task from his/her area of specialisation ad-hoc in front of the examining board (e.g. in the recording studio). The candidate will be granted an appropriate amount of time for preparation.

3. Eight further projects

The student is to submit a list of eight productions (including five music recordings of different stylistics), along with the corresponding sound- and visual recording medium to the examining board.

The subjects "Production", "Audio Engineering" and "Fundamentals of Composition" will be examined based on the work (i.e. recordings) submitted.

The evaluation will be based on the sound design of the production, but may also be including aspects of additional compositional elements, such as content, texts and music, as well as graphic design, images and lighting.

DIPLOMA THESIS

An artistic or scientific diploma thesis is to be written.

1. Artistic diploma thesis

a) The artistic diploma thesis consists of an artistic project out of one of the subject areas offered in the field of study Tonmeister education, documented by a sound or visual recording-medium and

b) as well as a written explanation providing detailed elaborations of related issues and aspects of scientific criteria regarding the chosen artistic project. The written part should contain approximately 40 pages.

The subject as well as the questions regarding the thesis have to be set apart from the 6 other projects which are to be handed in for the committee.

2. Scientific diploma thesis

In place of an artistic diploma thesis students are also entitled to compose a diploma thesis in one of the academic areas of examination as laid down on the curriculum, e.g. the subject areas acoustics and sound research, sound- and studio technics, musicology, performance practice and interpretation, music- and communication technology, perceptual psychology, media- or product analysis a. o.

Head of the Departments ¹:

First Stage of Studies:

ANALYSIS	Dr.phil. Marie-Agnes Dittrich Dr.phil. Annegret Huber
ELECTROACOUSTIC EQUIPMENT	Dipl.Ing. Hermann Freiberger
HISTORICAL COMPOSITIONAL PRACTICES	Dr.phil. Martin Lichtfuss Dietmar Schermann N.N.
MUSIC PROCESSING	Mag. Peter Mechtler
STUDIO ENGINEERING	Ulrich Vette
THEORY OF SOUND ENGINEERING	Dipl.Ing. Hermann Freiberger

Second Stage of Studies:

ELECTROACOUSTIC EQUIPMENT	Dipl.Ing. Hermann Freiberger
FUNDAMENTALS OF APPLIED MUSIC AND SOUND DESIGN	N.N.
HISTORICAL COMPOSITIONAL PRACTICES	Dr.phil. Martin Lichtfuss Dietmar Schermann N.N.
JAZZ THEORY AND ARRANGING	Mag.Christian Mühlbacher Mag.Paul Pawluk
MUSIC PROCESSING	Mag. Peter Mechtler
POP ARRANGING	Mischa Janisch
STUDIO PRODUCTION	Robert Gutdeutsch Ulrich Vette
THEORY OF SOUND ENGINEERING	Dipl.Ing Hermann Freiberger
SOUND REINFORCEMENT	Jürg Jecklin Josef Schütz Ing. Adolf Toegel
FILM TON	Georg Misch Mag. Philipp Mosser
PRACTICAL INSTRUMENTATION	DDr. Ertugrul Sevsay
MUSIC RECORDING	Dr. Johann-Nikolaus Matthes Ulrich Vette
RADIO PRODUCTION	Mag. Andrea Hauer

¹ Furthermore, instructors holding full teaching accreditation for the respective major artistic subject may be hired to independently hold courses in that subject.

TUITION FEES:

For Austrian students and students who have the same status as Austrian students (citizens of EU and EEA Member States, as well as Switzerland) **when they overrun the duration in the stage of study per 2 semester:**
€ 363.36 per semester

For all other students, including those who are stateless and those whose citizenship is undetermined:
€ 363.36 per semester

The following fee is to be paid by all students once a semester:

Mandatory membership in the Austrian National Union of Students ("ÖH-Beitrag") amounting to **approximately € 17.00 per semester.**

The Austrian National Union of Students fee is the same for both Austrians and non-Austrians.

Information subject to change

German Proficiency

Students whose native language is not German must submit proof of German proficiency before the admission of the selected studies, that allows them to sufficiently follow lectures and understand coursework. The following documents are accepted as proof of adequate proficiency:

I. Instrumental studies, conducting, composition and music theory, sound engineering, voice

1. **“Zertifikat Deutsch” diploma** from the ÖSD examination centres (Austrian German Diploma) or the Goethe Institute

The ÖSD office at Althanstrasse 7-9, 1090 Vienna, tel: 319 33 95 (www.osd.at), and the Goethe Institute (www.goethe.de) both maintain a list of the authorised international institutions and language schools who hold examinations for obtaining the “Zertifikat Deutsch” diploma. (There is at least one examination date a month in Vienna; cost: ca. €70.) Sample examinations can also be obtained from the websites listed above.

