

Anlage 5

Modulhandbuch

Digital Media

Bachelor of Arts

der Besonderen Bestimmungen für die Prüfungsordnung für den Studiengang Digital Media des Fachbereichs Media der Hochschule Darmstadt – University of Applied Sciences

zuletzt geändert am 14.01.2014
gültig ab 15.12.2014

zugehörige BBPO veröffentlicht in den Amtlichen Mitteilungen 2012

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0. Preliminary remarks

- (1) All modules are described by means of the following points in terms of § 1 Paragraph 7 of the ABPO:
 1. Indicative module contents;
 2. Learning outcomes and qualification goals in terms of competencies to be gained;
 3. Types of courses and teaching methods;
 4. Itemised workload of the study courses and teaching methods of the modules and the number of Credit Points (CP) awarded;
 5. Requirements necessary for admission to the module (prerequisite subjects);
 6. Duration and scheduled structure of the semester as well as module frequency;
 7. The utilisation of the module used in other courses;
 8. Description of examination prerequisites and assessment methods to be rendered in the module, as well as, if applicable, other requirements for the successful completion of the module (prerequisites for CP).

- (2) The overview of the modules in Appendix 1 of the BBPO contains:
 1. Itemised workload of the study courses and teaching methods of the modules and the number of Credit Points (CP) awarded;
 2. Duration of the offer;
 3. The type and form of assessment methods to be rendered in the module.

- (3) The admission requirements to the Bachelor Module are listed in § 12 of the BBPO; those of the other modules are regulated in § 11 of the BBPO. Furthermore, potential additional admission requirements are listed in the module descriptions.

- (4) The elective modules are listed and described in Appendix 2 of the BBPO.

1. The Principle of Problem Based Learning Workshops

Preconditions

Facing the rise of complexity

Media-Projects are characterized by a two-dimensional multidisciplinaryity: 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 Digital Media, 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. Module descriptions of the compulsory modules in 1. Semester

MD1 – Basic Principles of Media Design					
ID	Workload	Credits	Semester	Module Frequency	Duration
MD 1	125 h	5	1st Semester	Winter Term	1 Semester
1	Type of Course		Contact Hours	Self-Study	Size of Groups
	a) Theory: Collaborative teaching/ lecture/seminar		a) 2 SWS/32 h	61 h	a) 30
	b) Praxis: Practical		b) 2 SWS/32 h		b) 15
2	Learning Outcomes / Competencies				
	<p>The Media Design Module “md1” provides a foundation for all media design activities. The student is introduced to theories, methods and practical processes involved in time-based and interactive media production. The module encourages students to adopt an analytic, creative and ethical approach to the resolution of basic media design problems.</p> <p>The module integrates theoretical and practical aspects of design processes in the four specializations of Digital Media. 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.</p> <p>On successful completion of this module the student will be able to:</p> <ul style="list-style-type: none"> • Analyse and value media artefacts with regard to fundamental genre and design principles • Describe the scope of creative activities and methods within a typical media project • Show basic abilities in developing design concepts for media products in the chosen specialisation and presenting them in a clear and coherent manner • Analyse and evaluate time-based and interactive media artefacts in terms of their use of space, time, motion, sound and interaction • Demonstrate an awareness of audiences in the communication and interpretation of ideas 				

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Indicative Module Contents listed according to Specialisations

Indicative Module Contents for Animation and Game

Theory: Animation & Game Studies

- History of animation and animation technology
- History of video games and game technology
- Animation and game genres in contemporary media culture
- Introduction to game theory (magic circle)
- Introduction to animation cinematography
- Basics of storytelling in animation and games

Praxis: Basics of Animation & Game Design

- Principles of visual composition 1: frame (object and figure, colour and light, space and staging)
- Principles of visual composition 2: sequence (basics of cinematography and visual storytelling in animation and games)
- Principles of animation
- Basic principles of game play design
- Introduction to character design
- Introduction to environment design for animation and game
- Visual styles and techniques in animation & game
- Drawing for animation & game
- Ideation and preproduction methods

Indicative Module Contents for Interactive Media Design

Theory: Design & Interaction Studies

- Perception of design, perception of interactive products
- Theories of the image
- History of images and moving images
- Principles of audio-visual composition
- Principles of action and interaction
- Colour, layout, typography
- Narration/storytelling/cinematographic codes

Praxis: Basics of Interaction Design

- Principles of visual composition: line, shape, space, colour, layout, typography, text & image
- Principles of audio-visual composition: animation & sound
- Principles of action & interaction
- Visual & interactive storytelling: linear and non-linear
- Concept and production: concept making, visualization and prototyping

Indicative Module Contents for Sound

Theory: Sound Studies

- History of music and sound
- Definition and aesthetics of sound products: music production, radio play, audio book, feature etc.
- Aesthetics of sound design: expression of distance and nearness, emotional expressions, stereo and surround sound
- Creative principles of sound editing
- Basics of sound design in multimedia applications

Praxis: Design Basics Sound

- Principles of recorded music: style creation by sound colours
- Principles of audio-visual composition: image & sound, music
- Principles of stereophonic perception
- Creative sound editing
- Sound in visual media: video, animation
- Sound in interactive media: game, interactive media

Indicative Module Contents for Video

Theory: Film Studies

- History of moving images
- Film language
- Narration/storytelling/cinematographic codes
- Basics of lighting

	<ul style="list-style-type: none"> • Basics of cinematography • Composition of space: mise en scène • Composition of time: montage • Sound in video & film <p>Praxis: Design Basics Video</p> <ul style="list-style-type: none"> • Principles of still composition: photography & framing • Modelling with light: available and constructed light • Characters and objects in space and time • Montage, mis en scène, découpage • Perspective, angle, depth of field • Trucking, blocking • Characterization • Storytelling: plot and subplot • Storyboarding • Principles of audio-visual composition: image & sound • Blue/green screen shooting • Visual effects and post production
4	<p>Teaching Methods</p> <p>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 the four specializations of Digital Media. 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.</p> <p>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.</p>
5	<p>Prerequisite Subjects</p> <p>-</p>

6	<p>Assessment Methods</p> <p>Examination Prerequisite: Homework, practical work and demonstration (70%), Examination: Final presentation and written documentation (30%)</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-Responsible</u> and Teaching Professors</p> <p>Module-responsible:</p> <p><u>Prof. Katharina Kafka</u> (Animation & Game)</p> <p><u>Prof. Claudia Söller-Eckert</u> (Interactive Media Design)</p> <p><u>Prof. Moritz Bergfeld</u> (Sound)</p> <p><u>Prof. Thomas Carlé</u> (Video)</p> <p>Teaching Professors:</p> <p>Prof. Thomas Burnhauser</p> <p>Prof. Thomas Carlé</p> <p>Prof. Katharina Kafka</p> <p>Prof. Tilmann Kohlhaase</p> <p>Prof. Andrea Krajewski</p> <p>Prof. Claudia Söller-Eckert</p> <p>Prof. Tsune Tanaka</p> <p>Prof. Will Weber</p>
11	<p>Other Information</p> <p>-</p>

MI/T1 – Media Informatics and Technology 1

ID	Workload	Credits	Semester	Module Frequency	Duration
MI/T1	125 h	5	1st Semester	Winter Term	1 Semester
1	Type of Course a) Lecture b) Practical		Contact Hours a) 2 SWS/32 h b) 2 SWS/32 h	Self-Study 61 h	Size of Groups a) 30 students b) 15 students
2	<p>Learning Outcomes / Competencies</p> <p>The student shall be able to explain and / or give examples for the role of informatics in different media areas:</p> <ul style="list-style-type: none"> • The role of informatics in different media areas • Understanding algorithms • Basics of logic • Computer as a tool • Media related hardware • Analogue and digital media • Usage of different types of digital media • Principles and limitations of human perception (visual, acoustical, tactile, etc.) 				
3	<p>Indicative Module Contents</p> <p>Indicative Module Contents for Animation and Game</p> <ul style="list-style-type: none"> • Creating a script for a simple 2-d game or interactive animation • Knowledge of selected animation tools and techniques • Basic knowledge of video technology • Introduction to animation techniques and tools • Basics of camera and video technology • Introduction to scripting for A&G (p.ex. Action script, Java Script) • Introduction to game programming (methods, tools, procedures) • Hardware technology: input and output devices in animation and game 				

	<p>Indicative Module Contents for Interactive Media</p> <ul style="list-style-type: none"> • Examples for interactive devices and systems • Analysis of their components and functional basics • Identifying specific input and output strategies • Binary and hexadecimal representation of numbers • Basic concepts and examples of computer programs: variables, types, assignments, input/output, flow control, functions and parameters • Introduction to programming (methods, tools, procedures) • Event-based programming (input and output) • Introduction to Physical Computing • Sensors: technical background, operation and limitations
	<p>Indicative Module Contents for Sound</p> <ul style="list-style-type: none"> • Physics of sound: wavelength, frequency, speed, reflection, absorption, ... • Root mean square (rms), dB, dB (SPL) • Sampling, A/D, D/A • Spectrum, Fourier Transformation • Binary and hexadecimal representation of numbers • Basic concepts and examples of computer programs: variables, types, assignments, input/output, flow control, functions and parameters
	<p>Indicative Module Contents for Video</p> <ul style="list-style-type: none"> • Physics of light: dualism particle/wave; wavelength, refraction, reflection • Lux, lumen, colour temperature • Colour balancing, additive and subtractive mixture • Studio technology • Focus, focal depth, aperture, exposure time, exposure value, aspect ratio • Optical sensors: CMOS, CCD • Video compression basics • Sound for video
4	<p>Teaching Methods</p> <p>Lecture, seminar, practical sessions</p>

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 <u>Module-Responsible</u> and Teaching Professors Module-responsible: <u>Prof. Tilmann Kohlhaase</u> (Animation & Game) <u>Prof. Dr. Arnd Steinmetz</u> (Interactive Media Design) <u>Prof. Dr. Kyrill Fischer</u> (Sound) <u>Prof. Dr. Frank Gabler</u> (Video) Teaching Professors: Prof. Dr. Christoph Busch Prof. Dr. Kyrill Fischer Prof. Dr. Torsten Fröhlich Prof. Dr. Frank Gabler Prof. Dr. Arnd Steinmetz
11	Other Information -

MM1 – Basic Principles of Communication, Teamwork and Project Management

ID	Workload	Credits	Semester	Module Frequency	Duration
MM1	125 h	5	1st Semester	Winter Term	1 Semester
1	Type of Course		Contact Hours	Self-Study	Size of Groups
	a) Theory: Collaborative teaching / lecture / seminar		a) 1 SWS/16 h	77 h	a) 30
	b) Praxis: Practical		b) 2 SWS/32 h		b) 30
2	<p>Learning Outcomes / Competencies</p> <p>The Media Design Module “mm1” provides a foundation for communication and cooperation in heterogeneous project-teams and basic methods of project management. The student is introduced to theories, methods and practical communication processes involved in media production. The student is introduced in basic project management theories, methods and tools.</p> <p>On successful completion of this module the student will be able to:</p> <ul style="list-style-type: none"> • Understand, describe and apply the basic elements of communication • Understand and apply the basic tools to improve communication and teamwork • Analyse and change the own communication behaviour • Understand, and describe the basic elements of project management 				

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Indicative Module Contents

- Introduction to basic elements of communication
- Tools to improve communication
- Communication quadrant
- Interaction circles
- Inner team
- Development quadrant
- Situation model
- Feedback
- Tools for self analysis
- Logbook
- Peer Review
- Effective teamwork
- Handling of team diversity/interdisciplinarity
- Talking and listening – perception of realities
- timeline of a media project
- problems in various phases of a media project
- basic methods of project management

4	Teaching Methods Seminar/Group coaching
5	Prerequisite Subjects -
6	Assessment Methods Examination Prerequisite: Homework, practical work (40%), Examination: Presentation (60%)
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 <u>Prof. Andrea Krajewski</u> N.N. (associate lecturers)
11	Other Information -

MPH1 – Media, Culture, Technology and Communication

ID	Workload	Credits	Semester	Frequency of Module	Duration
MPH1	125 h	5	1. Semester	Winter Term	1 Semester
1	Type of Course a) Theory: Collaborative teaching / Lecture/Seminar b) Practical		Contact Hours a) 1 SWS/16 h b) 2 SWS/32 h	Self-Study 77 h	Size of Groups a) 30 b) 30
2	Learning Outcomes / Competencies On successful completion of this module the student shall be able to: <ul style="list-style-type: none"> • Discuss the basic origins, meanings as well as conceptual and terminological implications of the terms 'media', 'communication' and 'culture'; • Demonstrate knowledge of milestones in audiovisual art and design history as well as the history of technology and apply them to contemporary media; • Demonstrate basic knowledge of the role and influence of visual, auditory and interactive communication modes and models in contemporary culture and media production; • Demonstrate and apply knowledge of the interdependence of technological achievements, upcoming media, political and social ownership of media, role of recipient/user, and the emergence of media contents and subjects. • Apply different terms and strategies to the analysis and interpretation of media and cultural artifacts as well as to their impact on recipients and users demonstrating a knowledge of semiotic, cultural, psychological and social contexts and influences; • Discuss concepts and terms relevant to the creation, production and consumption of media and cultural artefacts e.g. creator/author, artist/designer, recipient/consumer/user, etc. • Apply and evaluate scientific and scholarly methods to the analysis of artifacts, their elaboration and their presentation. 				
3	Indicative Module Contents Introductions into: <ul style="list-style-type: none"> • Introductions into • The origins and meanings of "Culture", "Media" and "Communication", introducing into their historical developments and their relationship to technological and social 				

