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HOCHSCHULE DARMSTADT
UNIVERSITY OF APPLIED SCIENCES

Anlage 5

Modulhandbuch des Studiengangs

Sound and Music Production
Bachelor of Arts

des Fachbereichs Media

der Hochschule Darmstadt – University of Applied Sciences

Vom 04.11.2014
gültig ab 15.12.2014

zugehörige BBPO veröffentlicht in den Amtlichen Mitteilungen 2014

Inhaltsverzeichnis

0. Vorbemerkungen

(1) Sämtliche Module werden im Sinne des § 1 Abs.7 ABPO durch folgende Punkte beschrieben:

1. Die Inhalte (Indicative Module Contents);
2. Die Lern- und Qualifikationsziele (Learning Outcomes) im Sinne von zu erwerbenden Kompetenzen (Competencies);
3. Die Lehrveranstaltungen (Type of Course)mit den Lehr- und Lernformen (Teaching Methods);
4. Den nach den Lehrveranstaltungen und Lernformen des Moduls aufgeschlüsselten Arbeitsaufwand (Workload) und die Zahl der vergebenen Punkte (CP);
5. Die Voraussetzungen für die Zulassung zu dem Modul (Prerequisites Subjects)
6. Die Dauer (Duration) und zeitliche Gliederung (Semester) sowie die Häufigkeit des Angebots (Module Frequency);
7. Die Verwendbarkeit des Moduls in verschiedenen Studiengängen (Used in other Courses);
8. Die Beschreibung der im Modul zu erbringenden Prüfungsvorleistungen und Prüfungen (Assessment Methods), sowie gegebenenfalls weitere Voraussetzungen für den erfolgreichen Abschluss des Moduls (Prerequisites for CP).

(2) Die Übersicht über die Module in Anlage 1 der BBPO enthält:

1. Den nach den Lehrveranstaltungen und Lernformen des Moduls aufgeschlüsselten Arbeitsaufwand (workload) und die Zahl der vergebenen Punkte (CP);
2. Die Dauer des Angebots (Duration);
3. Die Art und Form der im Modul zu erbringenden Prüfungen.

(3) Die Zulassungsvoraussetzungen zum Bachelormodul sind in § 12 BBPO, zu allen anderen Modulen in § 11 BBPO geregelt. Darüber hinaus sind eventuelle weitere Zulassungsvoraussetzungen in den Modulbeschreibungen aufgeführt.

(4) Die Wahlpflichtmodule sind in Anlage 2 der BBPO aufgeführt und beschrieben.

1. The Principle of Problem Based Learning Workshops

Preconditions

Facing the rise of complexity

SMP-Media-Projects are characterized by a two-dimensional multidisciplinarity: They are on first hand a combination of Media Design, Media Management, Media Informatics and Media Technology (the "classical" disciplines) and on the other hand more and more often a combination of the diverse but meanwhile highly specific media genres with linear and/or interactive modalities like animation, game, interactive products, installations, video, sound ... Teaching should correspond to the exposure of complexity by accentuating respective methods how to handle this rising complexity.

Facing new concepts of work

The change from an industrial to a knowledge-oriented society has deep impact on contemporary and future work patterns. Moreover the half-value period of tools and software gets shorter ever. For the individual worker this means the rise of self directed work, self-motivation, self-organisation, lifelong learning and beyond this – teamwork in international (which means multi-cultural) settings. This requires teaching methods, which help students to reach the qualifications necessary in these fields.

Supporting constructivist learning

In the traditional sense, learning means to memorize and to recall facts. Thus declarative knowledge will be acquired in a static way, which is suitable in complex situations to only a limited extent. The future media developer rather needs practical methodological skills and problem solving competencies. Therefore a change from an instructional to a constructivist view of teaching is helpful. In this sense learning means to incorporate the persistent fundamentals on the one hand and to actively construct thought-patterns on the other hand.

Supporting active learning

Constructivist learning means the change from reproduction to production, from gaining knowledge to developing competencies, from examination to facilitation, from teaching to coaching. These requirements can be fulfilled by an adequate link between theory and practice.

Supporting to learn how to learn

Knowledge management is a central task of our knowledge society. Until today the idea of mainly explicit exchange of knowledge prevails. But especially in the media industry a change

from codified knowledge (externalized knowledge) to tacit knowledge (implied/implicit Knowledge) is necessary.

Definition

Problem-based learning (PBL) is a student-centred pedagogical strategy, applied to the study course Sound and Music Production, in which students learn about the given indicative subjects in the context of complex, multifaceted, and realistic problems. Working in groups, students identify what they already know, what they need to know, and how and where to access new information that may lead to resolution of the problem. The role of the instructor is that of a facilitator of learning who provides appropriate scaffolding of that process by (for example), asking probing questions, providing appropriate resources, and leading class discussions, as well as designing student assessments.

Implementation into the study programme

This form of teaching should embrace the disciplines Media Design, Media Informatics/Media Technology and Media Management as inherent parts of a workshop module with a given semester's topic.

Way of teaching

From a constructivist perspective in a problem-based learning strategy, the role of the instructor is to guide the learning process rather than provide knowledge (Hmelo-Silver, C. E. & Barrows, H. S. (2006). "Goals and strategies of a problem-based learning facilitator. ", Interdisciplinary Journal of Problem-based Learning, 1. 21-39.). In this perspective, feedback and reflection on the learning process and group dynamics are essential components of PBL. Students are considered to be active agents who engage in social knowledge construction. Nevertheless, a professional and reliable input-framework is necessary.

Teaching methods in the workshops can be:

- Seminar
- Impulse keynote talk
- Coaching
- Discussion

General learning outcomes

In Detail PBL develops the following skills:

- Ability for critical thinking
- Analytical and methodological skills, i.e. transferable skills
- Research skills

- Problem solving skills
- Project management skills
- Communication, negotiation and conflict resolution skills
- Acquisition of knowledge that is flexibly usable
- Development of interdisciplinary competencies
- Social competency
- Capacity for teamwork
- Lifelong learning skills

Project phases

(Basic grid, to be adapted to focal-point-specific workshops)

- Define rules of work
- Analyse situation
- Define problem
- Design research & distribute work
- Research/work
- Share results & analyse results
- Conclusion

Benefits of PBL compared to traditional lecture teaching

- With a given project/workshop/production context, students want to learn to a greater extent than in pure lecture scenarios
- Students take ownership of the need to learn
- Students learn by doing – practice, trial-and-error, repetition, experimenting
- Making sense of what is being learned is more obvious – 'getting one's head around it'
- Better effects by learning from feedback: other people's reactions, seeing the results
- Deepening one's learning by explaining it to others, teaching, coaching
- Further deepening one's learning, by making informed judgements on one's own
- Work and on others' work – self- and peer-assessing

(Following Phil Race's presentation, University of Aalborg, March 2009)