Students are recommended to obtain their German proficiency certificate in their home country before taking the entrance examination.

2. **Passing a German test** taken in conjunction with the entrance examination (counts as a supplementary examination within the meaning of Sec. 63 para 3 of the University Studies Act which corresponds to the level of the “Zertifikat Deutsch”)

We recommend that you consult sample examinations from the “Zertifikat Deutsch” (see addresses above) for preparation.

3. **Diploma from the one-year continuing education course “German as a Foreign Language”** (corresponds to the level of the “Zertifikat Deutsch”)
4. **Secondary school leaving certificate** based on German-language secondary-school instruction in German (“Matura”/secondary school leaving certificate from an Austrian or German-language secondary school (“Gymnasium”) abroad).

Should the student fail to submit adequate proof of German proficiency by the end of the admission deadline, the student will not be able to be admitted to the degree programme.

Please note that only those students who have taken the **placement test** at the beginning of the semester and paid the **course fee** may attend the continuing education course “German as a Foreign Language”.

For more information on German courses please consult the website www.campus-austria.at.

II. Fields of studies in music pedagogy (IGP, ME/IME, MBP and MTH)

A German proficiency test is to be taken within the context of the entrance examination. The test consists of a written and an oral section. Students must already have knowledge of musical vocabulary (e.g. the names of the notes, note values, intervals, clefs, etc.).

A **secondary school leaving certificate** based on German-language secondary-school instruction in German (“Matura”/secondary school leaving certificate from an Austrian or German-language secondary school (“Gymnasium”) abroad) is grounds for exemption from the German test.

III. All other fields of studies

Sufficient knowledge of German is required for admission and will be examined as part of the entrance examination.

Sample Questions for the Entrance Examination “Balance Engineer”

Duration of the written aural skills test: 1 ½ hours

Part A: Written

- Ear training test

All examples will be played five times.

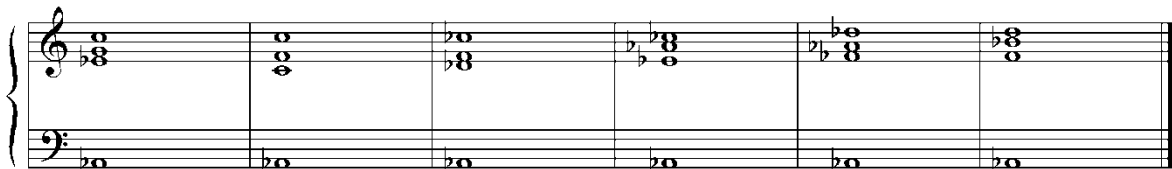
(English instructions on page 26)

1) Es sind die Intervalle zu notieren und zu bezeichnen (die untere Stimme ist gegeben)



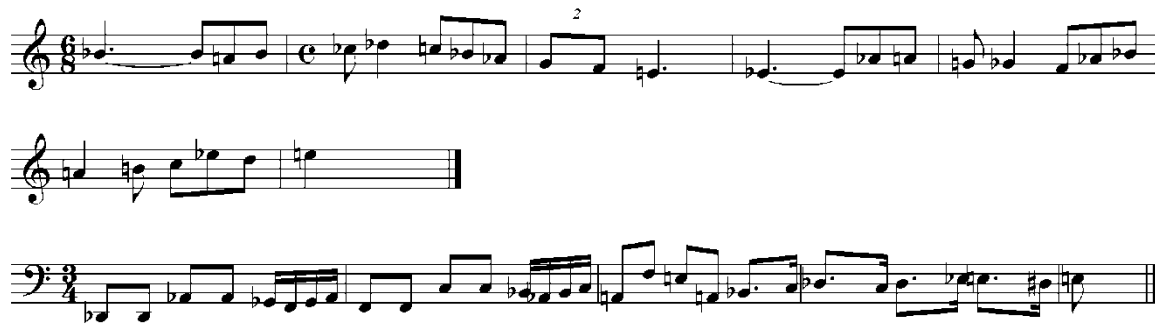
A musical staff in G major (one sharp) showing a series of intervals. The lower voice is given. The intervals are: gr. Terz (G4-A4), gr. Sept (G4-F5), usw. (G4-F#5), (G4-A5), (G4-B5), (G4-C6), (G4-D6), (G4-E6), (G4-F6).