	<p>developments</p> <ul style="list-style-type: none"> • The history of technology and their impact on medias' designs, contents and communication development • The history of arts and design, their semiotics and their relation to contemporary media; • Theories, models and terms describing and analysing media, communication, culture, art, design, and relating them to e.g. identity, gender, power and socio-political structures • Scientific and scholarly methods appropriate for culture and media • The culture industry: creation, production, consumption; high, mass and popular culture
4	<p>Teaching Methods</p> <p>Lecture and presentation</p>
5	<p>Prerequisite Subjects</p> <p>-</p>
6	<p>Assessment Methods</p> <p>Examination Prerequisite: Homework, practical work and demonstration (40%), Examination: Written exam (60%)</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-Responsible</u> and Teaching Professors</p> <p><u>Prof. Sabine Breitsameter</u></p> <p>Prof. Claudia Söller-Eckert</p> <p>Prof. Katharina Kafka</p> <p>Prof. Moritz Bergfeld</p> <p>N.N.</p>
11	<p>Other Information</p> <p>-</p>

3. Module descriptions of the compulsory modules in 2.to 7. Semester

MP2 – Experimental Media Projects					
ID	Workload	Credits	Semester	Frequency of Module	Duration
MP2	250 h	10	2. Semester	Summer Term	1 Semester
1	Type of Course Main Module: Project/problem based learning Sub-modules: Problem based learning/workshops/seminars/lectures		Contact Hours 5 SWS/80 h	Self-Study 170 h	Size of Groups 10
2	Learning Outcomes / Competencies <p>The aim of the Media Project 2 is to foster the development of a first project in the area of interactive media, animation, game, video or sound. This project should promote awareness of the creative and technical issues associated with the chosen specialization 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. The first project offers the possibility to apply basic project management methods and skills.</p> <p>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. They explore methods and tools of project management.</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • 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 				

	<ul style="list-style-type: none"> • Produce media artefacts in an appropriate media language and with necessary technical skills • Understand and solve the problems within a project team and within a project development process • Understand and apply basic methods of project management • Understand, and describe the basic elements of project management • Document the project development and the deliveries of the project management
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3	Indicative Module Contents See sub-modules
4	Teaching Methods Project work, assisted team work, problem based learning
5	Prerequisite Subjects -
6	Assessment Methods Examination Prerequisite: project work (0%) Media Informatics/Technology: written or oral exam (33,3%) Media Design: homework, written or oral exam (33,3%) Examination: Project: Final Presentation and documentation (33,3%)
7	Prerequisites for CP -
8	Used in Other Courses -
9	Significance of Mark for Final Mark According to CP: 4,85%
10	Name of <u>Module-responsible</u> and Teaching Professors Module-responsible: Prof. <u>Katharina Kafka</u> (Animation & Game) Prof. <u>Claudia Söller-Eckert</u> (Interactive Media Design) Prof. <u>Moritz Bergfeld</u> (Sound) Prof. <u>Thomas Carlé</u> (Video)

	Teaching Professors: All professors of Digital Media
11	Other Information -

3.1	Indicative Module Contents Animation & Game: Simple Games/Animations
	<p>In this first project students are familiarized with the aesthetic and technological implications related to the creation of three-dimensional ludic or narrative worlds. They are encouraged to integrate fundamental concepts of storytelling, cinematography and gameplay. The students get introduced to the standard project stages of concept development, planning, preproduction, production and testing, thus gaining first producing skills. In producing a simple game or animation, the students are exposed to the dynamics of the various disciplines and roles that contribute to animation and game production. They experience essential characteristics of both fields of practice and explore the creative potential at the intersections of game and animation. They gain an increasing awareness of the aesthetic specificities of genres and formats, which will guide them in their creative decision-making.</p>
	<p>Sub-module Media Informatics/Technology</p> <ul style="list-style-type: none"> • Introduction to game engines and game middleware (p.ex. Unity) • Introduction to browser game technology • Scripting for animation and games (p.ex. Action Script, Java Script) • Introduction to object oriented programming for games • Introduction to 3-D computer graphics and animation software (Maya) • Introduction to postproduction for A&G (non-linear editing, basic sound editing, compositing) • Basics of mathematics for game programming and computer graphics • Basics of mechanics for animation and game
	<p>Sub-module Media Design</p> <ul style="list-style-type: none"> • Environment design for animation and game • Character design for animation and game • Design methods: development of design concepts for animation and game • Introduction to interface design for games • Advanced drawing: concept art for animation and game

- Animation for movies/games (linear and non-linear animation)
- Introduction to storytelling for animation and games (principles of linear and non-linear storytelling and dramaturgy)
- Introduction to sound design: the role of sound for animation & game

Indicative Module Contents Interactive Media Design: Interaction

In this project the students explore and apply design and technical principles of interaction in a virtual simulation scenario. Students explore simulation concepts, structuring media content, dynamic and interactive scenarios as well as technological skills and tools. They design and produce media artefacts, interactive visualizations, virtual characters and interfaces for virtual environments, learning environments, simulations or games – all in acoustical and/or visual way. Students learn to approach tasks as projects and to interact in interdisciplinary team settings. They are challenged in self-motivation and time management.

Sub-module Media Informatics/Technology

- Computing concepts
- Binary computing, arithmetic and Boolean operations
- Basic programming concepts
- Basis programming concepts: Data types, variables, control structures, functions;
- Introduction to programming and scripting
- Stored programs/scripts; writing simple scripts; Apply basic concepts: variables; loops; conditional
- Branching; functions; methods; proper formatting to support code maintenance and reuse; use a scripting language for this purpose
- OOP: introduction to object oriented programming, objects with private and public variables and methods
- Advanced data structures
- List, tables, abstraction over data structures
- Programming Language
- Formulate elementary tasks in a high-level programming language introduction to JAVA, usage of available classes, Integration of algorithms and media objects
- Image: gamma correction, multi-point operations (filter, edge detection, image analysis, etc.)
- Audio: Fourier analysis, spectrum revisited, time and frequency domain, filtering, filter types, Audio-CD-formats; DAT; compression algorithms, i.e. understanding MP3, etc. GSM/voice
- Video 1: display ratios, frame rates; interlaced / progressive, PAL, NTSC, analogue & digital, common formats, frame rate conversion; I/O-devices; basic editing tools and equipment;
- Video 2: basics of compression (interpolation, I, B, P --> GOP), family of MPEG-

standards and profiles, DVD format; file formats, MPEG-4 (scene description); keying; selected codecs, Digital Video formats – DV, HDDV, colour correction / white balance. TV standards – PAL, NTSC, SECAM

- I/O-devices – video cameras: formats, functions and use. Lenses – types, focal length and depth of field. Microphones and portable audio recording equipment: formats, functions and use
- Lighting for video: Lighting equipment and controls, Colour balance/white balance, Light levels and exposure readings
- Equipment training for audio/video input/output: recording, storage, import/export
- Equipment use for audio and video recording, storage and correction

Sub-module Media Design

- History of interaction and interfaces
- Design theory (p. ex. criteria of “good design”, user/player centred design, design ethics, creative thinking, theory of fun, visual branding)
- Man-machine-relationship: space of interaction, mental models and metaphors
- Information structure & information architecture
- Intuitive acting, natural dialogue and interactive elements
- Creating visual and audible concepts for interactive media
- Principles of visual and audible interaction and interfaces for application and games (web-based, browser-based and serious games)
- Interactive animation and simulation
- Interactive sound design
- Interactive documentations

3.3	<p>Indicative Module Contents Sound: Radio Play</p> <p>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.</p>
	<p>Sub-module Media Informatics/Technology</p> <ul style="list-style-type: none"> • Reverb convolution • Impulse response • Binaural hearing • Microphone types and operation • Principles in stereophony • Room acoustics (sound sources, reflection, echo, hall, T60, reverberation) • Sound compression (MP3, ADPCM, FLAC) • Filter, filter types (high, low, band-pass • Mono, stereo, multi channel, binaural • Intensity difference and / or temporal delay • Important tools: equalizer, compressor • Object oriented programming • Classes, instances • Strict program flow vs. event control <p>Sub-module Media Design</p> <ul style="list-style-type: none"> • Principles of stereophonic recording • Acquaintance of radiophonic forms • Narration principles in Audio • Sound Design Development in Post Production

3.4

Indicative Module Contents Video: Short Films

In this project the students explore planning, preparing, producing, editing and public presentation of short films – either documentary or fiction. They train appropriate creative techniques regarding research, scriptwriting, planning, budgeting, casting, organizing camera operation, lighting, sound recording, nonlinear editing and sound mixing. Items are spine, tone, narrative perspective in cinematographic storytelling, the grammar of film language, character development, plot and subplot. Students research advanced contemporary cinematographic codes in order to reveal the students' "visual mind".

Sub-module Media Informatics/Technology

- Light and lighting: Emission, conversion foils, lighting in the studio environment, photometry
- Lenses II: Macro, bellows, filter, modulation transfer curve / MTF
- Image Sensors, basic electronics, resolution, OECF, LUT, thermography, highspeed, de-mosaicing, clipping, blooming, smearing, corrections
- Camera technology: output formats, timecode, genlock, compression, SDI/HDSDI, framerates, dynamic range, resolution, aliasing, OECF, noise, HDR, camera test stands, testcharts
- Compression: mathematical basics, RLE, LZW, Huffmann-Code, discrete cosine transform, MPEG (H.262, H. 264), JPEG, Gif, Tiff, DXF, bitrates
- Sound II: Sound recording, sound mixing, MP3, ADPCM, reverb, noise, filters, audio compression, video & sound synchronization
- Image & video reproduction: LCD, TFT, plasma, DLP, projections

Sub-module Media Design

- Narratology: story structure, characterization, dramatic/narrative structure
- Narratology: documentary and fiction film
- Classical and modern patterns in storytelling
- Film language, cinematographic codes
- Cinematography, montage principles
- Image and sound
- Preproduction & Production
- Post production & visual effects
- Sound design and mixing

SuK2– Diversity and Intercultural Communication in Globalized Media *

ID	Workload	Credits	Semester	Frequency of Module	Duration
SuK 2	125 h	5	2nd Semester	Summer Term	1 Semester
1	Type of Course a) Lecture/Seminar b) Workshops/Seminar/Practical		Contact Hours a) 1 SWS/16 h b) 2 SWS/32 h	Self-Study 77 h	Size of Groups a) 60 b) 60
2	Learning Outcomes / Competencies <p>This module introduces the students to the major challenges of professional practices in an economically globalized and socially highly diversified media arena.</p> <p>After the successful completion of the module the students shall be able to</p> <ul style="list-style-type: none"> • Demonstrate and apply knowledge of central aspects of gender, diversity and intercultural issues and questions prevalent in contemporary societies related to the contents, production conditions, technologies and working situations in media • Demonstrate and apply knowledge of the similarities and differences in diverse media cultures (presuming the roles as media makers, producers, performers and consumers) based on diversity and gender • Apply appropriate terms and strategies to analyse issues of gender, diversity and intercultural communication in media, understand and discuss the origins and causes of disbalances and frictions of the issues, their ethical, humanitarian as well as economical implications • Apply appropriate ways of meeting a standard of connecting the requirements of gender, diversity and interculturality with the aims and requirements of media production in the digital, globalized media world 				
3	Indicative Module Contents <ul style="list-style-type: none"> • Introduction into the topics of diversity, gender and interculturality from a historical as well as from a contemporary perspective • Specification and exemplification of the topics towards their occurrence, influence and relevance in media • Introduction into the aims, approaches and policies of major International Organizations such as UN or EU and their subdivisions to improve communication, collaboration, communal productivity/creativity and avoid or compensate disbalances. 				
4	Teaching Methods				

	Lecture, seminar, presentations, individual and team-based research, case studies
5	Prerequisite Subjects -
6	Assessment Methods Examination Prerequisite: Homework, practical work and demonstration (40%), Examination: Written or oral exam (60%)
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 Module-responsible: Prof. <u>Sabine Breitsameter</u> Teaching Professors: Professors of GS
11	Other Information * This module is offered in the framework of the socio-scientific programme of the University of Applied Sciences Darmstadt

MP3 – Professional Media Projects

ID	Workload	Credits	Semester	Frequency of Module	Duration
MP3	375	15	4th Semester	Summer Term	1 Semester
1	Type of Course Main Module: Project/problem based learning Sub-modules: Problem based learning/workshops/seminars/lectures		Contact Hours 9 SWS/145 h	Self-Study 230 h	Size of Groups 10
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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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 				

	<p>Disciplinary Competencies:</p> <p>Design:</p> <ul style="list-style-type: none"> • 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 <p>Media Informatics & Technology:</p> <ul style="list-style-type: none"> • Apply mathematical sound analysis • Apply interactive signal synthesis <p>Media Management:</p> <ul style="list-style-type: none"> • Cope with crises and failures • Apply business-planning methodologies
4	<p>Teaching Methods</p> <p>Project work, seminar, lecture</p>
5	<p>Prerequisite Subjects</p> <p>-</p>
6	<p>Assessment Methods</p> <p>Examination Prerequisite: project work (0%) Media Management: written or oral exam (25%) Media Design: homework, written or oral exam (25%) Media Informatics/Technology: written or oral exam (25%)</p> <p>Examination: Project: Final Presentation and documentation (25%)</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>