2. Modulbeschreibungen der Pflichtmodule im 1. Semester

SP1 L Sprint Project 1 – Linear - Understanding sound analysis design basics					
ID	**Workload**	**Credits**	**Semester**	**Module Frequency**	**Duration**
SP1	125 h	5	1st Semester	Winter Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Seminar and Project Work		4 SWS/64 h	61 h	30
2	**Learning Outcomes / Competencies** The Sprint Project 1 provides a foundation for all media design activities. The student is introduced to theories, methods and practical processes involved in time-based media production. The module encourages students to adopt an analytic, creative and ethical approach to the resolution of basic media design problems. The module integrates theoretical and practical aspects of design processes in different areas of Sound Design and Music Production. The students gain awareness of the issues associated with the development of ideas and the use of appropriate forms of genre and media specific expression within the contemporary digital media landscape. On successful completion of this module the student will be able to: • Analyse and valuate media artefacts with regard to fundamental genre and design principles • Describe the scope of creative activities and methods within a typical Sound Design- or Music-Production- project • Show basic abilities in developing design concepts for Sound Design- and Music Production-products and presenting them in a clear and coherent manner • Analyse and evaluate time-based media artefacts in terms of their use of space, time, motion and sound • Demonstrate an awareness of audiences in the communication and interpretation of ideas				

	Indicative Module Contents Design Basics Sound and Music Production • Principles of recorded music: style creation by sound colours • Basic definition and aesthetics of sound products: radio play, audio book, feature etc. • Principles of audio-visual composition: image & sound, music • Principles of stereophonic perception
4	**Teaching Methods** The module integrates essential methods of problem-based learning. The range of teaching methods includes impulse lectures, coaching of individual practical assignments and short, group-based project activities within Sound Design and Music Production. The student-centred methodical approach creates an interactive learning environment, which encourages learners to explore their creative potential and to integrate professional design thinking in their creative practice. Through individual and group based work the students develop essential methodical, practical and intellectual skills in the specialized field of media design. Carefully selected assignments and projects involve students in design problems that promote the acquisition of critical knowledge, problem solving proficiency, self-directed learning strategies and teamwork capacity.
5	**Prerequisite Subjects** -
6	**Assessment Methods** Examination Prerequisite: continuous participation of not less than 75% Examination: project concept (50%) and final presentation (50%) – each one has to be passed in order to pass the complete module

7	**Prerequisites for CP** -
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** According to CP: 2,42%

10	**Name of Module-Responsible and Teaching Professors**
	Module-responsible: Prof. Moritz Bergfeld Teaching Professors: Prof. Moritz Bergfeld Prof. Dr. Kyrill Fischer Thorsten Greiner N.N.
11	**Other Information**
	-

SP2 I Sprint Project 2 – Interactive - Aesthetics and dramaturgy					
ID	**Workload**	**Credits**	**Semester**	**Module Frequency**	**Duration**
SP2	125 h	5	1st Semester	Winter Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Seminar and Project Work		4 SWS/64 h	61 h	30
2	**Learning Outcomes / Competencies** The Sprint Project 1 provides a foundation for all media design activities. The student is introduced to theories, methods and practical processes involved in interactive media production. The module encourages students to adopt an analytic, creative and ethical approach to the resolution of basic media design problems. The module integrates theoretical and practical aspects of design processes in different areas of Interactive Sound Productions. The students gain awareness of the issues associated with the development of ideas and the use of appropriate forms of genre and media specific expression within the contemporary digital media landscape. On successful completion of this module the student will be able to: • Analyse and valuate media artefacts with regard to fundamental genre and design principles • Describe the scope of creative activities and methods within an interactive media project • Show basic abilities in developing design concepts for Sound Interactive Media Products and presenting them in a clear and coherent manner • Analyse and evaluate nonlinear media artefacts in terms of their use of space, time, motion and sound • Demonstrate an awareness of audiences in the communication and interpretation of ideas				

	Indicative Module Contents • Definition and aesthetics of sound products: theatre and installation • Aesthetics of interactive sound design • Creative principles of story telling and dramaturgy • Basics of sound design in interactive multimedia applications • Sound in interactive media: game, interactive media
4	**Teaching Methods** The module integrates essential methods of problem-based learning. The range of teaching methods includes impulse lectures, coaching of individual practical assignments and short, group-based project activities within interactive sound production. The student-centred methodical approach creates an interactive learning environment, which encourages learners to explore their creative potential and to integrate professional design thinking in their creative practice. Through individual and group based work the students develop essential methodical, practical and intellectual skills in the specialized field of media design. Carefully selected assignments and projects involve students in design problems that promote the acquisition of critical knowledge, problem solving proficiency, self-directed learning strategies and teamwork capacity.
5	**Prerequisite Subjects** -
6	**Assessment Methods** Examination Prerequisite: continuous participation of not less than 75% Examination: project concept (50%) and final presentation (50%) – each one has to be passed in order to pass the complete module

7	**Prerequisites for CP** -
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** According to CP: 2,42%

10	**Name of Module-Responsible and Teaching Professors** Module-responsible: Thorsten Greiner Teaching Professors: Thorsten Greiner Prof. Moritz Bergfeld Prof. Dr. Kyrill Fischer N.N.
11	**Other Information**

SL1 – SMP Lecture 1 - Acoustics & Mathematics					
ID	**Workload**	**Credits**	**Semester**	**Module Frequency**	**Duration**
SL1	125 h	5	1st Semester	Winter Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Lecture		3 SWS/48 h	61 h	60 students
2	**Learning Outcomes / Competencies** The student shall be able to explain theoretical and practical basics related to mathematics and acoustics. These include: • Properties of analogue and digital representation of signals • Physical quantities relevant for sound phenomena • Superposition of waves • Fourier Transform; Spectrum				
	Indicative Module Contents • Physical numbers and units, • Physical basics of acoustics: wavelength, frequency, speed, reflection, absorption, ... • Root main square (rms), dB, dB (SPL), log, • The specific role of trigonometric functions in acoustics • Analogue and digital signals, sampling, A/D, D/A-conversion • Fourier Transformation, Spectrum				
4	**Teaching Methods** Lecture and seminar				
5	Prerequisite Subjects				
	-				
6	Assessment Methods				
	Examination Prerequisite: Homework, continuous participation Examination: Written exam (100%)				
7	Prerequisites for CP				
	-				
8	Used in Other Courses				

	-
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-Responsible and Teaching Professors
	Module-responsible: Prof. Dr. Kyrill Fischer Teaching Professors: Prof. Dr. Kyrill Fischer Thorsten Greiner N. N.
11	Other Information
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MI1 – Media Informatics 1 – Basics of Media Informatics					
ID	**Workload**	**Credits**	**Semester**	**Module Frequency**	**Duration**
MI1	125 h	5	1st Semester	Winter Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	a) Lecture		3 SWS/48 h	61 h	60 students
2	**Learning Outcomes / Competencies** The student shall be able to explain and / or give examples for the role of informatics in different media areas: • The role of informatics in different media areas • Understanding algorithms • Basics of logic • Computer as a tool • Basics of Computer programming • Basics of program structures				
	Indicative Module Contents • Binary and hexadecimal representation of numbers • Basic concepts and examples of computer programming: variables, types, assignments, input/output, flow control, functions and parameters • Object oriented programming • Basic introduction in the programming languages Java and C++ • Introduction in Sound Frameworks				
4	**Teaching Methods** Lecture and seminar				