2) Es sind die Akkorde zu notieren oder mit Bezifferung zu bezeichnen



A musical staff in G major showing six chords: G major, G minor, G7, G7b9, G7#9, and G7b5. The bass line is a simple bass clef with a G note in each measure.

3) Es sind die gespielten Melodien zu schreiben (Takt und erster Ton gegeben)



Two musical staves. The top staff is in G major, 3/4 time, starting with a G note. The melody is: G4 (quarter), A4 (quarter), B4 (quarter), A4-G4 (beamed eighth notes), F#4 (quarter), E4 (quarter), D4 (quarter), C4 (quarter), B3 (quarter), A3 (quarter), G3 (quarter). The bottom staff is in G major, 3/4 time, starting with a G note. The melody is: G4 (quarter), A4 (quarter), B4 (quarter), A4-G4 (beamed eighth notes), F#4 (quarter), E4 (quarter), D4 (quarter), C4 (quarter), B3 (quarter), A3 (quarter), G3 (quarter).

4) Es sind beide Stimmen zu notieren (Tonart, erster Ton beider Stimmen und Takt gegeben)

5) Die gespielte Kadenz ist als Stufen- bzw. Funktionsfolge zu bezeichnen.

6) Es ist der Rhythmus zu notieren (Takt gegeben)

7) Bezeichnen Sie im folgenden Beispiel alle Abweichungen der gespielten Version vom Notentext!

Allegro moderato

8) Schreiben Sie für jedes Stück ein kurzes Kommentar
(Epoche, Stilrichtung, Land, Komponist, Interpreten, Besetzung und Soloinstrumente,
Gattung, Form, Charakter, Tonsprache, usw. ...)

Studierrichtungen Komposition / Musiktheorie:	4 Hörbeispiele aus der E-Musik und 4 Hörbeispiele aus dem Jazz- und Poprepertoire
Studierrichtung Tonmeister:	4 Hörbeispiele aus der E-Musik und 4 Hörbeispiele aus dem Jazz- und Poprepertoire
Studierrichtung Dirigieren:	8 Hörbeispiele aus der E-Musik

b) Eine Pauke und eine Posaune setzen nicht genau zusammen ein. Welches Instrument kommt zu früh?
(3 mal gespielt)

8.) In folgenden kurzen Melodiebeispielen sind einige der Töne verstimmt. Wenn der Ton höher klingt als er sollte, so machen Sie einen Strich über die entsprechende Note, wenn der Ton tiefer klingt, einen Strich unter die Note!
(jeweils 3 mal gespielt)



9.) a) Sie hören die Aufnahme einer echten Flöte und die einer Synthesizerflöte. Welches ist die echte und welches die Synthesizer-Flöte? Beschreiben Sie die charakteristischen Unterschiede!

b) Sie hören Ausschnitte aus Musikstücken, in denen bestimmte Instrumente hervortreten. Um welche Instrumente handelt es sich?

Beispiel 1: Viola, Violoncello, Kontrabaß oder Gambe?

Beispiel 2: Baßklarinetten, Tenorsaxophon, Englischhorn oder Posaune mit Dämpfer?

Beispiel 3: Congas, Bongos, Tablas oder Tomtoms?

10.) Sie hören 3 "Remixes" einer Pop-Produktion mit verschiedenen Instrumentierungen. Nennen Sie alle Instrumente bzw. Sounds, die Sie erkennen!

Remix 1:

Remix 2:

Remix 3:

11.) a) Sie hören die Aufnahme eines Barockstückes zuerst im Original und danach mit klanglichen Veränderungen. Beschreiben Sie die Veränderungen!

Original

1. Veränderung:

2. Veränderung:

3. Veränderung:

(z.B. leises Rauschen, Baßlastigkeit, Störton etc.)

b) Sie hören eine Aufnahme der "Alpensinfonie" von R. Strauss zuerst im Original und danach mit klanglichen Veränderungen. Beschreiben Sie die Veränderungen!

Original

1. Veränderung:

2. Veränderung:

3. Veränderung:

(z.B. andere Raumakustik, leichte Verzerrung etc.)

12.) a) Sie hören Schritte.