9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 7,27%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible:</p> <p>Prof. <u>Tilmann Kohlhaase</u> (Animation & Game)</p> <p>Prof. <u>Andrea Krajewski</u> (Interactive Media Design)</p> <p>Prof. <u>Moritz Bergfeld</u> (Sound)</p> <p>Prof. <u>Thomas Carlé</u> (Video)</p> <p>Teaching Professors:</p> <p>All professors of Digital Media</p>
11	<p>Other Information</p> <p>-</p>

3.1	<p>Indicative Module Contents Animation & Game: Professional Animation and Game</p> <p>This project focuses on the development of a functioning game prototype or an animation format for a specific target group and platform. The students will experience and integrate the methods and practices of a professional framework in the entertainment industries. They will acquire and apply advanced skills in problem solving and quality assurance, budgeting and project management in order to conceive and produce a marketable product. Based on scientific methods they establish branding, marketing objectives. They will explore and apply advanced methodical tools of analysis and evaluation with regard to audience/user-centred design. They will be exposed to advanced media technologies like platforms, distribution channels, interaction and input devices. By creating a product for a defined platform and audience, the students learn to generate ideas, concepts and solutions in response to identified market needs.</p>
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Sub-module Media Management

- Research and development
- Introduction to marketing and branding in the entertainment industry
- Resource planning, time estimation and calculation
- Introduction to financing and funding of animation & game products
- Legal aspects of production and distribution
- Managing remote teams
- Recruiting and human resources
- Introduction to quality management

Sub-module Media Design

- Creating and documenting advanced design concepts and design programmes
- Visual branding and visual communication in animation and game
- Character design and character animation
- Digital scenography for animation and game
- Interface design for games and interactive animations
- Storytelling and dramaturgy for linear and non-linear formats
- Advanced cinematography for animation and game
- Game design (level design, game balancing, game mechanics)
- Prototyping and previsualization for animation and game

Sub-module Media Informatics/Technology

- Camera and lighting in virtual environments
- Introduction to stereoscopy
- Introduction to motion capturing, motion tracking and 3-D scanning
- Introduction to AI for animation and game (p.ex. pathfinding, collision detection, matrix structures, crowd simulation, non-player behaviour)
- 3-d tools for character animation
- Introduction to technical direction (rigging, physics, simulation and particles, render technologies, software tools for 3-D animation)
- Tools and technologies for prototyping and previsualisation
- Postproduction and visual effects for 3-D computer animation
- Game engines
- Scripting and programming for 3-D game environments
- Object oriented programming for animation and game
- Introduction to network technologies

3.2

Indicative Module Contents Interactive Media Design: Mobile Media Systems

This project develops skills in problem solving and quality assurance, budgeting and project management. It requires the students to combine management, technical and creative knowledge to produce a marketable product in the area e-Business, e-commerce, e-government, e-learning, media installation, mobile media and others. The students learn to generate ideas, concepts and solutions in response to the identified market needs of an interactive media product.

Sub-module Media Management

- Introduction to teamwork methodologies and dynamics
- Introduction of project management techniques
- Assess relevant parameters to build basic business models
- Exposure to conflicting stakeholder interests
- Experience stress, failure and frustration and learn to deal with it in a team environment

Sub-module Media Design

- Structured design process
- Physiological and psychological aspects of user centred design. User research and usability methods and practices
- Participatory design and the role of a designer in his / her role as human-computer-interface expert and the interpreter of user demands
- User Experience Design
- Service-design in relation to the concept of mobility
- Application and game-design (web-based, browser-based and serious games) for mobile media
- Human Computer Interaction (GUI, HCID, NUI, ...) design of media systems
- Audible and visual interaction design for mobile media
- Corporate Design
- Rich media documentations

Sub-module Media Informatics/Technology

- Databases (Designing tables, normalization, querying databases, SQL);
- DOM (DOM und JavaScript);
- Advanced mark-up (Dynamic document creation, forms in HTML, document structure);

- Client-side scripting (basic principles, animations, form validation, limits and security issues);
- Server-side scripting (basic principles, PHP scripts, parsed scripts, server setup).
- XML
- XML, parsing, events, DOM;
- Databases/remote storage
- Tables, SQL queries, database design, incorporating search results into interactive content;
- Local storage/standalone environments
- Files, shared global objects, cookies;
- Client-server environments
- Flash-remoting, cookies, AJAX, HTTP Methods.
- Time-based and interactive multimedia documents: Smile, Flash, Director, authoring environments;
- Usability aspects (answer/reaction times, geometrics);
- Text based UI, forms based UI. standard UI elements (e.g. button, field, selection,...);
- Features, usage, programming of tabbed sequences;
- Native UI frameworks and libraries (Windows, KDE, Gnome, X11, WCF);
- Application training and use of interactive authoring environments.

3.3

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 Management

- Marketability of Audio Products
- Audio Product development
- Introduction in the Music Market

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

Sub-module Media Informatics/Technology

- Physical Computing
- Programming C++
- Arduino
- Open frameworks
- Interactive signal synthesis
- Mathematical sound analysis

3.4

Indicative Module Contents Video: Professional TV-/Movie Production

This project focuses on pre-production of a feature film or a documentary film either individual or in groups of several students. Production of a feature film: The students develop their idea to a script. The items of pre-production are breakdown, schedule, budget, financing, storyboard, teambuilding, casting, pitch and presentation due to the character and content of the individual project. Production of a documentary film: The items are catalyst (motivation, wound, encounter, assignment...), research, "choice of weapons", fund raising, spine, perspective/, tone, common editing strategies in documentary film making and new documentary formats.

Sub-module Media Management

- Planning, scheduling and budgeting
- Financing and funding film projects
- Legal aspects of production and distribution
- Teambuilding
- Casting
- Quality management
- Marketing and distribution

Sub-module Media Design

- Film history
- Film semiotics
- Advanced storytelling and scriptwriting
- Film language
- Advanced cinematography
- Working with actors
- Technique of interview

Sub-module Media Informatics/Technology

- Historical: TV & Broadcast
- Video signals: BAS, RGB, FBAS, Composite, PAL, PALplus, NTSC, SECAM
- Signal Measurement: Waveformmonitor, Vectorscope
- Digital Video Studiosignals, SDTV, HDTV, VESA e.g.
- Pulscodemodulation (DPCM)
- MAZ technologies
- MPEG-4, MPEG-7, MPEG-21
- DVB-(T,H,C,S)
- IPTV, OpenTV, HD-Media Services
- Home Entertainment systems, Video & Mobility
- Sound III: Midi, Wavelet, Soundcards, Equalizer, Compressor, Mixing
- Studio technology I: live recording, live editing
- Green Screen, chroma key
- Stereoscopy basics

IP4 – Industrial Placement incl. Preparation u. Follow Up

ID	Workload	Credits	Semester	Frequency of Module	Duration
IP4	750 h	30	4th Semester	Summer Term	1 Semester
1	Type of Course a) Lecture b) Tutorials, group discussions and peer reviews c) Industrial placement		Contact Hours a) 2 SWS/30 h b) 2 SWS/30 h	Self-Study c) 690 h	Size of Groups a) 30 b) 15
2	Learning Outcomes / Competencies On successful completion of this subject the student will be able to: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Concept, planning and / or production of movie, video, TV and AV projects • Concept, planning and / or production of animation projects • Concept, planning and / or production of game projects • Concept, planning and / or production of multimedia projects • Concept, planning and / or production of sound projects • Concept, planning and / or production of media systems • Concept, planning and / or production of sound systems • Implementation and / or programming of multimedia products and media systems • Implementation and / or programming of games • Management and marketing of multimedia products and media systems 				

4	Teaching Methods <ul style="list-style-type: none"> • 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 <u>Module-responsible</u> and Teaching Professors <u>Prof. Dr. Kyrill Fischer</u> All professors of Digital Media
11	Other Information -

MP5 – Transmedia Projects

ID	Workload	Credits	Semester	Frequency of Module	Duration
MP5	375	15	5th Semester	Summer Term	1 Semester
1	Type of Course Problem based learning/workshops/seminars/Lectures		Contact Hours 9 SWS/145 h	Self-Study 230 h	Size of Groups 10
2	Learning Outcomes / Competencies <p>The aim of the Project is to develop, produce and implement a trans-media-product from brief through presentation. Students of all (in minimum of two) mayor fields of media disciplines (Animation & Game, Interactive Media Design, Sound, Video) work together in an interdisciplinary project workshop. Aim is a multi-dimensional media product that is mutually and in all media areas professionally produced.</p> <p>There is an emphasis on creating a synergy of the different linear and non-linear media expertise, coming together in the project. The topic can be broadly interpretable to leave latitude for different markets, target groups and their demands.</p> <p>The product has to be revisable in terms of its economic efficiency, and marketing opportunities. Parallel ethical, social and legal aspect should be taken into consideration.</p> <p>On successful completion of this module the student will be able to:</p> <p>Overall Competencies:</p> <ul style="list-style-type: none"> • Lifelong learning skills • Ability to generate synergies by the cooperation of project members with different media perspectives <p>Project competencies:</p> <ul style="list-style-type: none"> • Manage a self-initiated project from brief through to presentation • Demonstrate creativity, independence and inventiveness in the approach and methods used to develop and implement a project • Make informed choices through a critical approach to information gained through appropriate research methods in the development and implementation of ideas for a project • Effectively use synergy-effects learning from different media-disciplines • Present a project in a coherent and clear fashion using a range of appropriate 				

documentation and communication skills

Disciplinary Competencies:

Media Design:

- Broaden the idea of design by learning from the design process of different media disciplines
- Apply appropriate design / artistic methodology, to perform a trans-media project
- Broaden the understanding of linear and non linear structures and strategies
- Broaden the understanding of interfaces
- Broaden the idea of user experience
- Broaden the idea of user participation
- Create a product or artwork aesthetics that corresponds with the cross-media character of the project

Media Informatics & Technology:

- Phase models (Criteria for software quality, requirement analysis, specification, implementation, component testing, component documentation);
- Software engineering (UML etc., use cases)
- Software engineering environments (Eclipse, Rational Rose, Java Editor);
- Formal languages: XML (XML, DTDs, XML schema, parsing (XPath, Xpointer), XST, XHTML);
- Web Services (SOAP, WSDL).
- HCI devices;
- Remote controls;
- Kiosk systems controls;
- Vandalism protected Input;
- Touch panels;
- Advanced HCI:
- I/O Devices (Pen, Tangibles, A/V)
- Gesture recognition
- Motion capture
- Audio based input
- Video based input
- Haptic UI

- Mobile interfaces
- Small screens
- Form factors
- Public displays
- Large screen projection
- Large screen interaction
- Event presentation interfaces

Media Management:

- Manage a self-initiated project from brief through to presentation
- Broaden project management skills including project plan, work breakdown structure, project mgt. software
- Manage a self-initiated project from brief through to presentation in an interdisciplinary environment
- Apply methods to promote creativity, understand influencing parameters enabling creativity in an interdisciplinary team setting
- Apply the technique of business model canvas to generate and structure an advanced business model focussing amongst others on value proposition, key activities, customer segments
- Enhance presentation skills using a range of presentations styles, techniques and technologies.
- Explore conventional and innovative approaches in ideation processes
- Raise awareness for the correlation of company culture and product & service-portfolio

3

Indicative Module Contents

Media Installations *

(Sound, Video, Interactive Media Design, Animation & Game)

Sub-module Media Design

- Installation Design
- Environmental storytelling in digital spaces, virtual placemaking
- Advanced information design
- Strategies and examples of digital scenography
- Audio-visual linear media in space

- Interaction in space
- Sound design for space and spatial interaction
- Video installation
- Installation in media arts

Sub-module Media Informatics/Technology

- Phase models (Criteria for software quality, requirement analysis, specification, implementation,
- Component testing, component documentation);
- Software engineering (UML etc., use cases)
- Software engineering environments (Eclipse, Rational Rose, Java Editor);
- Formal languages: XML (XML, DTDs, XML schema, parsing (XPath, Xpointer) , XST, XHTML);
- Web services (SOAP, WSDL).
- HCI devices ;
- Remote controls ;
- Kiosk systems controls;
- Vandalism protected input;
- Touch panels;
- Advanced HCI:
- I/O Devices (Pen, Tangibles, A/V)
- Gesture recognition
- Motion Capture
- Audio based input
- Video based input
- Haptic UI
- Mobile interfaces
- Small screens
- Form factors
- Public displays
- Large screen projection
- Large screen interaction
- Event presentation interfaces