5	**Prerequisite Subjects** -
6	**Assessment Methods** Examination Prerequisite: Homework and continuous participation Examination: Written exam (100%)
7	**Prerequisites for CP** -
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** According to CP: 2,42%
10	**Name of Module-Responsible and Teaching Professors** Module-responsible: Thorsten Greiner Teaching Professors: Thorsten Greiner Prof. Dr. Kyrill Fischer Prof. Dr. Torsten Fröhlich Prof. Dr. Frank Gabler
11	**Other Information** -

ST1 - Studio Technology 1					
ID	**Workload**	**Credits**	**Semester**	**Module Frequency**	**Duration**
ST1	125 h	5	1st Semester	Winter Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	a) Lecture b) Practical		a) 2 SWS/32 h b) 2 SWS/32 h	61 h	a) 60 students b) 30 students
2	**Learning Outcomes / Competencies** The student shall be able to explain and / or give examples for the role of informatics in different media areas: • Understand and describe basic concepts in audio technology • Understand and operate mobile recording equipment • Basic understanding of workflows in professional audio studios • Accomplishment of simple Audio Projects in the DAW and digital mixing consoles				
	Indicative Module Contents Theory • Principles of Audio Technology • Principles of Psychoacoustics • Audio Formats • Professional audio connectors Praxis • Introduction to the Digital Consoles and DAWs • Mobile Recording Equipment				
4	**Teaching Methods** Lecture, seminar, practical sessions				
5	Prerequisite Subjects				
	-				
6	Assessment Methods				

	Examination Prerequisite: Homework, practical work and demonstration (50%) Examination: Written exam (50%)
7	Prerequisites for CP
	-
8	Used in Other Courses
	-
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-Responsible and Teaching Professors
	Module-responsible: Prof. Moritz Bergfeld Teaching Professors: Prof. Moritz Bergfeld Prof. Dr. Kyrill Fischer N. N.
11	Other Information
	-

RT1 - Recording Technology 1

ID	Workload	Credits	Semester	Module Frequency	Duration
RT1	125 h	5	1st Semester	Winter Term	1 Semester

1	Type of Course	Contact Hours	Self-Study	Size of Groups
	Lecture	3 SWS/48 h	61 h	60 students

2 Learning Outcomes / Competencies

The student shall be able to explain and / or give examples for the role of recording technology in different media areas:

- Basics of microphone technology
- Directional recording patterns
- Basics of digital work stations
- Basics of editing and mastering
- Use of analogue and digital recording equipment
- Usage of different types of digital media
- Principles and limitations of human perception (visual, acoustical, tactile, etc.)

Indicative Module Contents

- Microphone placement and microphone directivity
- Stereophonic perception
- Development of basic digital recording and mixdown skills
- Relevant linear and nonlinear audio effects
- Signal measurement in digital and analogue surroundings
- Usage of different types of digital media

4 Teaching Methods

Lecture

5 Prerequisite Subjects

-

6 Assessment Methods

Examination Prerequisite: Homework, continuous participation
Examination: Written exam (100%)

7	Prerequisites for CP
	-
8	Used in Other Courses
	-
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-Responsible and Teaching Professors
	Module-responsible: Prof. M. Bergfeld Teaching Professors: Prof. M. Bergfeld N. N.
11	Other Information
	-

3. Modulbeschreibungen der Pflichtmodule im 2. bis 7. Semester

<table>
<tr><th colspan="6">WS2 – SMP workshop 2: Concept & realization of sound design</th></tr>
<tr><td>ID</td><td>Workload</td><td>Credits</td><td>Semester</td><td>Frequency of Module</td><td>Duration</td></tr>
<tr><td>WS2</td><td>250 h</td><td>10</td><td>2. Semester</td><td>Summer Term</td><td>1 Semester</td></tr>
<tr><td>1</td><td colspan="2">Type of Course</td><td>Contact Hours</td><td>Self-Study</td><td>Size of Groups</td></tr>
<tr><td></td><td colspan="2">Main Module: Project work, problem based learning, workshops and seminar
Sub-modules: concept and script work</td><td>6 SWS/80 h</td><td>170 h</td><td>15</td></tr>
<tr><td>2</td><td colspan="5">Learning Outcomes / Competencies

The aim of the Media Project 2 is to foster the development of a first project in the area of digital media. This project should promote awareness of the creative and technical issues associated with the field of sound and music and the use of appropriate media language, tools and techniques. It allows the students to experience the scope of creative and technical methods and processes within contemporary multimedia production.

Students are encouraged to take responsibility for self-directed, group-oriented learning processes. They explore individual and collective methods of problem solving and construction of knowledge. They develop presentation ideas tailored to an audience; visualize and verbalize the essential of a message, address and present to an audience and reply to critical questions within their projects.

On successful completion of this module the student shall be able to:
• Understand and experience key characteristics of team based projects, solve team problems; use relevant and appropriate etiquette in communicating with stakeholders
• Apply basic principles of research such as: examine the topic and identify the audience/user, existing products, the social and cultural environment, functional and technical conditions of the media application
• Demonstrate methodical and practical skills in creating, visualizing and evaluating different ideas and concepts</td></tr>
</table>

	• Produce media artefacts in an appropriate media language and with necessary technical skills • Understand and apply basic methods of project management

3	**Indicative Module Contents** See sub-modules
4	**Teaching Methods** Project work, assisted team work, problem based learning
5	**Prerequisite Subjects** All 1st semester modules
6	**Assessment Methods** Examination Prerequisite: **detailed concept** and project script (33,3%) Examination: Final Presentation and documentation (66,6%)
7	**Prerequisites for CP** -
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** According to CP: 4,85%
10	**Name of Module-responsible and Teaching Professors** Module-responsible: Prof. Moritz Bergfeld Teaching Professors: All professors and university teachers of SMP
11	**Other Information** -

3.3	**Indicative Module Contents: Sound Design and Radio Plays**
	In this project the students get acquainted with concepts and strategies of audio and radio-phonic forms as well as with the possibilities of mono and stereo recordings. Steps are Conceptualization of a sonic narrative production, mastering the necessary tools for production, recording and post-production. Students explore classic as well as innovative types and languages of audio and radio- phonic forms, critical and analytic listening skills, main audio production tools, techniques and devices.
	Main Module Project Work • Creative use of stereophony (intensity and time delay stereophony) • Understanding of artistic content in audio products • Development of narrative strategies in sound design • Individual approach to forms of artistic expression in audio products • Sound Design Development in Post Production • Understanding and using important tools: mobile recording equipment, mixing consoles, reverb computers, equalizers, compressors
	Sub-module concept and SCRIPT work • Building abstract sound concepts to a given topic • Communication strategies in creative media • Acquaintance of linear and interactive audio forms • Narration principles in Audio

SL2 – SMP Lecture 2 – Simulating Room Reverberation					
ID	Workload	Credits	Semester	Frequency of Module	Duration
SL2	125 h	5	2nd Semester	Summer Term	1 Semester
1	Type of Course Lecture		Contact Hours a) 3 SWS/48 h	Self-Study 61h	Size of Groups 60
2	Learning Outcomes / Competencies • Understanding of linear systems • Ability of recording individual impulse responses • Performing the convolution in specific digital audio workstations				
3	Indicative Module Contents • Impulse response • Convolution • Convolution reverb • Convolution in the time- and frequency domain • Digital filters • MAX/MSP				
4	Teaching Methods Lecture, seminar				
5	Prerequisite Subjects SL1				
6	Assessment Methods Examination: Written exam (100%)				
7	Prerequisites for CP -				
8	Used in Other Courses -				
9	Significance of Mark for Final Mark According to CP: 2,42%				
10	Name of Module-responsible and Teaching Professors				