Beschreiben Sie den Boden, über den die Person geht!

Beschreiben Sie den Gemütszustand (bzw. Charakter) dieser Person!

Beschreiben Sie den Raum (Größe, Ausstattung, Materialien etc.)

b) Sie hören, wie eine Flüssigkeit in ein Gefäß gegossen wird.

Um welche Flüssigkeit könnte es sich handeln?

Beschreiben Sie das Gefäß (Größe, Fassungsvermögen, Material)!

13.) a) Sie hören eine Art von Rauschen. Wodurch wird es verursacht?

(z.B.: Wind, ferne Eisenbahn, Großstadtlärm, Regen, Wasserfall, Blätter, Dampf etc.)

b) Sie hören Vogelstimmen. Welche können Sie erkennen?

14.) Sie hören eine Geräuschkulisse des Alltags. Was alles können Sie in dem Klanggemisch erkennen? Beschreiben Sie die verschiedenen von Menschen, Maschinen und der Natur verursachten Geräusche! Inwieweit können Sie aufgrund der akustischen Details Schauplatz, Menschen und Dinge (z.B. Geräte, Maschinen, Fahrzeuge etc) optisch beschreiben?

15.) Sie hören einige Musikbeispiele unterschiedlicher Stile bzw. Epochen aus verschiedenen Bereichen. Was alles können Sie erkennen? Schreiben Sie zu jedem Beispiel einen kurzen Kommentar (Stilepoche, Werktitel, Komponist bzw. Interpret, Land, Gattung bzw. Form, Besetzung und allfällige Soloinstrumente, Charakter, Tonsprache etc.)!

KLASSIK: a)

b)

c)

JAZZ: a)

b)

c)

POP/ROCK: a)

b)

c)

B) Allgemeine Musiklehre

1.) a) Ergänzen Sie zu einem 4-stimmigen Satz!

b) Schreiben Sie eine 4-stimmige Kadenz in B-Dur! (in Halben, 4 Takte)

Bezeichnen Sie die Stufen (bzw. Funktionen)!

2.) Setzen Sie folgende Melodieanfänge fort!

a)

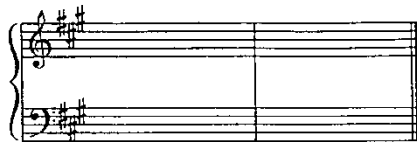
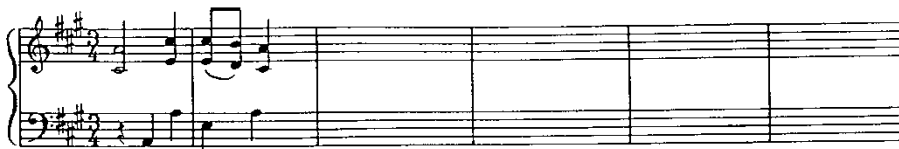
b)

3.) Setzen Sie zur gegebenen Melodie eine 2. Stimme (bzw. harmonische Begleitstimme)!

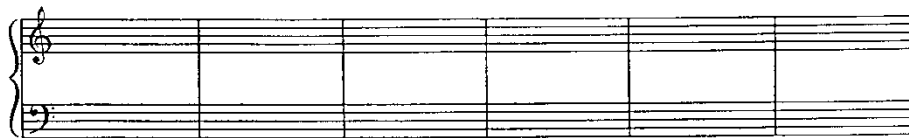
Ist Ihre 2. Stimme eher homophon oder polyphon?

4.) Setzen Sie einen der folgenden Anfänge fort!

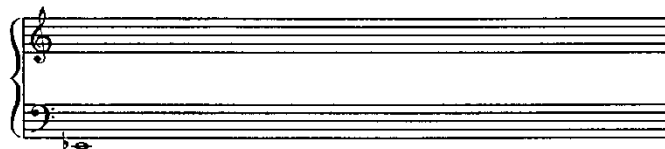
a)



b)



5.) a) Notieren Sie die ersten 9 Partialtöne der Naturtonreihe (Obertonreihe) vom gegebenen Grundton aus!