	<p>Sub-module Media Management</p> <ul style="list-style-type: none"> • Broaden project management skills including project plan, work breakdown structure, project mgt. software • Manage a self-initiated project from brief through to presentation in an interdisciplinary environment • Apply methods to promote creativity, understand influencing parameters enabling creativity in an interdisciplinary team setting • Apply the technique of business model canvas to generate and structure an advanced business model focussing amongst others on value proposition, key activities, customer segments • Enhance presentation skills using a range of presentations styles, techniques and technologies. • Explore conventional and innovative approaches in ideation processes • Raise awareness for the correlation of company culture and product & service portfolio
4	<p>Teaching Methods</p> <p>PBL-Workshops</p>
5	<p>Prerequisite Subjects</p> <p>Successful completion of all modules of semester 1-3, except two elective modules</p>
6	<p>Assessment Methods</p> <p>Examination Prerequisite: project work (0%)</p> <p>Media Design: homework, written or oral exam (25%) Media Informatics/Technology: written or oral exam (25%) Media Management: written or oral exam (25%)</p> <p>Examination: Project: Final Presentation and documentation (25%)</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 7,27%</p>

10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible:</p> <p>Prof. <u>Tilman Kohlhaase</u> (Animation & Game)</p> <p>Prof. <u>Andrea Krajewski</u> (Interactive Media Design)</p> <p>Prof. <u>Moritz Bergfeld</u> (Sound)</p> <p>Prof. <u>Thomas Carlé</u> (Video)</p> <p>Teaching Professors:</p> <p>All professors of DM</p>
11	<p>Other Information</p> <p>*Project-Topic shall change if no longer up-to-date.</p> <p>Each team shall consist of students of each focus.</p>

MP6 – Advanced Media Projects					
ID	Workload	Credits	Semester	Frequency of Module	Duration
MP 6	375	15	6th Semester	Winter Term	1 Semester
1	Type of Course Problem based learning/workshops/seminars/ Lectures		Contact Hours 9 SWS/145 h	Self-Study 230 h	Size of Groups 10
2	Learning Outcomes / Competencies On successful completion of this module the student will be able to: Overall Competencies: <ul style="list-style-type: none"> • Lifelong learning skills • Ability for critical thinking concerning innovation, new formats and technologies • Ability to transfer technical innovation into cultural and/or social innovations Project competencies <ul style="list-style-type: none"> • Manage a self-initiated project from brief through to presentation • Demonstrate creativity, independence and inventiveness in the approach and methods used to develop and implement a project • Make informed choices through a critical approach to information gained through appropriate research methods in the development and implementation of ideas for a project • Effectively use quality control techniques and methods to ensure a high quality finish to their product • Present a project in a coherent and clear fashion using a range of appropriate documentation and communication skills 				
4	Teaching Methods Project work, seminar, lecture				
5	Prerequisite Subjects Successful completion of all modules of semester 1-3, except two elective modules				

6	<p>Assessment Methods</p> <p>Examination Prerequisite: project work (0%) Media Management: written or oral exam (25%) Media Design: homework, written or oral exam (25%) Media Informatics/Technology: written or oral exam (25%)</p> <p>Examination: Project: Final Presentation and documentation (25%)</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 7,27%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. <u>Tilmann Kohlhaase</u> (Animation & Game) Prof. <u>Tsune Tanaka</u> (Interactive Media Design) Prof. <u>Moritz Bergfeld</u> (Sound) Prof. <u>Thomas Carlé</u> (Video)</p> <p>Teaching Professors: All professors of DM</p>
11	<p>Other Information</p> <p>-</p>

3.1

Indicative Module Contents Animation & Game: Experimental Game

Students develop a concept for a fully functioning linear or non-linear product separate from the constraints of the mainstream entertainment industry. This product should possess a strong experimental character, investigating innovative solutions for with regard to design, content, genre or technology. Students are encouraged to explore the potential of cross-format, cross-platform concepts. A particularly strong focus will be on detailed preproduction according to leading industry standards. The study and critical reflection of advanced subjects in media design and media technology will enable them to transcend common aesthetic standards and established models of user/audience participation.

Albeit the experimental character of the project, it will integrate advanced project management aspects which enable students to develop scenarios for emerging or future technological environments and market conditions where their project might be used or applied successfully. They will be asked to self-reflect their conceptual work at all stages and to evaluate decisions made in the conceptual process in order optimize the results.

Sub-module Media Management

- Company Forms
- Business Plan
- Start-Up Management
- Networking & Acquisition
- Negotiation Strategies
- Leadership Styles
- Motivation Techniques
- Creative strategies / creativity techniques

Sub-module Media Design

- Learning from the avantgarde: current design topics in animation and game
- Creativity and experiment: examples from art, design and cinematography
- Advanced design theory and design research
- Design and the human factor: design ethics and identity design in the entertainment industries
- Cross-media/cross-format: design of mixed realities and immersive environments

Sub-module Media Informatics/Technology

- Advanced C++ programming for games
- AI for animation and games
- Advanced scripting
- Advanced technical direction
- Advanced previzualisation, prototyping and testing
- Advanced game programming for multiplayer games
- Creating advanced software tools for 3-D animation (MEL, Python)

3.2

Indicative Module Contents Interactive Media Design: Ambient Intelligent Systems

The students learn how to apply methodical and practical knowledge of media design, media technology, media informatics and media management and to transfer it into the field of conceptualising, designing and developing ubiquitous media systems. The new aspect for the students in this project is the confrontation with the physical interface and the designing of haptic interfaces and/or sensory installations, as well as the aspect of sound-design for spaces. By applying scientific methods to analysing media, user needs, socio-cultural contexts and media markets they develop their ability of critical examine the use of innovative forms of information technology including physical interfaces in a social-cultural-context. They investigate, apply and combine complex technologies from software development, programming and network technologies to explore the potential of innovative or alternative interface approaches.

The project might, for example develop an ambient application, which responds to a defined target group, taking cognisance of user needs and market potential. The product could be conceived in its entirety and be developed as a prototype, mock up or simulation. Topics are: ambient intelligence, ubiquitous computing, pervasive computing, tangible media with outcomes like: wearable media, smart objects, digital interior design, digital facades

Fields of application are: Business, education and entertainment.

Sub-module Media Management

- Apply professional project management skills and explore new trends in project management (Agile Management, Rapid Prototyping)
- Manage a self-initiated project from brief through to presentation in an interdisciplinary environment and document proceedings in a professional, customer centred way
- Apply the technique of business model canvas to generate and structure an advanced business model focussing amongst others on cost factors, revenue streams, customer relationship and channels
- Devise a marketing strategy with focus on corporate identity and corporate image, the marketing of own interdisciplinary team and conceptualize appropriate promotional material (website, business stationary, flyers, brochures, banners)
- Fine tune presentation skills & be exposed to difficult clients
- Effectively use quality control techniques and methods to ensure a high quality finish to their product;
- Explore personal qualities assessment, feedback techniques and systemic asking as

engagement tool

Sub-module Media Design

- Adapting the structured design process to a systematized individual approach
- Current interaction development: system and user. Innovations, technological developments and social-cultural evolutions, possible influences on the life scenarios work and leisure.
- Understanding of the important conceptual, theoretical, social, technical and design issues related to haptic and ubiquitous interactive products and pervasive environments.
- Human factors and the design and use of technology in immersive environments
- Ambient interaction
- Product Design for tangible interfaces
- Sound-design for interactive spatial interfaces
- Game-design for interaction in space
- Advanced animation and simulation
- Advanced data visualisation
- Video-production for self-marketing-videos

Sub-module Media Informatics/Technology

- Ambient Systems
- Context Modelling
- Architecture of Ambient Systems
- Databases for Ambient Systems
- Arduino and Interaction
- Dynamic coding - Writing generic/dynamic code, reference variables, associative arrays, string processing;
- Dynamic content creation: Dynamically created images and text. Randomisation, incorporating external data/media
- Advanced pre-visualisation, prototyping and testing

3.3

Indicative Module Contents Sound: Advanced Sound

This project focuses on the development and realisation of an audio-based media product, including time schedule, resources and technical considerations. The students learn to deal with advanced issues in planning and organizing a professional realization of a audio-based media product and to verify the technical and methodological concept. They realize the sound product with all its components.

Sub-module Media Design

- Adapt the role of a recording producer within a music-based project
- Apply all necessary competences for complex recording tasks
- Understand and use the principles of multi-track editing/mixing/mastering
- Understand own role within the economic impact on popular music styles
- Create a product or artwork aesthetics that use interactive and algorithmic composition methods
- Program and use VST effects

Sub-module Media Informatics & Technology:

- Use programming as a regular part of own creative work
- Integrate Concepts/Ideas of Emerging Technologies

Sub-module Media Management:

- Understand the critical relationship of Arts and Markets
- Apply business-planning methodologies
- Apply Marketing Tools and methods
- Set up a StartUp or self employment

3.4

Indicative Module Contents Video:

This project focuses on pre-production of a feature film or a documentary film either individual or in groups of several students. Production of a feature film: The students develop their idea to a script. The items of pre-production are breakdown, schedule, budget, financing, storyboard, teambuilding, casting, pitch and presentation due to the character and content of the individual project. Production of a documentary film: The items are catalyst (motivation, wound, encounter, assignment...), research, "choice of weapons", fund raising, spine, perspective/, tone, common editing strategies in documentary film making and new documentary formats.

Sub-module Media Management

- Planning, scheduling and budgeting
- Financing and funding film projects
- Legal aspects of production and distribution
- Teambuilding
- Casting
- Quality management
- Marketing and distribution

Sub-module Media Design

- Film history
- Film semiotics
- Advanced storytelling and scriptwriting
- Film language
- Advanced cinematography
- Working with actors
- Technique of interview

	<p>Sub-module Media Informatics/Technology</p> <ul style="list-style-type: none"> • Stereoscopy • Motion capturing and 3-D, camera tracking • Camera motion systems • Multicamera synchronization • Virtual studio • Studio technology, MXF, GXF • Massive data storage & handling • Audio & video Streaming • Digital cinema • Emerging standards & technologies • Advanced camera technology
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MP7R – Research-Project					
ID	Workload	Credits	Semester	Frequency of	Duration

MP7R	375 h	15	7th Semester	Module Every Term	10 weeks
1	Type of Course Seminar Tutorials, group discussions and peer reviews		Contact Hours 7 SWS/110 h	Self-Study 265 h	Size of Groups 60
2	Learning Outcomes / Competencies <p>On successful completion of this subject the student will – in accordance to his or her chosen study focus – be able to:</p> <ul style="list-style-type: none"> • 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 <p>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:</p> <ul style="list-style-type: none"> • 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 <p>Project Schedule:</p> <ul style="list-style-type: none"> • Application with briefing document • Agreement on deliverables according to chosen subject with coach 				

	<ul style="list-style-type: none"> • Delivery of research- and concept-plan • Discussion sessions and review of preliminary results (group/peer reviews) • Final Presentation (assessment)
4	Teaching Methods <ul style="list-style-type: none"> • Coaching • Tutorials, group discussions and peer reviews • Presentation and demonstration
5	Prerequisite Subjects Successful completion of all modules of semester 1-3, except two elective modules
6	Assessment Methods Examination Prerequisite: Research Documentation (75%) Examination: Final Presentation (25%)
7	Prerequisites for CP -
8	Used in Other Courses -
9	Significance of Mark for Final Mark According to CP: 7,27%
10	Name of <u>Module-responsible</u> and Teaching Professors All professors of Digital Media
11	Other Information -

MP7B – Bachelor Module incl. Colloquium					
ID	Workload	Credits	Semester	Frequency of Module	Duration
MP7B	375 h	15	7th Semester	Every Term	12 weeks
1	Type of Course Seminar Tutorials, group discussions and peer reviews		Contact Hours 3 SWS / 45 h	Self-Study 330 h	Size of Groups 20
2	Learning Outcomes / Competencies On successful completion of this subject the student will be able to <ul style="list-style-type: none"> • 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 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				

	<p>member of the team.</p> <p>Project Schedule:</p> <ul style="list-style-type: none"> • 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	<p>Teaching Methods</p> <ul style="list-style-type: none"> • Coaching • Tutorials, group discussions and peer reviews • Presentation and demonstration
5	<p>Prerequisite Subjects</p> <p>Successful completion of all modules of semester 1-6 (including IP), except two elective modules</p>
6	<p>Assessment Methods</p> <p>Bachelor Project: 75%</p> <p>Colloquium: 25%</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>20%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>All professors of Digital Media</p>
11	<p>Other Information</p> <p>-</p>

4. Module descriptions of the electives ME1 in 1. Semester

ME1-D – Media Design Elective Semester 1					
ID	Workload	Credits	Semester	Frequency of Module	Duration
ME1-D	125 h	5	1st Semester	Winter Term	1 Semester
1	Type of Course Practical		Contact Hours 3 SWS/48 h	Self-Study 77 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>This elective module complements the foundations in media design students acquire through the Media Design 1 module. It offers selected design topics from each of the four specializations – Interactive Media Design, Animation and Game, Video and Sound – in form of themed electives. This allows students to broaden their practical and methodical skills by choosing an elective from another specialization.</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Recognize and describe basic methodologies, genres and design issues in the relevant field of specialization • Identify and apply fundamental principles of design related to the field of specialization • Resolve design challenges through the considered application of appropriate practical, technical and creative competencies and skills • Present design concepts, process and outcome in a clear and coherent manner 				
3	<p>Indicative Module Contents</p> <p>Students can choose from the following specialized electives:</p> <ul style="list-style-type: none"> • Media Design for „Animation and Game“ • Media Design for „Interactive Media Design“ • Media Design for „Sound“ • Media Design for „Video“ 				
4	<p>Teaching Methods</p> <p>Impulse lectures, seminar, practical</p>				