	Module-responsible: Prof. Dr. Kyrill Fischer Thorsten Greiner N.N.
11	**Other Information**

ST2 - Studio Technology 2					
ID	**Workload**	**Credits**	**Semester**	**Module Frequency**	**Duration**
ST2	125 h	5	2nd Semester	Summer Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	a) Lecture b) Practical		a) 2 SWS/32 h b) 2 SWS/32 h	61 h	a) 60 students b) 30 students
2	**Learning Outcomes / Competencies** The student shall be able to explain and / or give examples for the role of informatics in different media areas: • Understand and describe complex audio studio technology • Operate studio equipment in all SMP studios • Full understanding of workflows in professional audio studios • Creation of complex Audio Projects in DAWs and digital mixing consoles				
	Indicative Module Contents Theory • Advanced Audio Technology • Psychoacoustic effects in studio work • Linear and nonlinear audio effects • Professional audio mixing and mastering formats Praxis • Full understanding of digital mixing consoles • Extensive use of on- and outboard equipment • Advanced microphone technology				
4	**Teaching Methods** Lecture, seminar, practical sessions				
5	Prerequisite Subjects				
	ST1 and RT1				

6	Assessment Methods
	Examination Prerequisite: Homework, practical work and demonstration (50%) Examination: Written exam (50%)
7	Prerequisites for CP
	-
8	Used in Other Courses
	-
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-Responsible and Teaching Professors
	Module-responsible: Prof. Moritz Bergfeld Teaching Professors: Prof. Moritz Bergfeld Prof. Dr. Kyrill Fischer N. N.
11	Other Information
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WS3 – SMP workshop 3: Sound Production & Synthesis					
ID	**Workload**	**Credits**	**Semester**	**Frequency of Module**	**Duration**
WS3	375	15	3rd Semester	Winter Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Main Module: Project/problem based learning Sub-modules: Problem based learning/workshops/seminars/ lectures		16 SWS/145 h	230 h	15
2	**Learning Outcomes / Competencies**				
	Sound processing and programming skills, Advanced mixdown and studio mastering. On successful completion of this module the student will be able to: Overall Competencies: • Apply analytical and methodological skills with more routine • Transfer skills • Apply problem solving skills • Work in a mid-sized team • Define quality standards Project competencies: • Demonstrate creativity, initiative and experimentation in developing and progressing ideas over the course of a project • Apply project management techniques, tools and strategies throughout the lifecycle of a project • Meet agreed deadlines and declared milestones of a project • Apply an appropriate range of specialised software and hardware tools in the execution and completion of a project • Negotiate a range of design communication and organisational problems which occur in a multidisciplinary team environment • Demonstrate the use of appropriate research and presentation methods in the development and implementation of a project				

	Disciplinary Competencies: Design: • Apply a basic design methodology, typical for the focus, • Develop a reasonable design concept considering an argued strategy • Create a product or artwork aesthetics that corresponds to the intended design targets Media Informatics & Technology: • Apply mathematical sound analysis • Apply interactively controlled sound synthesis • Apply room and instrument acoustics
4	**Teaching Methods** Project work, seminar, lecture
5	**Prerequisite Subjects** -
6	**Assessment Methods** Examination: "**linear**" **project: Technology: 25%** "**linear**" **project: Design: 25%** "**interactive**" **project: Technology: 25%** "**interactive**" **project: Design: 25%** The final score of the module is calculated from the average of the four results. Each of the four individual examinations has to be passed (i.e. score of 4 or better), otherwise, the complete module has not been passed.
7	**Prerequisites for CP** Each of the four individual examinations has to be passed (i.e. score of 4 or better), otherwise, the complete module has not been passed.
8	**Used in Other Courses**

	-
9	**Significance of Mark for Final Mark**
	According to CP: 7,27%

10	**Name of Module-responsible and Teaching Professors**
	Module-responsible: Prof. Moritz Bergfeld Prof. Dr. Kyrill Fischer Teaching Professors: All professors and lecturers of SMP
11	**Other Information**
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3	**Indicative Module Contents Sound: Professional Sound Production**
	The project divides into the recording production of jazz/rock and/or classical music including editing and postproduction on a stereophonic basis and the production of sound-based interactive tools. It will be the first approach to the world of professional production in the linear and non-linear audio field. Students try their skills and preferences in different subjects and start to find their position in the professional world of sound. Students develop skills in problem solving and quality assurance, budgeting and project management. By focusing on a professional sound project the students learn to generate ideas, concepts and solutions, in response to the marketability of a sound-production.
	Sub-module Media Design • Music production practice • Interaction of music and space • The language of musical expression • Audio editing and mixing • Sound in nonlinear contexts • Sound based user interfaces
	Sub-module Media Informatics/Technology • Physical Computing • Programming (task dependent: C++, Max/MSP, Java) • Arduino • Open frameworks • Interactivly controlled sound synthesis • Mathematical sound analysis

SL3 – SMP Lecture 3 – Analogue Audio					
ID	Workload	Credits	Semester	Frequency of Module	Duration
SL2	125 h	5	3rd Semester	Winter Term	1 Semester
1	Type of Course		Contact Hours	Self-Study	Size of Groups
	Lecture		a) 3 SWS/48 h	61h	60
2	Learning Outcomes / Competencies • Understanding of the operation of analog filter elements and circuits • Explain the concept of the Transfer Function • Ability to calculate the Transfer Function				
3	Indicative Module Contents • Basic Analog electro-acoustical elements (Resistor, Capacity, Inductance) • Frequency-depending behaviour of Capacity and Inductance • Analog Filters (Low-, High-, Band-Pass) • Transfer Function, Magnitude, Phase • Hardware-Controller and –Sensors (Arduino, Kinect, Ultrasonic devices). • Room and instrument acoustics • The sense of hearing – hearing psychology				
4	Teaching Methods Lecture, seminar				
5	Prerequisite Subjects SL1 and SL2				
6	Assessment Methods Examination: Written exam (100%)				
7	Prerequisites for CP -				
8	Used in Other Courses -				
9	Significance of Mark for Final Mark				

	According to CP: 2,42%
10	**Name of Module-responsible and Teaching Professors** Module-responsible: Prof. Dr. Kyrill Fischer Thorsten Greiner Prof. M. Bergfeld N.N.
11	**Other Information**

WS4 – SMP workshop 4: professional sound production & artistic sound design

ID	Workload	Credits	Semester	Frequency of Module	Duration
WS4	375	15	4th Semester	Summer Term	1 Semester

1	Type of Course	Contact Hours	Self-Study	Size of Groups
	Main Module: Project/problem based learning Sub-modules: Problem based learning/workshops/seminars/ lectures	16 SWS/145 h	230 h	15

2 Learning Outcomes / Competencies

On successful completion of this module the student will be able to:

Overall Competencies:

- Apply analytical and methodological skills with more routine
- Transfer skills
- Apply problem solving skills
- Work in a mid-sized team
- Define quality standards
- Make up and follow a suitable project management

Project competencies:

- Demonstrate creativity, initiative and experimentation in developing and progressing ideas over the course of a project
- Apply project management techniques, tools and strategies throughout the lifecycle of a project
- Meet agreed deadlines and declared milestones of a project
- Apply an appropriate range of specialised software and hardware tools in the execution and completion of a project
- Negotiate a range of design communication and organisational problems which occur in a multidisciplinary team environment

	• Demonstrate the use of appropriate research and presentation methods in the development and implementation of a project • Identify and redeem the users needs Disciplinary Competencies: Design: • Describe the scope of creative activities within a typical media project in the selected focus • Apply a basic design methodology, typical for the focus, • Develop a reasonable design concept considering an argued strategy • Create a product or artwork aesthetics that corresponds to the intended design targets Media Informatics & Technology: • Apply mathematical sound analysis • Apply interactive signal synthesis
4	**Teaching Methods** Project work, seminar, lecture
5	**Prerequisite Subjects** -
6	**Assessment Methods** Examination: "**linear**" **project: Technology: 25%** "**linear**" **project: Design: 25%** "**interactive**" **project: Technology: 25%** "**interactive**" **project: Design: 25%** The final score of the module is calculated from the average of the four results. Each of the four individual examinations has to be passed (i.e. score of 4 or better), otherwise, the complete module has not been passed.
7	**Prerequisites for CP**

	Each of the four individual examinations has to be passed (i.e. score of 4 or better), otherwise, the complete module has not been passed.
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** According to CP: 7,27%

4	**Indicative Module Contents Sound**
	This workshop is subdivided into two major sub-projects. The first project ("linear project") deals with advanced studio recording of more complex musical scores as well as radio and television production. An important focus is set on the mixing and mastering process of stereo and surround audio products. Students gain more experience with room and instrument acoustics as well as voice recording. The other project ("interactive project") introduces an artistic based approach to the representation and interpretation of abstract media by using sound and interactive elements. This project evokes the creative potential of the student. The students will have to plan and realize a spatial sound- and interaction-based representation of a certain given media material, which may include images, sculptures, theatre plays, movies, abstract terms.
	Sub-module Media Design • Music production practice • Advanced editing and multitrack mixdown • Introduction in audio mastering • Introduction in 5.0 and 5.1 surround audio • Nonlinear room and sound installations

	Sub-module Media Informatics/Technology • Spatial sound processing • Room-based and room-oriented sensor devices • Sensor/computer-interaction • Programming (task dependent: C++, Max/MSP, Java, Arduino) • Open frameworks • Interactive signal synthesis • Musical acoustics

SL4 – SMP Lecture 4 – Digital Effects and Simulation of Sound Sources					
ID	**Workload**	**Credits**	**Semester**	**Module Frequency**	**Duration**
SL4	125 h	5	4th Semester	Summer Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Lecture		3 SWS/48 h	61 h	60 students
2	**Learning Outcomes / Competencies** The student shall be able to explain theoretical and practical basics related to digital effects. These include: • Structure and principles of operation of Digital Filters • Basic idea of the z-Transform • Transfer Function				
	Indicative Module Contents • Operation of digital Filters • Relation of Filter coefficients, Impulse Response and Transfer Function • Finite Impulse Response (FIR) and Infinite Impulse Response (IIR) • Examples of the calculation of the Transfer Function for different Filters • Physical modelling of acoustical instruments				
4	**Teaching Methods** Lecture and seminar				
5	Prerequisite Subjects				
	-				
6	Assessment Methods				
	Examination Prerequisite: Homework, continuous participation Examination: Written exam (100%)				
7	Prerequisites for CP				
	-				
8	Used in Other Courses				

	-
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-Responsible and Teaching Professors
	Module-responsible: Prof. Dr. Kyrill Fischer Teaching Professors: Prof. Dr. Kyrill Fischer Thorsten Greiner N. N.
11	Other Information
	-

Praxismodul, inkl. Vorbereitung und Nachbereitung (Industrial Placement incl. Preparation u. Follow Up)

ID	Workload	Credits	Semester	Frequency of Module	Duration
IP5	750 h	30	5th Semester	Winter Term	1 Semester

1	Type of Course	Contact Hours	Self-Study	Size of Groups
	a) Lecture b) Tutorials, group discussions and peer reviews c) Industrial placement	a) 2 SWS/30 h b) 2 SWS/30 h	c) 690 h	a) 30 b) 15

2 Learning Outcomes / Competencies

On successful completion of this subject the student will be able to:

- Understand and reflect the practical work of a designer, producer, developer
- Reflect new fields of application and new professional methods
- Integrate needs of practice in coming projects
- Integrate methods of practice in coming projects

3 Indicative Module Contents

The industrial placement takes five months. There will be accompanying studies at university before the placement and after the placement.

The course before the placement gives information about industrial places and about the organisation of the placement. In the course after the placement the students give a presentation about their projects in the placement and about their experiences.

Students have to produce a detailed report about their projects.

The students work in the fields of any type of sound related projects, including but not limited to (potentially interactive) sound systems design, recording, production or management.

4 Teaching Methods

- Lectures
- Tutorials, group discussions and peer reviews
- Presentation

5 Prerequisite Subjects

-

6	**Assessment Methods** Examination Prerequisite: Completed IP (0%) Examination: IP-Report, presentation of IP-Report (100%)
7	**Prerequisites for CP** -
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** None (0%)
10	**Name of Module-responsible and Teaching Professors** Prof. Dr. Kyrill Fischer All professors of Digital Media
11	**Other Information** -

WS6 – SMP workshop 6: artistic recording & algorithmic composition					
ID	**Workload**	**Credits**	**Semester**	**Frequency of Module**	**Duration**
WS6	375	15	6th Semester	Summer Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Main Module: Project/problem based learning Sub-modules: Problem based learning/workshops/seminars/ lectures		16 SWS/145 h	230 h	15
2	**Learning Outcomes / Competencies** On successful completion of this module the student will be able to: Overall Competencies: • Apply analytical and methodological skills with professional routine • Advanced transfer skills • Apply problem solving skills on a professional level • Work in a mid-sized team • Define competitive quality standards • Make up and follow professional project management Project competencies: • Demonstrate creativity, initiative and experimentation in developing and progressing ideas over the course of a project • Apply project management techniques, tools and strategies throughout the lifecycle of a project • Meet agreed deadlines and declared milestones of a project • Apply an appropriate range of specialised software and hardware tools in the execution and completion of a project • Negotiate a range of design communication and organisational problems which occur in a multidisciplinary team environment • Demonstrate the use of appropriate research and presentation methods in the development and implementation of a project • Identify and redeem the users needs				