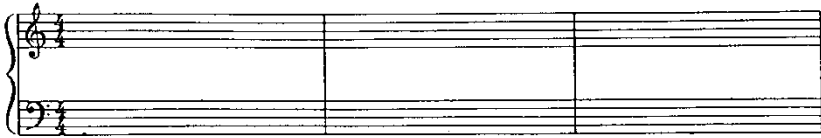


b) Nennen Sie die Besetzung eines Streichquartetts!

c) Nennen Sie 3 bedeutende Orchesterwerke aus dem Bereich der Programmusik!
(Komponist, Werktitel)

d) Welche Sound-Effekte der E-Gitarre kennen Sie?

6.) Transponieren Sie die folgende Phrase eine Quart abwärts und halbieren (diminuieren) Sie gleichzeitig alle Notenwerte ohne den gegebenen Takt zu ändern!



Um welche Kompositionstechnik (bzw. welchen Stil) könnte es sich handeln?

7.) Bezeichnen Sie die Instrumente der folgenden Partiturbeispiele!

a)

Um welchen Musikstil handelt es sich?

8.) Beschreiben (analysieren) Sie folgendes Beispiel (Satztechnik, thematisch-motivische Arbeit, Harmonik, Form etc.)!

The musical score consists of six systems of piano accompaniment. Each system contains a treble clef staff and a bass clef staff. The music is written in 3/4 time. The first system shows a melodic line in the right hand with eighth notes and a bass line with quarter notes. The second system continues the melodic development with some sixteenth-note passages. The third system features a more complex rhythmic pattern with eighth and sixteenth notes. The fourth system shows a continuation of the melodic theme with some rests. The fifth system has a more active bass line with eighth notes. The sixth system concludes the piece with a final melodic phrase in the right hand and a steady bass line.

1. Identify each of the intervals: (The lower note is provided).

Major third Major seventh etc.

2. Identify the chord types, with numbers indicating inversions if necessary.

3. Write out each of the melodies. (The time signature and first note are provided.)

4. Write out both voices. (Key, time signature and first note are provided.)

5. Indicate the diatonic progression and diatonic functions in the following cadence.

6. Write out the following rhythm. (Time signature is provided.)

7. In the following exercise, please indicate all of the differences between the music on the page and the version played for you.

8. Write a short-answer response for each piece.

(Era, style, country, composer, performer(s), instrumentation and solo instruments, genre, form, character, tonal language, etc.)

Composition/Music Theory	4 classical excerpts and 4 jazz and pop excerpts
Balance Engineering	4 classical excerpts and 4 jazz and pop excerpts
Conducting	8 classical excerpts

A timpani and a trombone do not come in together. Which instrument is heard first?
(The excerpt will be played three times)

8. In the following short melodies several pitches are out of tune. If the pitch is too high, place a mark above the corresponding note; if the pitch is too low, place a mark below the corresponding note. (Each melody will be played three times.)

9. a) You will hear a recording of a real flute and a synthesizer flute. Which one is which? Please describe the characteristic difference you hear.

b) You will hear excerpts from musical works where specific instrument will appear. Which instruments do you hear?

Excerpt 1: Viola, cello, contrabass or viola da gamba?

Excerpt 2: Bass clarinet, tenor saxophone, English horn, trombone with mute?

Excerpt 3: Congas, bongos, tablas or tom-toms?

10. You will hear three remixes from a pop production with varying instrumentation. Name as many instrument and/or sounds as you can.

Remix 1

Remix 2

Remix 3

11. a) You will hear a recording of a Baroque work, first in the original and then with a few sound changes. Please describe the changes you hear.

Original:

Change 1

Change 2

Change 3

(e.g. soft static, heavy bass, tonal disturbance)

b) You will hear a recording of the "Alpensinfonie" by Richard Strauss, first in the original and then with a few sound changes. Please describe the changes you hear.

Original:

Change 1

Change 2

Change 3

(e.g. different acoustics, slight distortion, etc.)

12. You will hear footsteps.

Describe the floor that the person is walking on.

Describe the mood (or character) of the person.

Describe the room (size, furnishings, materials)

b) You will hear a liquid being poured into a container.

What liquid could it be?

Describe the container (size, volume, materials)

13 a) You will hear a kind of white noise. What is its source?

(e.g. wind, a distant train, noise from a large city, rainfall, a waterfall, leaves, steam, etc.)

b) You will hear some birds. Which ones do you recognise?

14. You will hear some everyday background noise. What elements can you recognise from this composite of sounds? Please describe the various sounds you hear made by people, machines and nature. To what extent can you make a visual description of the scenery, people and objects (e.g. equipment, machines, vehicles, etc.) based on the acoustic details you hear?