5	Prerequisite Subjects -
6	Assessment Methods Examination Prerequisite: Homework, practical work and demonstration (70 %), Examination: Final presentation and written documentation (30%)
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 Module-responsible: Prof. <u>Katharina Kafka</u> (Animation&Game) Prof. <u>Claudia Söller-Eckert</u> (Interactive Media Design) Prof. <u>Moritz Bergfeld</u> (Sound) Prof. <u>Thomas Carlé</u> (Video) Teaching Professors: Prof Moritz Bergfeld Prof. Thomas Burnhauser Prof. Thomas Carlé Prof. Katharina Kafka Prof. Tilmann Kohlhaase Prof. Andrea Krajewski Prof. Claudia Söller-Eckert Prof. Tsune Tanaka Prof. Will Weber N.N.
11	Other Information -

ME1-I/T – Media Informatics/Technology Elective Semester 1

ID	Workload	Credits	Semester	Frequency of Module	Duration
ME1 -I/T	125 h	5	1st Semester	Winter Term	1 Semester
1	Type of Course Practical		Contact Hours 3 SWS/48 h	Self-Study 77 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>This elective module complements the foundations in media informatics/technology students acquire through the Media I/T 1 module. It offers selected I/T topics from each of the four specializations – Interactive Media Design, Animation and Game, Video and Sound - in form of themed electives. This allows students to broaden their practical and methodical skills by choosing an elective from another specialization.</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Explain the role of informatics/technology in different media areas • Recognize and describe basic methodologies, genres and I/T issues in the relevant field of specialization • Understand the basics of logic and mathematics needed in the media foci • Explain media related (studio-) hardware and its basics underlying technology • Resolve informatics and technology challenges through the considered application of appropriate theoretical and practical competencies and skills 				
3	<p>Indicative Module Contents</p> <p>Students can choose from the following specialized electives:</p> <ul style="list-style-type: none"> • Media I/T for „Animation and Game“ • Media I/T for „Interactive Media Design“ • Media I/T for „Sound“ • Media I/T for „Video“ 				
4	<p>Teaching Methods</p> <p>Impulse lectures, seminar, practical</p>				
5	<p>Prerequisite Subjects</p> <p>-</p>				

6	<p>Assessment Methods</p> <p>Examination Prerequisite: Homework, practical work and demonstration (50%) Examination: Written Exam (50%)</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. <u>Tilmann Kohlhaase</u> (Animation&Game) Prof. <u>Dr. Arnd Steinmetz</u> (Interactive Media Design) Prof. <u>Dr. Kyrill Fischer</u> (Sound) Prof. Dr. <u>Frank Gabler</u> (Video)</p> <p>Teaching Professors: Prof. Dr. Christoph Busch Prof. Thomas Carlé Prof. Dr. Kyrill Fischer Prof. Dr. Torsten Fröhlich Prof. Dr. Frank Gabler Prof. Dr. Arnd Steinmetz</p>
11	<p>Other Information</p> <p>-</p>

5. Frame module descriptions of the electives ME2 in 2. to 6. Semester

ME2 – Media Electives					
ID	Workload	Credits	Semester	Frequency of Module	Duration
ME2	125 h	5	2, 3, 5, 6	Each semester	1 Semester
1	Type of Course Seminar/workshop/lectures/ project		Contact Hours 3 SWS / 50 h	Self-Study 75 h	Size of Groups 20 Design 20 IT 20 Philosophy
2	<p>Learning Outcomes / Competencies</p> <p>Media Electives shall enable the student to:</p> <ul style="list-style-type: none"> • Deepen his or her knowledge in specialised media fields or advanced topics and/or • Work in genre-spanning teams and contexts and/or • Gain and deepen knowledge from other media foci <p>On successful completion of these modules the student shall be able to:</p> <ul style="list-style-type: none"> • Develop and describe media concepts in a broad cultural and social horizon as well as in adaption to the eventually addressed media genre • Use a professional project management from brief and concept through to implementation and presentation • Use quality control techniques to ensure a professional finish to their product • Use all necessary design abilities to achieve a high quality media product • Use all necessary informatics and technical abilities and skills to achieve a high quality media product • Evaluate and assess the product or service completed from the success and functionality of the design, the technical, but also from a cultural perspective. • Integrate different media and different techniques to a complex product. 				
3	<p>Indicative Module Contents</p> <p>The modules are clustered here in the following fields:</p> <ul style="list-style-type: none"> • Media Informatics & Technology • Media Design • Media Management 				

	<ul style="list-style-type: none"> • Media Philosophy
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 <u>Module-Responsible</u> and Teaching Professors Media Informatics/Technology: Prof. Moritz Bergfeld Prof. Dr. Christoph Busch Prof. Dr. Torsten Fröhlich Prof. Dr. Frank Gabler Prof. <u>Dr. Kyrill Fischer</u> Prof. Dr. Arnd Steinmetz N.N. Media Design: Prof. Moritz Bergfeld. Prof. Thomas Burnhauser, Prof. Thomas Carlé, Prof. Katharina Kafka, Prof. Tilmann Kohlhaase, Prof. Andrea Krajewski, Prof. <u>Claudia Söller-Eckert</u> , Prof. Tsune Tanaka, Prof. Wilhelm Weber, N.N.

	<p>Media Management: <u>Prof. Andrea Krajewski</u>, Prof. Thomas Burnhauser, N.N .</p> <p>Media Philosophy: Prof. <u>Sabine Breitsameter</u>, Prof. Katarina Kafka, Prof. Tilmann Kohlhaase, Prof. Claudia Söller-Eckert, N.N.</p>
11	<p>Other Information</p> <p>* 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.</p>

ME2_01 bis ME2_09 – Electives Media Design

The main indicative topics are:

- Advanced Animation
- Advanced Game Design
- Advanced Video Production
- Advanced Post Production
- Interaction & Interface Design
- Media Installation
- Dramaturgy and Storytelling for Linear and Interactive Media
- Media Experiments
- E-Learning

Several versions of these Modules can be offered servicing different domains and foci.

Basic indicative elements are:

- Character development, inner and outer conflict, characterisation, archetypes
- Interview techniques
- Storytelling and understanding of complex story-structure taking into consideration of the history of drama, literature and motion pictures
- Experience and knowledge in pace, rhythm and timing as part of directing, photographing and editing motion pictures and designing games
- Capability of analysing motion pictures in terms of cinematographic language, montage, "mise en scene" a.o. in due consideration of historical and artistic background as well as genre
- Active elaborated use of film language and taking into account contemporary styles and evolutions
- History of the so called "montage" versus the contemporary "non-linear editing"
- Film editing for documentary and feature films
- Time, light, style as part of motion picture photography
- Technical, artistic and journalistic practice of TV production taking into consideration of TV & media history and contemporary evolutions

5.1	ME2_10 bis ME2_15 – Electives Media Informatics & Technology
	<p>The main indicative topics are:</p> <ul style="list-style-type: none"> • Advanced Media Systems • Advanced System Technology • Interface Technology • Mobile/Web Technology • 3D Interactive Environments • Music & Technology <p>Several versions of these modules can be offered servicing different domains and foci. Basic indicative elements are:</p> <ul style="list-style-type: none"> • Software development environments • Software engineering and programming concepts • Control structures • Object-oriented and event-based programming • Event based programming • Local and remote persistent storage and retrieval of Information, Databases • Scripting, markup and style sheets (e.g. HTML,XML, PHP, JavaScript, CSS) • Time-based and interactive multimedia documents (e.g. Smile, Flash) • Networks and communication technologies • Client-Server environments • Agent based systems • Web Services (e.g. SOAP, WSDL) • User interface mechanics, methods and elements • Native UI frameworks and libraries • Mobile interfaces • I/O Technology, I/O Devices, HCI devices, body-tracking, gesture recognition • Analogue and digital handling of still, video, film and audio signals • Sound and film synchronization • Sound recording and acoustics • Sound and video effects (e.g. filters) • Camera technology, optics • Studio technology • Broadcast technology

- IP-TV standards and systems
- Blue/green screen technology
- Image analysis principles, image processing, object detection and tracking
- Simulation and rendering
- Game engines, requirements and characteristics
- Mobile computing and gaming
- Artificial Intelligence
- Virtual and augmented reality technology
- 3D position description and motion capturing
- 3D scanning technology
- 3D Modelling, animation, rigging
- Image Synthesis
- Emerging technologies, current trends in technologies
- E-Learning-Platforms and technology

5.3

ME2_16 bis ME2_18 – Electives Media Management

The main indicative topics are:

- Media Events and Marketing
- Media Producing in Different Fields of Media
- Media and Entertainment Law (SuK-Module)

Several versions of these Modules can be offered servicing different domains and foci.

Basic indicative elements are:

- History and contemporary practices of media business, financing, funding and budgeting as well as planning of resources.
- Capability of planning and producing cross media events under consideration of Aspects such as technical, artistic, management & marketing
- Entrepreneurial approach towards media production
- Knowledge and experience of markets, their elementary laws, distribution and refunding of media products
- Capability of planning, scheduling, financing and funding complex media products in due consideration to the artistic or journalistic approach
- Copyright, media and entertainment law as basis for entrepreneurial decision making

5.4

ME2_19 bis ME2_24 – Electives Media Philosophy

The main indicative topics are:

- Media Art History
- Cultures and Creative Practices in Digital Media
- Media Environments and Spaces
- Media Ethics and Philosophy
- Media and Communication Theories
- Play, Game, Act, Use: Concepts, History and Practices
- Choice from SuK-Catalogue

Several versions of these Modules can be offered servicing different domains and foci.

Basic elements are:

- 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
- Concepts, degrees and types of the audience's/the user's involvement and participation
- Notions and concepts of space, environment and architecture in media
- Contemporary practices and historical roots of exhibitions, installations, virtual spaces, games
- Structure and pre-requisites of creative and innovative aesthetic and social processes
- Aesthetic and ethical interpretation of historical or contemporary art, design and media productions
- Individuality, character, gender and identity in the digital age's virtual and networked world
- Methodologies of cultural analysis, self-reflection, observation and field research

- | | |
|--|--|
| | <ul style="list-style-type: none">• Communication in the age of globalisation and diversity, and its impact on values, behaviours and aesthetics• The relation between technology and innovation• Success and failure of art-, design-works and media productions• Terminologies of digital art and design related to aesthetics and communication• Strategies of empowerment in order to participate in on-going theoretical/cultural/conceptual discourses |
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6. Module descriptions of the electives ME2 2. to 6. Semester

6. 1 Module descriptions of the Design Electives

ME2_01 – Advanced Animation					
ID	Workload	Credits	Semester	Frequency of	Duration
ME2_01	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	Learning Outcomes / Competencies On successful completion of this module the student shall be able to: <ul style="list-style-type: none"> • Create a storyboard and task listing for an animation • Outline a range of core of editing and production tools for tools for both 2D & 3D animation • Design a short 2D animation using a range of techniques • Design a short 3D animation using a range of techniques relating to modelling, lighting, cameras, materials, textures, animation and rendering • Outline the process of integrating animation in a broad range of delivery environments to include the web, a video editing/compositing environment such as Final Cut Pro or After Effects, an on-line authoring environment such as Director or authorware 				
3	Indicative Module Contents This module is designed to build on the students existing knowledge of animation initiated in first year (MD1, MD2). The subject aims to provide the student, specifically interested in the audio-visual aspects of multimedia design and production, with a higher advanced level of knowledge with regard to processes and techniques relating to 2D/3D animation. Contents of this module may contain but are not limited to the following aspects: Advanced Animation Overview: Analysing a range of animation types with specific consideration given to the context and function of the animation within the overall design of a given product. Analysis includes online and offline products or services. Differences and similarities between traditional and contemporary digital methods of producing animation. Overview of 2D/3D animation concepts relating to analogue and digital animation. Examine in detail established practices, styles, narratives and elements of visual language employed in animation for				

	<p>multimedia.</p> <p>Animation Methods 1: A range of methods applicable to the production of short 2D web-based or feature-length animation such as Storyboarding techniques, key framing, tweening, onion skinning, timing and frame rates.</p> <p>Animation Methods 2: A range of methods applicable to the production of short 2D web-based or feature length animation such as modelling techniques, texture mapping and materials, lighting and cameras, animation techniques.</p> <p>Rendering and Output Animation: Setting up a scene or project for rendering in production and draft production modes, rendering previews, post-production effects, output sizes and aspect ratios, output file types for single and multiple frames, output file types for a range of viewer/user environments.</p> <p>Concept and Realization of Animation: Students are required to produce short animations using 2D and 3D techniques. The animations should demonstrate evidence of the student's ability to conceptualise and develop an idea for animation using appropriate tools. The animations should be of a suitable quality and complexity such that the student can complete the work within the time allowed for the subject. The student is required to output each animation in an appropriate way for it to be incorporated within another authoring, production or delivery environment. Examples of the type of assignment could be: a short animation to be employed as a title sequence to an interactive CD/DVD-ROM based product, a short animation to be included as part of a video sequence composite with captured video/film footage or an interactive animation to be included as part of a web page or introduction to a web site.</p>
4	<p>Teaching Methods</p> <p>Lecture, seminar, practical and presentation</p>
5	<p>Prerequisite Subjects</p> <p>-</p>
6	<p>Assessment Methods</p> <p>Final presentation and documentation</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. Tilmann Kohlhaase</p>