	Disciplinary Competencies: Design: • Describe the scope of creative activities within a typical media project in the selected focus • Apply professional audio/video products, • Develop a multimedia design concept considering an argued strategy • Create a product or artwork aesthetics that fully meets professional design targets Media Informatics & Technology: • Apply mathematical sound analysis • Apply interactive signal synthesis
4	**Teaching Methods** Project work, seminar, lecture
5	**Prerequisite Subjects** -
6	**Assessment Methods** Examination: "**linear**" **project: Technology: 25%** "**linear**" **project: Design: 25%** "**interactive**" **project: Technology: 25%** "**interactive**" **project: Design: 25%** The final score of the module is calculated from the average of the four results. Each of the four individual examinations has to be passed (i.e. score of 4 or better), otherwise, the complete module has not been passed.
7	**Prerequisites for CP** Each of the four individual examinations has to be passed (i.e. score of 4 or better), otherwise, the complete module has not been passed.
8	**Used in Other Courses**

	-
9	**Significance of Mark for Final Mark**
	According to CP: 7,27%

4	**Indicative Module Contents Sound**
	This workshop is subdivided into two major sub-projects. The first project ("linear project") deals with complex multimedia productions, audio for video, filmsound and –music as well as complex radio plays. Multitrack postproduction, 5.0 and 5.1 mastering and the design of multimedia products will be executed on aprofessional level. The second project ("interactive project") contains musical rendering of Animation Movies and Film material by using interactive techniques. The students learn how to make abstract Sound concepts based on the dramaturgical structure of the given media material. Evolving from the Auditive perspective, they implement the Film editing with live performing techniques.
	Sub-module Media Design • Strategies of artistic recording direction • Independent and realisation of artistic concepts in multimedia surroundings • Interactive and algorithmic composition • Markets and individuality • Film Editing: Soviet Montage Theory
	Sub-module Media Technology • Algorithmic approaches towards computational composition • Mathematical background of Markov-chain-based modelling • The recording studio as a multimedia tool • Audio follows Video technologies and strategies

SMP 7R – Research-Project					
ID	**Workload**	**Credits**	**Semester**	**Frequency of Module**	**Duration**
SMP7R	375 h	15	7th Semester	Every Term	10 weeks
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Seminar Tutorials, group discussions and peer reviews		3 SWS / 30h	340 h	20
2	**Learning Outcomes / Competencies** On successful completion of this subject the student will – in accordance to his or her chosen study focus – be able to: • Use appropriate methodologies to explore the topic for an interactive or linear product; and/or • Demonstrate the advantages of carrying out extensive and detailed user or situation research for a product; and/or • Use appropriate methodologies with regard to research for product development; and/or • Use appropriate methodologies with regard to market research; and/or • Use appropriate methodologies with regard to product concept and development; and/or • Use appropriate methodologies to plan the project organisation and financing of a media-project; and/or • Identify and design for the cultural environment in which a product will be used or experienced				
3	**Indicative Module Contents** The student(s) submits a briefing document for a linear and/or interactive to a desired project coach. Once this brief has been accepted, the student then writes a planning document, containing: • A project proposal • The results of the necessary research, developing the project • The description of a developed rough concept for the project • A project plan				

	Project Schedule: • Application with briefing document • Agreement on deliverables according to chosen subject with coach • Delivery of research- and concept-plan • Discussion sessions and review of preliminary results (group/peer reviews) • Final Presentation (assessment)
4	**Teaching Methods** • Coaching • Tutorials, group discussions and peer reviews • Presentation and demonstration
5	**Prerequisite Subjects** Successful completion of all modules of semester 1-6 (including IP), except two elective modules
6	**Assessment Methods** Examination: Research Documentation (100%)
7	**Prerequisites for CP** -
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** According to CP: 7,27%
10	**Name of Module-responsible and Teaching Professors** All professors of Digital Media
11	**Other Information** -

SMP 7B – Bachelor Module incl. Colloquium					
ID	**Workload**	**Credits**	**Semester**	**Frequency of Module**	**Duration**
SMP7B	375 h	15	7th Semester	Every Term	12 weeks
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Seminar Tutorials, group discussions and peer reviews		3 SWS / 45 h	330 h	20
2	**Learning Outcomes / Competencies** On successful completion of this subject the student will be able to • Discuss the design, cultural, technical and economic issues related to the project • Show appropriate use of project management skills and tools in application of project resources and in meeting project milestones on time and to specifications • Demonstrate judgement in the application of appropriate research and design methods in arriving at final solution(s) for the proposed project • Demonstrate specialised technical, creative or conceptual skills and tools in the development, completion and presentation of the project outcomes • Show critical personal reflection and accountability in relation to learning from successful and unsuccessful project outcomes				
3	**Indicative Module Contents** Students may develop and realise a complete media system or media product, such as an interactive media system, an animation, a game, a video or a sound-related system or product. The work should demonstrate an understanding of how to apply a range of methods and tools in arriving at a professional solution. Students may explore a concept from a cultural or market perspective that they wish to develop as a proposal to industry. Students developing ideas should cater for the cultural, technical, aesthetic and business aspects of a particular idea and explore all these aspects through sound research methods. Students should be able to create and present a prototype that has a sound basis in technology as well as being appropriate to the needs of the target stakeholders. Such projects should demonstrate an awareness of the market in which the proposed project will operate or be displayed. Prototypes may be aimed at business, cultural, academic or community based environments. Projects can be the product of individual or team effort and in the case of team work the project proposed should outline clearly the areas of responsibility for each				

	member of the team. Project Schedule: • Discussion sessions and review of preliminary ideas • Student presentation of Ideas (seminars; individual and group reviews) • Paper Prototyping (group/peer reviews) • Prototype Presentation (group/peer reviews) • Final Presentation (assessment)
4	**Teaching Methods** • Coaching • Tutorials, group discussions and peer reviews • Presentation and demonstration
5	**Prerequisite Subjects** Successful completion of all modules of semester 1-6 (including IP), except two elective modules and successful completion of SMP 7R Research Project
6	**Assessment Methods** Bachelor Project: 75% Colloquium: 25%
7	**Prerequisites for CP** -
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** 20%
10	**Name of Module-responsible and Teaching Professors** All professors of Digital Media
11	**Other Information** -

5. Rahmenmodulbeschreibungen der Electives ME im 2. bis 7. Semester

5.1 Übersicht

<table>
<tr><th colspan="6">ME –Electives</th></tr>
<tr><td>ID</td><td>Workload</td><td>Credits</td><td>Semester</td><td>Frequency of Module</td><td>Duration</td></tr>
<tr><td>ME2</td><td>125 h</td><td>5</td><td>2, 3, 5, 6</td><td>Each semester</td><td>1 Semester</td></tr>
<tr><td>1</td><td colspan="2">Type of Course
Seminar/workshop/lectures/ project</td><td>Contact Hours
3 SWS / 50 h</td><td>Self-Study
75 h</td><td>Size of Groups
20 Design
20 IT
20 Philosophy</td></tr>
<tr><td>2</td><td colspan="5">Learning Outcomes / Competencies
Media Electives shall enable the student to:
• Deepen his or her knowledge in specialised fields or advanced topics related to sound and music production
• Work in genre-spanning teams and contexts and/or
• Gain and deepen knowledge of technical and/or artistic approaches.