15. You will hear several musical excerpts representing various styles and eras from different categories. What all do you recognise? Please write a short commentary on each excerpt (stylistic era, title of the work, composer and/or musician(s), country, genre and/or form, instrumentation and any solo instruments, character, tonal language, etc.).

Classical

- a)
- b)
- c)

Jazz

- a)
- b)
- c)

Pop/Rock

- a)
- b)
- c)

General Music Theory

1. a) Complete this four-part harmony.
b) Compose four bars of a four-part cadence in B flat Major using half notes. Also indicate the diatonic progression and diatonic functions.
2. Complete the following melody.
 - a)
 - b)
3. Add a second part to the melody below (such as harmony accompaniment). Is your second voice more homophone or polyphone?
4. Complete the following melodies.
 - a)
 - b)
5. a) Write in the first nine partial tones of the harmonic series (overtone series) based on the fundamental note provided.
b) What is the make-up of a string quartet?
c) Name three important orchestral works (composer, title) that are used in program music.
d) What sound effects are you familiar with on the electric guitar?
6. Transpose the following phrase up a fourth and halve all of the note values without changing the time signature. What compositional technique (i.e. which style) could this piece represent?
7. Write in the instrumentation for the following orchestral scores:
 - a) What musical style is this piece written in?
8. Describe (analyse) the following musical excerpt (compositional technique, thematic elements, motifs, harmony, form, etc.):

Technical part

MATHEMATICS

1. Please calculate the value of x.

$$x = \sqrt{16^{1/4} - \frac{\log 1000}{\log 10}}$$

What special term is also used for x??

2. Please calculate the value of x.

$$4x^2 + y = 1$$

$$x^2 - y = 1$$

3. Please fill in the correct number that would logically complete the sequence.

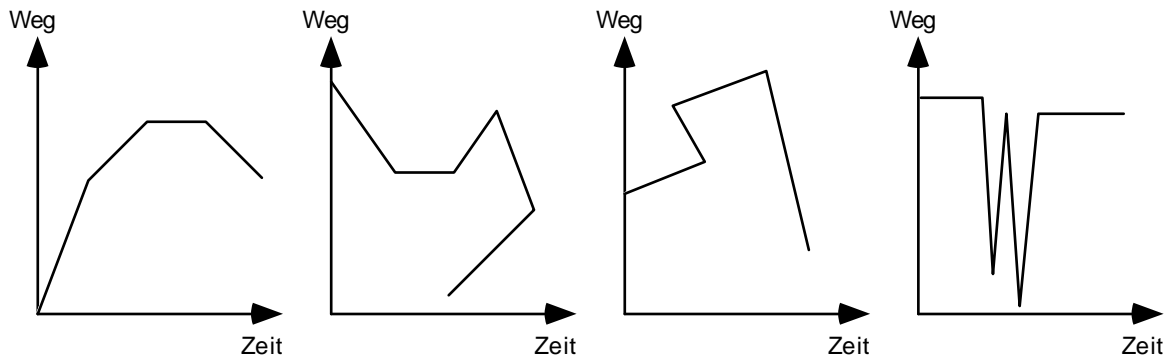
4 11 17 22 26 29 31

4. Please calculate:

$$\int_0^{2\pi} \sin x \, dx =$$

How did you get your answer?

5. Which of the following time-distance diagrams are possible and which aren't?



6. What is a complex plane and what kind of numbers are found on this plane?

7. Please perform the following calculation:

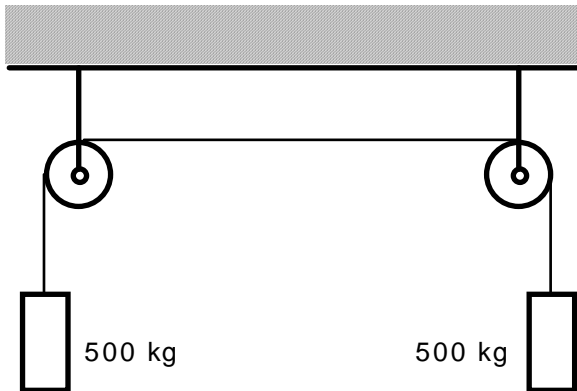
$$(a_1 + ib_1) + (a_2 + ib_2) =$$

General physics

1. What do the following units of measurement apply to?

-Newton:
-Gramm:
-Kelvin:
-Watt:
-Joule:
-Ohm:

2. Will the rope break? (tensile strength 750 kg)



Briefly explain your reasoning.