	Teaching Professors: Prof. Katharina Kafka Prof. Tilmann Kohlhaase Prof. Claudia Söller-Eckert Prof. Wilhelm Weber
11	Other Information

ME2_02 – Advanced Game Design

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_02	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Extend the ability to work with game- and rule-engines • Get a broad knowledge and usage of advanced expert systems, artificial intelligence, agent technology • Gain in-depth knowledge of existing and planned input/output devices relevant for game • Develop a game idea, a game story, game rules • Develop, design and implement characters and environments, game interfaces, sound 				
3	<p>Indicative Module Contents</p> <p>In this module students get to know conceptual aspects, design aspects and technological aspects and principles of games. With this experience the students develop and realise a game completely with interface, characters, environments and with all system components.</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <p>The students develop and realise a game completely with interface, characters, environments and with all system components:</p> <ul style="list-style-type: none"> • Research and analysis of games • Game concepts, game ideas • Characters, dialogue, 3D-modelling, setup • Environments • Sound concept and production • Rendering, implementation, usability • Documentation 				
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 <u>Module-responsible</u> and Teaching Professors Module-responsible: Prof. Wil Weber Teaching Professors: all animation, design and media technology teachers
11	Other Information

ME2_03 – Advanced Video Production

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_03	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Create a detailed storyboard and task listing for the production of a video composition • Use a professional project management from brief and concept through to implementation and presentation • Use a range of camera techniques to record/capture quality footage under a range of different circumstances Day time, night time, studio based recording • Design and integrate a range of visual media in a video editing environment using advanced compositing and post production techniques • Output a video composition to a range of delivery environments such as web (low and broadband), CD/DVD, film and TV 				
3	<p>Indicative Module Contents</p> <p>This module is designed to build on the students existing knowledge in video production and post- production initiated in first year. The subject aims to provide the student, specifically interested in the audio visual aspects of multimedia design and production, with a higher advanced level of knowledge with regard to processes and techniques relating to the capture, manipulation and delivery of video within a multimedia context.</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <p>Visual Research: Examination of established practices, styles, narratives and elements of visual language employed in film, TV, and multimedia.</p> <p>Storyboard and Planning: Detailed storyboarding of a video composition illustrating the narrative aspects of the composition; planning for the capture and production of video and graphic elements to be included in the final production; creation of a comprehensive project management plan to chart the time allocated to the different stages of the research and production tasks involved in the overall lifecycle of the assignment.</p> <p>Recording and Capturing: Camera and shooting techniques applicable to a variety of situations to include day and</p>				

	<p>night time recording, the use of lens filters for creating atmosphere or correcting unbalanced natural or available light; techniques for minimising audio interference in an outdoor or live situation; advanced studio-based lighting techniques; advanced studio-based recording techniques such as portrait composition guidelines for the interviewees appearance and clothing.</p> <p>Post Production: Advanced techniques for storing and managing video resources; setting up a project for a range of different delivery environments; advanced editing techniques employed to support narrative, advanced compositing techniques and choreography of various visual graphic elements; the application of special effects.</p> <p>Rendering and Output: Techniques for rendering as part of the production process; rendering a final composition in appropriate formats for a range of different delivery environments (for example, web, interactive CD/DVD-ROM, interactive TV, film/projection).</p> <p>Concept and Production: The student is required to choreograph a short video sequence (for example, 5 minutes) that is cohesive from an audio visual aesthetic perspective. Media to be incorporated could include sound, 2D graphic elements, typography and basic 3D elements. The student is required to generate all, or a large proportion (re 80%), of the resources included in the composition. Also, at this level a greater emphasis is placed on the need for the student to incorporate a strong narrative and become familiar with finer concepts relating to the language of the moving image. With regard to the narrative the student may select from a range of topics provided lecturer or present a proposal for an independent idea to be passed by the lecturer. The assignment should incorporate title and credits sequences.</p>
4	<p>Teaching Methods</p> <p>Lecture, seminar, practical and presentation</p>
5	<p>Prerequisite Subjects</p> <p>-</p>
6	<p>Assessment Methods</p> <p>Final presentation and documentation</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. Thomas Carlé</p>

	Teaching Professors: all professors of Digital Media
11	Other Information

ME2_04 – Advanced Post Production

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_04	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Describe the process of post-production and identify its key uses within the overall production process • Create a detailed task listing for the production of a video, employing advanced compositing and editing • Design and integrate a range of visual media in a video-editing environment using advanced compositing and editing techniques • Output a video composition to a range of delivery environments such as web (low and broadband), CD/DVD, film and TV • Produce a finished piece of video work individually or as part of a team 				
3	<p>Indicative Module Contents</p> <p>This module is designed to build on the students' existing knowledge of video production and post- production, initiated in first year. The subject aims to provide the student specifically interested in Postproduction techniques to extend and develop existing knowledge and craft skills to a higher level. This is with regard to processes and techniques relating to the capture, manipulation and delivery of video within a multimedia context.</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <p>Editing: Examine in detail-established practices, styles, narratives and elements of visual language employed in film, TV, and multimedia. Assemble editing, Jump cut, Match cut, subliminal cut, cross cut, montage sequence.</p> <p>Concept Development and Planning: Creating a detailed storyboard of a video composition illustrating the narrative aspects of the composition; and producing a plan for the capture and production of video and graphic elements to be included in the final production; creating a comprehensive project management plan to chart the time allocated to the different stages of the research and production tasks involved in the overall lifecycle of the assignment.</p> <p>Compositing: Animation, motion control and Keying. Using either shot footage or Library material.</p>				

Layering effects and filters. Tracking motion and masking techniques. Multichannel and 3D effects applied for image correction or enhancement. Compositing as a creative tool. Audio mixing effects within a postproduction environment. Manipulation of audio tracks for correction or enhancement. Lights and cameras as effects tools within compositing. Merging 2D and 3D material.

Management in Post Production:

Advanced techniques for storing and managing video resources; setting up a project for a range of different effects employed to support narrative, advanced compositing techniques and choreography of various visual graphic elements; the application of special effects.

Rendering and Output:

Techniques for rendering as part of the production process; rendering a final composition in appropriate formats for a range of different delivery environments (for example, web, interactive CD/DVD-ROM, interactive TV, film/projection)

Concept and Production:

The student is required to choreograph a short video sequence (for example, 5 minutes) that is cohesive from an audiovisual aesthetic perspective. Media to be incorporated could include sound, 2D graphic elements, typography and basic 3D elements. The student is required to generate all, or a large proportion (re 80%), of the resources included in the composition. Also, at this level a greater emphasis is placed on the need for the student to incorporate a strong narrative and become familiar with finer concepts relating to the language of the moving image. With regard to the narrative the student may select from a range of topics provided by the lecturer or present a proposal for an independent idea to be passed by the lecturer. The assignment should incorporate title and credits sequences. The size and complexity of the overall practical assignment should be designed to allow the student finish the assignment within in the time allocated.

4	<p>Teaching Methods</p> <p>Lecture, seminar, practical and presentation</p>
5	<p>Prerequisite Subjects</p> <p>-</p>
6	<p>Assessment Methods</p> <p>Final presentation and documentation</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible:</p>

	Prof. Tilmann Kohlhaase Teaching Professors: all animation, video, sound and design teachers
11	Other Information

ME2_05 – Interaction & Interface Design

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_05	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>This module aims to equip students with the essential knowledge and skills required to design, prototype and evaluate professional interactive products and interfaces. They will learn the principles of user centred design which is fundamental for interaction design. Besides functional, aesthetical and technical principles the students are expected to consider ethical aspects.</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Discuss and evaluate good user interaction design • Discuss and evaluate trends and innovation in interactive systems • Understand and making use of human psychology to develop a user-centred approach • Describe and making use of the key issues in designing interactive systems • Concept, design and develop interactive applications 				
3	<p>Indicative Module Contents</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <ul style="list-style-type: none"> • Human-computer interaction • Social interaction and participation • Emotional interaction and aesthetics • Interaction with gestures • Interface design • Spatial Interaction • Interaction design in web • Interaction design in mobile application • Interaction design in museum and exhibition • Interaction in virtual and augmented environments 				

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 <u>Module-responsible</u> and Teaching Professors Module-responsible: Prof. Andrea Krajewski Teaching Professors: Prof. Andrea Krajewski Prof. Claudia Söller-Eckert Prof. Tsune Tanaka Prof. Wil Weber Prof. Katharina Kafka Prof. Arnd Steinmetz Prof. Kyrill Fischer Prof. Sabine Breitsameter
11	Other Information

ME2_06 – Media Installation

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_06	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	Learning Outcomes / Competencies On successful completion of this module the student shall be able to: <ul style="list-style-type: none"> • Understand and discuss the historical prerequisites, transdisciplinary aspects and design principles of media installations and environmental media approaches • 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 Contents of this module may contain but are not limited to the following aspects: Students analyse and explore milestones of installations in media art (preferably, but not only, by excursions to media festivals or media art museums). They analyze the installations' different spatial/environmental, aesthetic and participatory/interactive experiences, and by which dramaturgical, technological and creative means they have been generated. The students will develop installations, environments, situative and spatial simulations. Their design, production and implementation will be based on prototypical media elements and system components. The productions' final presentation follows environmental experience's necessities and state-of-the-art display of professional exhibitions.				
4	Teaching Methods Lecture, seminar, practical and presentation				
5	Prerequisite Subjects -				
6	Assessment Methods Final presentation and documentation				

7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. Sabine Breitsameter</p> <p>Teaching Professors: all professors of Digital Media</p>
11	<p>Other Information</p>

ME2_07 – Dramaturgy and Storytelling for Linear and Interactive Media

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_07	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>This module aims to equip students with the essential knowledge and skills required to concept, write, design, prototype and evaluate narrative strategies for linear and interactive media. They will learn the principles of narration, dramaturgy and montage or interactive concepts which are fundamental for storytelling media.</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Discuss and evaluate dramaturgic theories and strategies • Discuss and evaluate linear and nonlinear storytelling in film, interactive film and game • Understand and making use of dramaturgic and storytelling principles • Concept, design/write and develop/realize linear and nonlinear stories • Discuss and integrate interaction in linear media or narration in interactive media 				
3	<p>Indicative Module Contents</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <ul style="list-style-type: none"> • Narratology • Dramaturgic concepts • Creative writing methods • Character development • Linear storytelling in film and animation • Nonlinear storytelling in film and animation • Interactive film and animation • Narration in games and interactive application • Web documentaries • Interactive commercials 				

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 <u>Module-responsible</u> and Teaching Professors Module-responsible: Prof. Claudia Söller-Eckert Teaching Professors: Prof. Thomas Burnhauser Prof. Thomas Carlé Prof. Tilmann Kohlhaase Prof. Katharina Kafka Prof. Claudia Söller-Eckert
11	Other Information

ME2_08 – Media Experiments

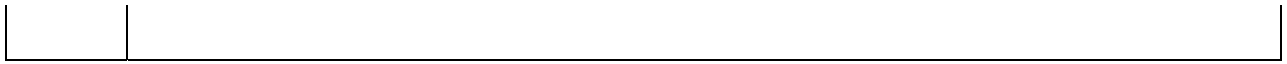
ID	Workload	Credits	Semester	Frequency of	Duration
ME2_08	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Identify important media experiments in history and presence and their different aspects of experimentation • Understand the plurality of the aesthetic term “experiment” • Understand the basic conceptual aesthetic, historical-philosophical, societal and technological incitements for media experimentation • Relate these phenomena to standard media design, and identify the respective transgressing of boundaries and how they are conceptualized • Understand and apply concepts, methodologies and strategies of experimentation Develop, conduct and implement experimental media projects and position them in relation to standard as well as to historical experimental productions. 				
	<p>Indicative Module Contents</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <ul style="list-style-type: none"> • Prototypical media experiment in history in relation to standard media production • Experimental concepts in trans- and mono-media • Experimental methodologies and strategies in relation to societal and technological prerequisites as experimental incitements • The different experimental perspective of media makers and recipients/users • Assessment methods for experiments' effects on society, art world and technology • Assessing the experiments' originality and ingenuity • Implementing, producing and presenting experimental work according to its concepts and intentions 				
4	<p>Teaching Methods</p> <p>Lecture, seminar, practical and presentation</p>				
5	<p>Prerequisite Subjects</p>				

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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 <u>Module-responsible</u> and Teaching Professors Module-responsible: Prof. Sabine Breitsameter Teaching Professors: All professors of Digital Media
11	Other Information

ME2_09 – E-Learning

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_09	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Critically describe the evolution of E-Learning in terms of antecedent educational/technological traditions and to also critically evaluate its likely characteristics and form for the future • Explain what pedagogy is and the need for a pedagogy of E-Learning; to explain the major pedagogical schools and their implications for effective E-Learning design, development and delivery • Critically describe and make use of the principal features of the main E-Learning platforms, in particular Learning Management Systems and Virtual Classroom systems • Identify the main types of e-learning standards and articulate their purpose • Describe and apply a framework for selecting and using a range of different e-learning technologies and content development tools • Evaluate, select and use of arrange of content development tools to create pedagogically effective E-Learning content 				
3	<p>Indicative Module Contents</p> <p>This module is designed to provide students, within the overall context of the Bachelor Arts in Multimedia degree, with a broad understanding of the field of e-learning, taken here to refer to learning facilitated specifically via the web, in terms of: its history, its vocabulary, its current form, and some of the main underlying pedagogical issues and a range of specific technologies upon which it is based. E-learning as a field will be linked throughout with other themes and learning of the Multimedia degree course and students will be encouraged to integrate their multimedia competences with the assessment demands of the module. Students will also be encouraged to apply theoretical concepts to make real-world design, development and delivery decisions.</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <p>History of E-Learning: Distance education, computer-aided learning, the emergence and ongoing development of internet and web technologies and their affordances for learning;</p>				