On successful completion of these modules the student shall be able to:
• Develop and describe media concepts in a broad cultural and social horizon as well as in adaption to the field of sound and music production
• Use a wide range of knowledge covering technological, artistic, philosophical as well as management-oriented views
• Integrate different media and different techniques to a complex artistic concept and/or product.</td></tr>
<tr><td>3</td><td colspan="5">Indicative Module Contents
The modules cover the following fields:
• Media Informatics & Technology
• Media Design
• Media Management
• Media Philosophy</td></tr>
<tr><td>4</td><td colspan="5">Teaching Methods</td></tr>
</table>

	Lecture, seminar, practical and presentation
5	**Prerequisite Subjects** -
6	**Assessment Methods** Final presentation and documentation
7	**Prerequisites for CP** -
8	**Used in other courses** -
9	**Significance of Mark for Final Mark** According to CP: 2,42%
10	**Name of <u>Module-Responsible</u> and Teaching Professors** Prof. Moritz Bergfeld
11	**Other Information** * The catalogue offers two modules from the socio-scientific programme of the University of Applied Sciences Darmstadt: a) Media and Entertainment Law, b) a free of choice-course from the respective catalogue.

5.2 Rahmenmodulbeschreibungen der Electives im 2. Bis 7. Semester im Detail

ME1 - Computational Audio and Simulation					
ID	**Workload**	**Credits**	**Semester**	**Frequency of**	**Duration**
ME2_01	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Seminar / Workshop / Practical		3 SWS/50 h	75 h	20
2	**Learning Outcomes / Competencies** On successful completion of this module the student shall be able to master one or some of the following tasks: • Describe and explain the algorithmic approach for a certain computational audio concept • Demonstrate the basic ideas of the underlying implementation, mathematics and/or the simulation • Identify and explain the advantages and shortcomings of the model-based algorithmic approaches under investigation.				
3	**Indicative Module Contents** The contents of this module may include but are not restricted to: • Investigation of specific physical and/or mathematical models • Realization of an algorithmic audio-related processing module • Simulation of sound-related effects • Digital physical modelling				
4	**Teaching Methods** Lecture, seminar, practical and presentation				
5	**Prerequisite Subjects** -				
6	**Assessment Methods** Final presentation and documentation				
7	**Prerequisites for CP** -				

8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** According to CP: 2,42%
10	**Name of Module-responsible and Teaching Professors** Module-responsible: Prof. Dr. Kyrill Fischer
11	**Other Information**

ME2 - Spatial Audio and Interaction

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_01	125 h	5	2-6	Winter Term Summer Term	1 Semester

1	Type of Course	Contact Hours	Self-Study	Size of Groups
	Seminar / Workshop / Practical	3 SWS/50 h	75 h	20

2 Learning Outcomes / Competencies

On successful completion of this module the student shall be able to:

- Explain the functional principles of a spatial (possibly 3D) audio concept and/or solution
- Demonstrate the possibilities and specific limitations of individual concepts and solutions
- Describe the interaction concept involved within a certain system
- Relate the artistic or technical concept to an intended user-experience

3 Indicative Module Contents

The contents of this module may include but are not restricted to:

- Theory and practice of different spatial audio concepts and systems
- Planning and/or realisation of a spatial audio installation
- Development and presentation of a technical and/or artistic user-interface concept

4 Teaching Methods

Lecture, seminar, practical and presentation

5 Prerequisite Subjects

-

6 Assessment Methods

Final presentation and documentation

7 Prerequisites for CP

-

8 Used in Other Courses

-

9 Significance of Mark for Final Mark

	According to CP: 2,42%
10	**Name of Module-responsible and Teaching Professors** Module-responsible: Prof. Dr. Kyrill Fischer
11	**Other Information**

ME3 - Music and Media Production

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_01	125 h	5	2-6	Winter Term Summer Term	1 Semester

1	Type of Course	Contact Hours	Self-Study	Size of Groups
	Seminar / Workshop / Practical	3 SWS/50 h	75 h	20

2 Learning Outcomes / Competencies

On successful completion of this module the student shall be able to:

- Explain and successfully work in typical audio-related production processes such as production direction and artistic recording direction
- Create professional results in the field of Music and Media Production as parts of market-suitable products.
- Take an active part in a music and media production process as an artistic advisor or director

3 Indicative Module Contents

The contents of this module may include but are not restricted to:

- Technical background of recording and mixing processes
- Utilisation of complex production equipment for artistic purposes
- Recording communication and artistic recording direction

4 Teaching Methods

seminar, practical work and presentation

5 Prerequisite Subjects

-

6 Assessment Methods

Final presentation of practical work and documentation

7 Prerequisites for CP

-

8 Used in Other Courses

-

9 Significance of Mark for Final Mark

According to CP: 2,42%

10 Name of Module-responsible and Teaching Professors

	Module-responsible: Prof. Moritz Bergfeld
11	**Other Information**

ME4 - Post-Production

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_01	125 h	5	2-6	Winter Term Summer Term	1 Semester

1	Type of Course	Contact Hours	Self-Study	Size of Groups
	Seminar / Workshop / Practical	3 SWS/50 h	75 h	20

2 Learning Outcomes / Competencies

On successful completion of this module the student shall be able to:

- Explain and successfully work in typical audio- and multimedia post-production processes such as music editing, -mixing and -mastering, filmsound-editing and gamesound-post-production
- Create professional results in the field of music and multimedia post-production as parts of market-suitable products.
- Take an active part in a music and media production process as an artistic advisor, editor or producer

3 Indicative Module Contents

The contents of this module may include but are not restricted to:

- Technical background of postproduction and computer-related mixing processes
- Utilisation of complex post production equipment for artistic purposes
- Artistic and technical schemes and topics in the post-production field
- Artistic music editing

4 Teaching Methods

seminar, practical work and presentation

5 Prerequisite Subjects

-

6 Assessment Methods

Final presentation of practical work and documentation

7 Prerequisites for CP

-

8 Used in Other Courses

-

9 Significance of Mark for Final Mark

According to CP: 2,42%

10	**Name of Module-responsible and Teaching Professors** Module-responsible: Prof. Moritz Bergfeld
11	**Other Information**

ME5 – Media Installation and PA

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_01	125 h	5	2-6	Winter Term Summer Term	1 Semester

1	Type of Course	Contact Hours	Self-Study	Size of Groups
	Seminar / Workshop / Practical	3 SWS/50 h	75 h	20

2 Learning Outcomes / Competencies

On successful completion of this module the student shall be able to:

- Successfully work in typical concert and/or installation situations such as front of house, electronic music performance, stage monitoring, sound design in theatre, musical performances and opera, linear or interactive sound installations.
- Create professional results in the field of music and concert amplification, media installation and nonlinear public audio projects.
- Invent and actualise artistic concepts in relation to public or private spaces, theatre, musical and opera performances
- Reflect and apply perceptual, cultural, technological, participatory/interactive and societal aspects and models of installations
- Conceptualize, design and implement media installations and environments considering and merging transdisciplinary criteria and components
- Develop and apply appropriate dramaturgies and presentational strategies of environmental media concepts for artistic as well as for applied fields

3 Indicative Module Contents

The contents of this module may include but are not restricted to:

- Technical background of linear or interactive amplification technique
- Utilisation of complex audio-related material for artistic purposes
- Actualisation of a literary concept in public space or theatre/opera venues
- The students will develop technical and/or artstic installations, environments, situative and spatial simulations. The productions' final presentation follows environmental experience's necessities and state-of-the-art display of professional exhibitions.