3. Any signal can be created by overlapping sine waves of a compatible frequency with arbitrary accuracy (true/false?).
4. Which of the following two steel balls will hit the ground first (discounting atmospheric friction) if they are dropped from a height of 122 m?
a) 10 kg, with a smooth surface
b) 122 kg, with a very rough surface
5. What standards apply to electrical power supply?
a) in Austria: Voltage:
Frequency:
b) in the US: Voltage:
Frequency:
6. How many conductors are there in a grounding outlet and what are they called?

Computers

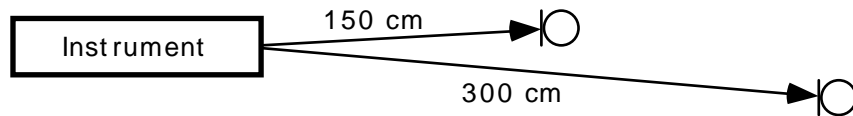
1. Please name as many individual computer system components as you can.
2. What is an operating system and what does it do?

Name several operating systems.
3. In order to communicate with each other computer systems need interfaces. Please name as many types of interfaces as you can.
- .

Acoustics

1. A police car with sirens blaring drives past a "listener".
 - a) How does the pitch of the siren change with respect to the listener?
 - b) Why?
 - c) What is this effect called?

2. The sound of an instrument is being mixed at the same volume by two microphones set up at two different distances. Are certain pitches favoured, are some not? If yes, which frequencies?



true false

3. Middle A is played at a frequency of 440 Hz.
An octave is divided into 12 half-steps.
The difference between C and c is 1,000 cents.

4. Two pitches are broadcast over a loudspeaker with frequencies of 30 Hz and 2 kHz, respectively.
 - a) When are the two pitches heard by a listener in the distance?

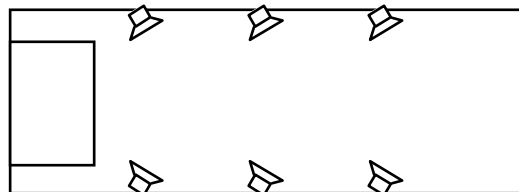
simultaneously the higher one first the lower one first
 - b) How long does it take the 2 kHz pitch to reach the listeners who is sitting 170 m away from the loudspeaker?

5. What is meant by the reverberation time of a room?

6. How long is the reverberation time in a concert hall with good acoustics?

7. How do the loudspeakers have to be set up with respect to the listener for stereo reproduction?

8. A listener is sitting all the way in the back of a large hall. A speech is being given on the stage and broadcast to the hall via three pairs of loudspeakers (see illustration).



- a) Where would the listener place the speaker if all loudspeakers were to broadcast the signal simultaneously?

- b) What measures would have to be taken to make the listener place the speaker on the stage?

Audio engineering

1. In the following terms frequently appear in brochures for electroacoustic devices. Please briefly explain what they mean.
 - analogue
 - digital
 - DAT
 - MIDI
 - Signal-to-noise ratio
2. How does analogue magnetic sound recording work?
3. What are the channels in 5.1 surround sound called?
4. Please briefly explain the principle behind broadcasting.
5. Sometimes a high-pitches whistling can be heard at events that are electroacoustically sound reinforced.
 - a) What is this effect called?
 - b) What is it caused by?
6. What do the following terms mean?:
 - Cinemascope
 - Technicolor
 - Dolby Surround
 - Vistavision
 - Optical sound
7.
 - a) When were sound films first made?
 - b) When was electroacoustics (i.e. the possibility of amplifying sound signals) first introduced?
 - c) How long have we been able to make audio recordings?
8. Please explain the difference between voltage and amperage.
9. What is the low frequency voltage output of a CD player?
10. What is a bass reflex box?
11. What is the difference between a passive box and an active box?
12. How does a dynamic microphone work?
13. What is a transformer used for?
14. What do the following abbreviations stand for:
 - CD
 - MD
 - MPEG
 - AM
 - DAB
 - MC
 - DVD
 - FFT
 - FM
 - IC

FOR FURTHER READING:

- Michael Dickreiter: Handbuch der Tonstudientechnik, Verlag K.G. Saur
- Hubert Henle: Das Tonstudio-Handbuch, Verlag G.C. Carstensen

We also recommend audio engineering journals and computer magazines for further reading.