	<p>Pedagogy of E-Learning: The major pedagogical schools in particular behaviourism, cognitivism, constructivism and their implications for effective e-learning design, development and delivery; also some discussion of instructional design techniques;</p> <p>E-Learning-Platforms: Learning Management systems (e.g. Web CT and Moodle), Virtual Classroom systems (e.g. Centra and Horizon Wimba) and some other standalone collaboration tools (e.g. discussion for instant messaging, P2P sharing etc);</p> <p>E-Learning Standards: To include coverage of various packaging standards, communications standards and metadata standards;</p> <p>Technology Evaluation: To include a look at criteria such as effectiveness/ usability, reliability, interactivity, scalability, robustness, novelty etc.;</p> <p>Content Development: Course authoring, testing and assessment, web design, media editors, content converter tools and criteria for their use and selection.</p>
4	<p>Teaching Methods</p> <p>Lecture, seminar, practical and presentation,</p>
5	<p>Prerequisite Subjects</p> <p>-</p>
6	<p>Assessment Methods</p> <p>Final presentation and documentation</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. Dr. Arnd Steinmetz</p> <p>Teaching Professors: All professors of Digital Media</p>
11	<p>Other Information</p>



6. 2 Module descriptions of the Informatics/Technology Electives

ME2_10 – Advanced Media Systems					
ID	Workload	Credits	Semester	Frequency of	Duration
ME2_10	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Apply scientific methods in analysing media, user needs, socio-cultural contexts and media markets • Critically examine innovative forms of information technology in their social-cultural context • Critically examine physical interfaces • Develop action processes considering alternative interface manipulation methods (gesture, voice entry, eye tracking, vital parameter, learning interfaces, etc.) • Apply and combine complex technologies • Develop complex media systems (software development, programming and application of knowledge in networks technologies) 				
3	<p>Indicative Module Contents</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <p>The students develop a reasonable ubiquitous application with regard to a defined target group, its needs and an economical market perspective. The product has to be conceived with all components. It has to be developed as prototype, mock up or simulation. To ensure the up-to-date-ness and relevance of the project topic it will be defined yearly in the run-up to the project-planning phase. Topics can be: ubiquitous education systems, products for the elderly, wearable media, smart objects, tangible media. The topic should be broadly interpretable to leave latitude for different markets, target groups and their demands. The product has to be revisable in terms of its economic efficiency, and marketing opportunities. Parallel ethical, social and legal aspect should be taken into consideration.</p>				
4	<p>Teaching Methods</p> <p>Lecture, seminar, practical and presentation</p>				
5	<p>Prerequisite Subjects</p>				

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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 <u>Module-responsible</u> and Teaching Professors Module-responsible: Prof. Dr. Arnd Steinmetz Teaching Professors: All professors of Digital Media
11	Other Information

ME2_11 – Advanced System Technology

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_11	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	Learning Outcomes / Competencies On successful completion of this module the student shall be able to: <ul style="list-style-type: none"> • Understand Agent based systems, media retrieval and information retrieval and their components • Critically examine innovative forms of information technology in their social-cultural-context • Develop and implement Agent based systems • Develop retrieval methods and concepts • Apply knowledge in software development, programming and networks technologies 				
3	Indicative Module Contents Contents of this module may contain but are not limited to the following aspects: <ul style="list-style-type: none"> • Application of Agent based systems, media retrieval and information retrieval. • Introduction to agent systems: Intelligent and mobile systems • Mechanisms and platforms: Communication and messaging, life cycles, serialization, agent naming, localization, Sample platforms JADE, tracy, SeMoA • Content descriptors: Image, audio- and video descriptors - Retrieval mechanisms: Client-server based systems, agent based systems. 				
4	Teaching Methods Lecture, seminar, practical and presentation,				
5	Prerequisite Subjects -				
6	Assessment Methods Final presentation and documentation				
7	Prerequisites for CP				

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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 Module-responsible: Prof. Dr. Arnd Steinmetz Teaching Professors: All interactive design, informatics and media technology teachers
11	Other Information

ME2_12 – Interface Technology

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_12	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	Learning Outcomes / Competencies On successful completion of this module the student shall be able to: <ul style="list-style-type: none"> • In depth understand common user interface mechanics, methods and elements • Understand advanced user interface technologies • Critically discuss the positive and negative components in an existing user interface and provide recommendations for improvement • Develop user interfaces • Implement user interfaces 				
3	Indicative Module Contents Contents of this module may contain but are not limited to the following aspects: <ul style="list-style-type: none"> • The students learn to apply advanced interface methods and technology. • Usability aspects: answer/reaction times, geometrics • Standard I/O devices • Text based UI • Forms based UI • Standard UI elements (e.g. button, field, selection,...): Features, usage and programming of standard UI elements and tabled sequences • HCI devices • Advanced HCI: I/O devices (pen, tangibles, A/V), gesture recognition, audio based input, video based input, haptic UI / force feedback • Mobile interfaces 				
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 <u>Module-responsible</u> and Teaching Professors Module-responsible: Prof. Dr. Arnd Steinmetz Teaching Professors: Prof. Dr. Christoph Busch Prof. Dr. Torsten Fröhlich Prof. Dr. Arnd Steinmetz Prof. Dr. Kyrill Fischer Prof. Dr. Frank Gabler All informatics and media technology teachers
11	Other Information

ME2_13 – Mobile/Web Application

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_13	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	Learning Outcomes / Competencies On successful completion of this module the student shall be able to: <ul style="list-style-type: none"> • Apply a user centred design methodology, typical for mobile or web applications • Develop a reasonable design concept considering the target group • Conceptualize a mobile or web application that corresponds to the intended design targets • Produce and implement a mobile or web application • Evaluate the product with usability methods 				
3	Indicative Module Contents Contents of this module may contain but are not limited to the following aspects: <ul style="list-style-type: none"> • User centred design process, user research and usability • Human-computer interaction and interface design • Service-design in relation to the concept of mobility • Application and game-design for mobile media • Interaction design for mobile media • Advanced mark-up: HTML 5/CSS 3, X3D; • Client-side scripting and Server-side scripting, client-server environments • XML, parsing, events, DOM • Databases/remote storage • Tables, SQL queries, database design, incorporating search results into interactive content; • Local storage, cookies, AJAX, HTTP • Time-based and interactive multimedia documents: Smile, Flash, Director, authoring environments • Native UI frameworks and libraries (Windows (Phone), MacOS, Android, iOS) • Platform independent frameworks (i.e. jQuery, PhoneGap) 				

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 <u>Module-responsible</u> and Teaching Professors Module-responsible: Prof. Dr. Arnd Steinmetz Teaching Professors: All professors of Digital Media
11	Other Information

ME2_14 – 3D Interactive Environment

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_14	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	Learning Outcomes / Competencies On successful completion of this module the student shall be able to: <ul style="list-style-type: none"> • Describe 3D immersive interaction paradigms and their fields of application • Critically discuss the positive and negative aspects of existing 3D environments and interaction technologies and make recommendations for improvements • In depth understand 3D display and interaction device technologies • Master authoring tools and development environments for interactive 3D worlds • Set up a collaborative production pipeline for a small team • Independently design, develop and implement interactive audio-visual 3D environments 				
3	Indicative Module Contents Contents of this module may contain but are not limited to the following aspects: The students learn to assess and apply 3D interaction paradigms and technologies: <ul style="list-style-type: none"> • Usability aspects: answer/reaction times, impact of graphical and audio rendering quality, breaks in immersion • 6D tracking systems, video-based full body interaction devices • Static and dynamic gesture recognition • Appropriate integration and representation of text • Virtual and augmented reality • Head-mounted, handheld and stationary 3D displays • Design of scripted and dynamic (i.e. physics-controlled) behaviour of non-player characters • Implementation of behaviour and general flow control by program scripts • Development and integration of novel interaction devices • Design aspects for professional users vs. lay-audiences • Location-based installations for entertainment and education (public understanding 				

	of science)
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 <u>Module-responsible</u> and Teaching Professors Module-responsible: Prof. Dr. Torsten Fröhlich Teaching Professors: All animation, interactive design, informatics and media technology teachers
11	Other Information

ME2_15 – Music & Technology

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_15	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Conceive and realize an individual audio project using the computer as principal tool • Conceive and realize audio projects in the studio and associated audio processing facilities • Use a professional project management from brief and concept through to implementation and presentation • Describe and use analogue and digital recording techniques (CDR, DAT, ADAT, Minidisk and tape formats) • Master and present a high-quality, marketable recording product 				
3	<p>Indicative Module Contents</p> <p>Students present a major and a minor portfolio in Computer-based Music Applications AND Practical Recording & Studio Technology. If the major portfolio is chosen from one section the minor portfolio MUST be chosen from the other section.</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <p>Major Portfolio: Prepare a CD of not less than 30 minutes duration that represents their ability to compile, process, edit and master digital audio material to a high standard using a computer, and presenting it with a concise marketing strategy proposal. Or: Prepare a CD of not less than 30 minutes duration that represents their ability to perform, record, master and produce to a high standard. Whilst the portfolio will incorporate various facets of the recording process it will also exhibit the individual creative and artistic abilities of the student and may incorporate other aspects of multimedia, e.g. video or animation.</p> <p>Minor Portfolio: Prepare a CD on not less than 10 minutes duration that represents their ability to compile, process, edit and master digital audio material to a high standard using a computer, and present it as a model commercial product. Or: Prepare a CD of not less</p>				

	<p>than 10 minutes duration that represents their ability to perform, record, master and produce to a high standard. Whilst the portfolio will incorporate various facets of the recording process it will also exhibit the individual creative and artistic abilities of the student and may incorporate other aspects of multimedia, e.g. video or animation.</p>
4	<p>Teaching Methods</p> <p>Lecture, seminar, practical and presentation,</p>
5	<p>Prerequisite Subjects</p> <p>-</p>
6	<p>Assessment Methods</p> <p>Final presentation and documentation</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. Moritz Bergfeld</p> <p>Teaching Professors: Prof. Moritz Bergfeld Prof. Dr. Kyrill Fischer Prof. Wil Welber Prof. Tsune Tanaka</p>
11	<p>Other Information</p>

6.3 Module descriptions of the Media Management Electives

ME2_16 – Media Events & Marketing					
ID	Workload	Credits	Semester	Frequency of	Duration
ME2_16	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Develop concepts of media events • Design environments for media events • Organize and realise media events • Develop marketing and funding • Develop public relation methods • Organise all technical equipment of a media event • Prepare and fulfil all necessary legal aspects and contracts 				
3	<p>Indicative Module Contents</p> <p>In this module students develop and perform a media event. For the event they implement and realise the whole marketing and funding process.</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <ul style="list-style-type: none"> • Pieces to be exhibited: choose and arrange the pieces choose and arrange the speeches, speakers, moderation • Personal management: moderators, speakers servant staff technical staff security people • Exhibition rooms: prepare necessary rooms design environments prepare setup and break down, 				

	<p>cleaning</p> <ul style="list-style-type: none"> • Technical equipment: organise the technical equipment trouble shooting camera, sound, microphones, cables, electrical capacity • Catering: organize catering servants • Public relations: magazine offer in newspapers announcements web-site • Marketing and project management: funding, entrance fee finance management, finance controlling time table project management legal aspects
4	<p>Teaching Methods</p> <p>Lecture, seminar, practical and presentation</p>
5	<p>Prerequisite Subjects</p> <p>-</p>
6	<p>Assessment Methods</p> <p>Final presentation and documentation</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. Andrea Krajewski</p> <p>Teaching Professors: Prof. Thomas Burnhauser</p>

	Prof. Dr. Torsten Fröhlich Prof. Wil Weber Associate lecturers
11	Other Information

ME2_17 – Media Producing in Different Fields of Media

ID	Workload	Credits	Semester	Frequency of	Duration
ME2_17	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Seminar/Workshop/Practical		Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>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.</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • 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	<p>Indicative Module Contents</p> <p>Contents of this module may contain but are not limited to the following aspects:</p> <ul style="list-style-type: none"> • 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	<p>Teaching Methods</p> <p>Lecture, seminar, practical and presentation</p>				
5	<p>Prerequisite Subjects</p> <p>-</p>				
6	<p>Assessment Methods</p> <p>Final presentation and documentation</p>				

7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. Thomas Carlé</p> <p>Teaching Professors: all professors of Digital Media with producing expertise</p>
11	<p>Other Information</p>