4 Teaching Methods

seminar, practical work and presentation

5 Prerequisite Subjects

	-
6	**Assessment Methods** Final presentation of practical work and documentation
7	**Prerequisites for CP** -
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** According to CP: 2,42%
10	**Name of Module-responsible and Teaching Professors** Module-responsible: Prof. Moritz Bergfeld
11	**Other Information**

ME6 - Music and Media Theory

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_01	125 h	5	2-6	Winter Term Summer Term	1 Semester

1	Type of Course	Contact Hours	Self-Study	Size of Groups
	Seminar / Workshop / Practical	3 SWS/50 h	75 h	20

2 Learning Outcomes / Competencies

On successful completion of this module the student shall be able to:

- Understand and describe the essential scientific background of music theory, music and/or media history and media theory and philosophy
- Gain a wide understanding of the professional and artistic background of the media and music production field
- Detect and evaluate the artistic value of musical works, sound design and multimedia applications.

3 Indicative Module Contents

The contents of this module may include but are not restricted to:

- Music and media history and theory
- Sound design theory in linear and nonlinear contexts
- Historical and theoretical architectures of audio related work spaces

4 Teaching Methods

seminar, practical work and presentation

5 Prerequisite Subjects

-

6 Assessment Methods

Seminar, lecture and examination

7 Prerequisites for CP

-

8 Used in Other Courses

-

9 Significance of Mark for Final Mark

According to CP: 2,42%

10	**Name of Module-responsible and Teaching Professors** Module-responsible: Prof. Moritz Bergfeld
11	**Other Information**

ME7 - Media Culture

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_01	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Seminar / Workshop / Practical		3 SWS/50 h	75 h	20

2 Learning Outcomes / Competencies

On successful completion of this module the student shall be able to:

- Develop concepts, degrees and types of the audience's/the user's involvement and participation
- Understand and explain contemporary practices and historical roots of exhibitions, installations, virtual spaces, games
- Understand structure and pre-requisites of creative and innovative aesthetic and social processes
- Develop aesthetic and ethical interpretation of historical or contemporary art, design and media productions
- Define individuality, character, gender and identity in the digital age's virtual and networked world

3 Indicative Module Contents

The contents of this module may include but are not restricted to:

- History and contemporary practices of image, sound, music and other semiotic systems
- History and contemporary practices of philosophy and ethical values
- History and contemporary practices of performative, process oriented and interactive arts, designs and cultural techniques
- History of media and media technology, its use and its audience
- Media and communication theories
- Media, perception and technology related philosophies and ethics
- Individual and social psychology of media use and impact

4 Teaching Methods

seminar, lecture, examination and presentation

5 Prerequisite Subjects

	-
6	**Assessment Methods** Final presentation of practical work and documentation
7	**Prerequisites for CP** -
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** According to CP: 2,42%
10	**Name of Module-responsible and Teaching Professors** Module-responsible: Prof. Moritz Bergfeld
11	**Other Information**

ME8 – Film, Theatre, and Game

ID	Workload	Credits	Semester	Frequency of Module	Duration
ME2	125 h	5	2, 3, 4, 6	Each semester	1 Semester

1	Type of Course	Contact Hours	Self-Study	Size of Groups
	Seminar/workshop/lectures/ project	3 SWS / 50 h	75 h	20 students

2 Learning Outcomes / Competencies

On successful completion of these modules the student shall be able to:

- Analyse the dramaturgic structures of different media types such as film, game and theatre plays from a sound designer's perspective
- Work in small film/ game developer teams
- Develop artistic and /or technical acoustical concepts based on a given theatrical or film scene
- Working with Sound in the field of digital story telling

3 Indicative Module Contents

- Using Sound and Leitmotif in different media, such as game, theatre and film
- Edit sound collages based on scenes and settings
- Analyze the interaction between main characters of an story and to subsequently derive sound concepts
- implement Sound concepts based on "story telling" principles
- Using sound and music to enforce dramatic structures in game, theatre and film.

4 Teaching Methods

Lecture, seminar, practical and presentation

5 Prerequisite Subjects

-

6 Assessment Methods

Final presentation and documentation

7 Prerequisites for CP

	-
8	**Used in other courses** -
9	**Significance of Mark for Final Mark** According to CP: 2,42%
10	**Name of Module-Responsible and Teaching Professors** Module-responsible: Thorsten Greiner
11	**Other Information**

ME9 - Free multimedia elective

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_01	125 h	5	2-6	Winter Term Summer Term	1 Semester

1	Type of Course	Contact Hours	Self-Study	Size of Groups
	Seminar / Workshop / Practical	3 SWS/50 h	75 h	20

2 Learning Outcomes / Competencies

On successful completion of this module the student shall be able to:

- Develop multimedia projects on campus and work in teams with students of all study programs of the faculty of media
- Create professional results in the field of multimedia production and post-production.
- Take an active in group-work and develop business and production skills together with all students in the faculty of media

3 Indicative Module Contents

The contents of this module may include but are not restricted to:

- Include own technical and theoretical background in complex multimedia production schemes
- Develop teams and install multimedia workflows on campus
- Co-produce and direct film- game- or interactive media projects

4 Teaching Methods

Practical work and presentation

5 Prerequisite Subjects

-

6 Assessment Methods

Final presentation of practical work and documentation

7 Prerequisites for CP

-

8 Used in Other Courses

-

9 Significance of Mark for Final Mark

	According to CP: 2,42%
10	**Name of Module-responsible and Teaching Professors** Module-responsible: Prof. Moritz Bergfeld Prof. Dr. Kyrill Fischer
11	**Other Information**

6. 3 Modulbeschreibungen der Media Management Electives

ME10 – Media Management					
ID	**Workload**	**Credits**	**Semester**	**Frequency of**	**Duration**
ME2_17	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	**Type of Course**		**Contact Hours**	**Self-Study**	**Size of Groups**
	Seminar/Workshop/Practical		3 SWS/50 h	75 h	20
2	**Learning Outcomes / Competencies** This module enables participants to manage the preproduction/concept, production/realisation and post production process of typical media projects. The module examines critical methods for the various processes and offers strategies that maximize resources and time frames. Management methods, timelines and project life cycles are examined with a focus on supporting business growth and project properties. On successful completion of this module the student shall be able to: • Identify separate processes and deliverables within the overall production timeline; • Identify methods and tools for the various processes; • Use strategies to maximize resources and control finance; • Use project management methods and tools to organize timelines and project life cycles; • Use human resource management methods to organize teams.				
3	**Indicative Module Contents** Contents of this module may contain but are not limited to the following aspects: • Project management within media production • Time management and handling deliverables within media production • Staff management and organizing teams within media production • Finance management within media production • Fund raising and media promotion				
4	**Teaching Methods** Lecture, seminar, practical and presentation				
5	**Prerequisite Subjects**				

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6	**Assessment Methods** Final presentation and documentation
7	**Prerequisites for CP** -
8	**Used in Other Courses** -
9	**Significance of Mark for Final Mark** According to CP: 2,42%
10	**Name of Module-responsible and Teaching Professors** Module-responsible: Prof. Moritz Bergfeld Teaching Professors: all professors of Digital Media with producing expertise
11	**Other Information**