SuK_18 – Media and Entertainment Law *

ID	Workload	Credits	Semester	Frequency of Module	Duration
SuK_18	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Lecture/Seminar		Contact Hours 3 SWS/48 h	Self-Study 77 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>This module introduces students to the legal framework and legal issues in relation to digital media production.</p> <p>On successful completion of this module students should be able to:</p> <ul style="list-style-type: none"> • Identify and explain core concepts of media law (p. ex. „intellectual property, „copyright“, „right of publicity“ etc.) • Demonstrate a working knowledge of basic standards and procedures of media law and regulation • To be able to apply this knowledge to the different aspects and stages of content creation and production of in digital media • Discuss the international dimension of media law • Identify and explain basic elements of legal contracts in the context of media production 				
3	<p>Indicative Module Contents</p> <p>Introduction into</p> <ul style="list-style-type: none"> • The specific legal framework of Germany/Europe and their fundamental principles of assigning special protection to media and its diverse forms of expression • The concept of intellectual property in national and international media law • Copyright law and its legal implications for content creation and distribution in digital media • General legal issues, standards and practices related to production and co-production of media products (financing, insurance, talent agreements, producer agreements, licensing etc.) • Specific legal issues and practices in different sectors of entertainment/media industry (Animation, Game, Music, Software etc.) • Revenue chains in the national and international media industries and typical legal 				

	<p>frameworks</p> <ul style="list-style-type: none"> • Media law and media ethics: freedom of expression, right of publicity, protection of minors, basic principles in constitutional and european law", standards and codes of conduct in the media industries etc. • Contracts in media law (function of contracts in the production process, typical contracts/case studies, and standards in contract language....)
4	<p>Teaching Methods</p> <p>Lecture, seminar, presentations, individual and team-based research, case studies</p>
5	<p>Prerequisite Subjects</p> <p>-</p>
6	<p>Assessment Methods</p> <p>Presentation, research project (e.g. essay, case study)</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. Sabine Breitsameter Prof. Katharina Kafka</p> <p>Teaching Professors: Professors of GS</p>
11	<p>Other Information</p> <p>* This module is offered in the framework of the socio-scientific programme of the University of Applied Sciences Darmstadt</p>

6. 4 Module descriptions of the Media Philosophy Electives

ME2_19 – Media Art History					
ID	Workload	Credits	Semester	Module Frequency	Duration
ME2_19	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Lecture/Seminar/ Workshop/Practical		Contact Hours 3 SWS/48 h	Self-Study 77 h	Size of Groups 20
2	Learning Outcomes / Competencies On successful completion of this module the student shall be able to: <ul style="list-style-type: none"> • Demonstrate and apply a knowledge and the appropriate terms of the main strands of aesthetic approaches and ways of artistic expression within the history of arts and culture • Describe the evolution of image and sonic expression from pre-history up to actual developments, with specific knowledge on the related history of ideas, religions, philosophies, socio-political developments, art and media institutions and technologies • Demonstrate appropriate, terminology, skills of reflection and specific methods of analyzation of artefacts from different time periods • Discuss and analyze critically contemporary and own media productions in relation to the history of art. 				
3	Indicative Module Contents The content follows an itinerary of the milestones in art history and the history of the arts, covering the period from pre-history to the digital imagery and sounds of our time. Special emphasis is on selected periods and their content, imaging composing and dramaturgical techniques e.g.: Classical Antiquity, Middle Ages, Renaissance, Romanticism, Expressionism and the arts in 20th century. Special emphasis will be given to time specific technologies and tools, religions, value systems and philosophies, and to the aesthetic transfers to and developments in media and design.				
4	Teaching Methods Lecture, seminar, presentations				
5	Prerequisite Subjects -				

6	Assessment Methods Presentation of homework
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 Module-responsible: Prof. Sabine Breitsameter Teaching Professors: Prof. Sabine Breitsameter All media design teachers
11	Other Information -

ME2_20 – Cultures and Creative Practices in Digital Media

ID	Workload	Credits	Semester	Module Frequency	Duration
ME2_20	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Lecture/Seminar/ Workshop/Practical		Contact Hours 3 SWS/48 h	Self-Study 77 h	Size of Groups 20
2	Learning Outcomes / Competencies <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Describe aesthetic concepts related to 'culture' within the context of the 'digital age' and demonstrate and apply knowledge of the history and the presence of digital media key productions, phenomena and systems • Apply appropriate terms and analytical methods to the study the specificity of digital cultural phenomena and relate them to social and concepts • Analyse critically the own practice and use of digital media in private and professional contexts; analyse critically the general values, presumptions, beliefs, behaviours, frictions, rituals, and specificities of different cultural models in relation to the digital age • Describe and apply the essential terms and methods of current intercultural discourse. 				
3	Indicative Module Contents <p>Study of:</p> <ul style="list-style-type: none"> • Individuality and identity in the digital age's virtual world. • (Re)construction of self, character, gender, media personae etc. changing modes of communication and representation (avatars, blogs, webcams, chatrooms, etc). • The digital community: the 'networked' society, virtual and real communities. Social networks and the emergence of locally dispersed communities, the emergence of social behaviours and values in different types of communities; the incurrance of stereotypes. • Globalisation of communication – impact on cultural values; democracy and control, censorship and the rights of the individual. • Mono-culturalism versus multi-culturalism. Globalization and the 'clash of cultures'; approaches and endeavors towards a diversity based communicational style of creativity and production. • Approaches to cultural analysis: self-reflection, observation and field research. 				

4	Teaching Methods Lecture, seminar, presentations
5	Prerequisite Subjects -
6	Assessment Methods Presentation of homework
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 Module-responsible: Prof. Sabine Breitsameter Teaching Professors: Prof. Sabine Breitsameter All media design teachers
11	Other Information -

ME2_21 – Media Environments and Spaces

ID	Workload	Credits	Semester	Module Frequency	Duration
ME2_21	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Lecture/Seminar/ Workshop/Practical		Contact Hours 3 SWS/48 h	Self-Study 77 h	Size of Groups 20
2	Learning Outcomes / Competencies On successful completion of this module the student shall be able to: <ul style="list-style-type: none"> • Relate media to the diverse concepts of space and environment • Demonstrate and apply knowledge of non-linear media key concepts, their interdependence with the history of society and technological developments. • Demonstrate and apply a knowledge of the distinctive and conceptual properties of space and environment in the „real“ world as well as in different media, understand concept and implications of „virtual space“ and link them to the diverse options of action and use within the respective settings. • Demonstrate and apply knowledge of groundbreaking productions, their specific conceptual and technological characteristics, their utilitarian and/or aesthetic values and their way of addressing/involving the recipient/user. • Discuss and analyze critically current and own media productions within the described field and foster the ability for experimenting and innovating. 				
3	Indicative Module Contents The elective aims at the knowledge and understanding of environmental as well as of spatial aspects of media productions such as in installations. Study of: <ul style="list-style-type: none"> • Central aspects and milestones of spatial and environmental concepts within analogue and digital media productions and settings (e.g. in media architectural settings, installations, virtual spaces, games, exhibitions etc. etc.) • Major works, settings and concepts within the field of practical utility as well artistic creation, identifying the crucial technological achievements of the respective productions • Emphasizing the different concepts, degrees and types of the audience's/the user's involvement and participation, introducing and discussing critically related terms as e.g. „interactivity“, „immersion“, „virtual reality“ etc. • Globalisation of communication – impact on cultural values; democracy and 				

	<p>control, censorship and the rights of the individual.</p> <ul style="list-style-type: none"> • Mono-culturalism versus multi-culturalism. Globalization and the 'clash of cultures'; approaches and endeavors towards a diversity based communicational style of creativity and production. • Approaches to cultural analysis: self-reflection, observation and field research.
4	<p>Teaching Methods</p> <p>Lecture, seminar, presentations</p>
5	<p>Prerequisite Subjects</p> <p>-</p>
6	<p>Assessment Methods</p> <p>Presentation of homework</p>
7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible: Prof. Sabine Breitsameter</p> <p>Teaching Professors: Prof. Sabine Breitsameter All media design teachers</p>
11	<p>Other Information</p> <p>-</p>

ME2_22 – Media Ethics and Philosophy

ID	Workload	Credits	Semester	Module Frequency	Duration
ME2_22	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Lecture/Seminar/ Workshop/Practical		Contact Hours 3 SWS/48 h	Self-Study 77 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Describe the development of ethical and aesthetic theories and discuss their relationship to contemporary media with particular reference to social responsibility, ethical behaviour, ecology, beauty, interpersonal values, intercultural relationships, sustainability, artistic freedom, freedom of speech • Demonstrate the appropriate use of terms as well as methods of argumentation and reflection that advance beyond common sense; address and describe perspectives, structures, conflicts within different value systems and philosophies, applying them to media and suggesting possible ways to deal with them productively • Discuss the cultural, social, political and moral implications of publishing to a virtually global audience. 				
3	<p>Indicative Module Contents</p> <p>A narrative of the milestones in the art of thinking: mythology, religion, theories of cognition, moral philosophy, anthropology, and aesthetic theories are discussed in major writings that shaped our understanding of human and nature and the concepts of human rights, ethics, and beauty.</p> <p>Special emphasis is given to:</p> <ul style="list-style-type: none"> • The history of monotheistic religions (Judaism, Christianity, Islam) and their enduring influence on culture; the different approaches of idealism (Plato to Hegel), materialism (de la Mettrie to certain post-Marxist positions), and existentialism (Nietzsche to Sartre) and contemporary media philosopher's positions • Aesthetic theories that justified and directed art, perception and production from the Renaissance to contemporary positions.- Mono-culturalism versus multi-culturalism. Globalization and the 'clash of cultures'; approaches and endeavors towards a diversity based communicational style of creativity and production • Approaches to cultural analysis: self-reflection, observation and field research. 				

4	Teaching Methods Lecture, seminar, presentations
5	Prerequisite Subjects -
6	Assessment Methods Presentation of homework
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 Module-responsible: Prof. Sabine Breitsameter Teaching Professors: Prof. Sabine Breitsameter All professors of Digital Media
11	Other Information -

ME2_23 – Media and Communication Theories

ID	Workload	Credits	Semester	Module Frequency	Duration
ME2_23	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Lecture/Seminar/ Workshop/Practical		Contact Hours 3 SWS/48 h	Self-Study 77 h	Size of Groups 20
2	Learning Outcomes / Competencies On successful completion of this module the student shall be able to: <ul style="list-style-type: none"> • Demonstrate and apply a knowledge of major contemporary media and communication theories • Describe the theories' evolution from the mid-19th century until today • Demonstrate and apply appropriate skills of reflection and specific methods of analysis of media and communication theories, their basic assumptions and methods • Discuss and analyze the theories in relation to the developments of technologies, sciences and societal changes. 				
3	Indicative Module Contents A narrative of milestones of major media and communication theories from the beginning of mechanical reproduction in the 19th century, the start-up of electric media at the beginning of the 20th century to the mid-century's media diversification and proliferation until the turn of century's theory models and discourses on digital media and its pre- and successors. Special emphasis will be given to historical aspects relating the media theories to their contemporary developments and changes of society, science, technologies as well as belief systems and value concepts.				
4	Teaching Methods Lecture, seminar, presentations				
5	Prerequisite Subjects -				
6	Assessment Methods Presentation of homework				

7	<p>Prerequisites for CP</p> <p>-</p>
8	<p>Used in Other Courses</p> <p>-</p>
9	<p>Significance of Mark for Final Mark</p> <p>According to CP: 2,42%</p>
10	<p>Name of <u>Module-responsible</u> and Teaching Professors</p> <p>Module-responsible:</p> <p>Prof. Sabine Breitsameter</p> <p>Teaching Professors:</p> <p>Prof. Sabine Breitsameter</p> <p>Associate lecturers</p>
11	<p>Other Information</p> <p>-</p>

ME2_24 – Play, Game, Act, Use: Concepts, History and Practices

ID	Workload	Credits	Semester	Module Frequency	Duration
ME2_24	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course Lecture/Seminar/ Workshop/Practical		Contact Hours 3 SWS/48 h	Self-Study 77 h	Size of Groups 20
2	<p>Learning Outcomes / Competencies</p> <p>The elective introduces into the performative and process oriented aspects of media, from the creational as well as from the receptive point of view.</p> <p>On successful completion of this module the student shall be able to:</p> <ul style="list-style-type: none"> • Describe inherited and innovative performative cultural techniques and relate them to their application in analogue and digital media productions and their reception • Apply appropriate analytical methods to explore the cultural techniques of performativity and process in specific ground breaking media productions and relate them to concepts of the human individual as well as of society, to concepts of psychological experience, consumptional needs and utility, as well as to existing or evolving structures of power relations • Describe and exert methods and results of performative cultural techniques, and apply them appropriately in own media productions. 				
3	<p>Indicative Module Contents</p> <p>Study of:</p> <ul style="list-style-type: none"> • History and presence of cultural techniques of perception, awareness and action, especially within the fields of old and new media from ritual performing, theatre acting, different ways of „Spiel“ (game, match, play, gambling, dramaturgy), operational as well as passive perception, interaction and participation) • The related motivations, affects, and anthropological dispositions (e.g. Aristotle, Lessing, Freud, Jung, Brecht, Searle, Virilio, Debord, Weibel) • Key terms and concepts of the described field as e.g. „performative“, „generative“, „sublimation“, „immersion“, „flow“, „dionysical/apollonial“ 				
4	<p>Teaching Methods</p> <p>Lecture, seminar, presentations</p>				
5	<p>Prerequisite Subjects</p>				

	-
6	Assessment Methods Presentation of homework
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 Module-responsible: Prof. Sabine Breitsameter Teaching Professors: Prof. Sabine Breitsameter All professors of Digital Media
11	Other Information -