

Modulhandbuch - Module Handbook Digital Media (Bachelor of Arts)

Version 29.06.2012 Hochschule Darmstadt - *University of Applied Sciences* Faculty of Media

Anlage 5

der Besonderen Bestimmungen der Prüfungsordnung für den Bachelorstudiengang Digital Media (BBPO-Digital Media) des Fachbereichs Media der Hochschule Darmstadt *University of Applied Sciences*

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0. Vorbemerkungen

- (1) Sämtliche Module werden im Sinne des § 1 Abs.7 ABPO durch folgende Punkte beschrieben:
 - 1. Die Inhalte (Indicative Module Contents);
 - 2. Die Lern- und Qualifikationsziele (Learning Outcomes) im Sinne von zu erwerbenden Kompetenzen (Competencies);
 - 3. Die Lehrveranstaltungen (Type of Course)mit den Lehr- und Lernformen (Teaching Methods);
 - 4. Den nach den Lehrveranstaltungen und Lernformen des Moduls aufgeschlüsselten Arbeitsaufwand (Workload) und die Zahl der vergebenen Punkte (CP);
 - 5. Die Voraussetzungen für die Zulassung zu dem Modul (Prerequisites Subjects)
 - 6. Die Dauer (Duration) und zeitliche Gliederung (Semester) sowie die Häufigkeit des Angebots (Module Frequency);
 - 7. Die Verwendbarkeit des Moduls in verschiedenen Studiengängen (Used in other Courses);
 - 8. Die Beschreibung der im Modul zu erbringenden Prüfungsvorleistungen und Prüfungen (Assessment Methods), sowie gegebenenfalls weitere Voraussetzungen für den erfolgreichen Abschluss des Moduls (Prerequisites for CP).
- (2) Die Übersicht über die Module in Anlage 1 der BBPO enthält:
 - 1. Den nach den Lehrveranstaltungen und Lernformen des Moduls aufgeschlüsselten Arbeitsaufwand (workload) und die Zahl der vergebenen Punkte (CP);
 - 2. Die Dauer des Angebots (Duration);
 - 3. Die Art und Form der im Modul zu erbringenden Prüfungen.
- (3) Die Zulassungsvoraussetzungen zum Bachelormodul sind in § 12 BBPO, zu allen anderen Modulen in § 11 BBPO geregelt. Darüber hinaus sind eventuelle weitere Zulassungsvoraussetzungen in den Modulbeschreibungen aufgeführt.
- (4) Die Wahlpflichtmodule sind in Anlage 2 der BBPO aufgeführt und beschrieben.

1. The Principle of Problem Based Learning Workshops

Preconditions

Facing the rise of complexity

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

Facing new concepts of work

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

Supporting constructivist learning

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

Supporting active learning

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

Supporting to learn how to learn

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

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

Definition

Problem-based learning (PBL) is a student-centred pedagogical strategy, applied to the study course 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. Modulbeschreibungen der Pflichtmodule im 1. Semester

MD1	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

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.

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.

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

- Analyse and valuate media artefacts with regard to fundamental genre and design principles
- Describe the scope of creative activities and methods within a typical 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

3 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

- Basics of cinematography
- Composition of space: mise en scène
- Composition of time: montage
- Sound in video & film

Praxis: Design Basics Video

- 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 Teaching Methods

The module integrates essential methods of problem-based learning. The range of teaching methods includes impulse lectures, coaching of individual practical assignments and short, group-based project activities within 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.

Through individual and group based work the students develop essential methodical, practical and intellectual skills in the specialized field of media design. Carefully selected assignments and projects involve students in design problems that promote the acquisition of critical knowledge, problem solving proficiency, self-directed learning strategies and teamwork capacity.

5 Prerequisite Subjects

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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 Module-Responsible and Teaching Professors
	Module-responsible:
	Prof. Katharina Kafka (Animation & Game)
	Prof. Claudia Söller-Eckert (Interactive Media Design)
	Prof. Moritz Bergfeld (Sound)
	<u>Prof. Thomas Carlé</u> (Video)
	Teaching Professors:
	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
11	Other Information
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MI/T1	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		Contact Hours	Self-Study	Size of Groups		
	a) Lecture		a) 2 SWS/32 h	61 h	a) 30 students		
	b) Practical		b) 2 SWS/32 h		b) 15 students		

2 Learning Outcomes / Competencies

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

- The role of informatics in different media areas
- Understanding algorithms
- Basics of logic
- Computer as a tool
- 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 Indicative Module Contents

Indicative Module Contents for Animation and Game

- 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

Indicative Module Contents for Interactive Media

- 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

Indicative Module Contents for Sound

- Physics of sound: wavelength, frequency, speed, reflection, absorption, ...
- Root main 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

Indicative Module Contents for Video

- Physics of light: dualism particle/wave; wavelength, refraction, reflection
- Lux, lumen, colour temperature
- Colour balancing, additive and subtractive mixture
- Studio technology
- Focus, focal depth, apperture, exposure time, exposure value, aspect ratio
- Optical sensors: CMOS, CCD
- Video compression basics
- Sound for video

4 Teaching Methods

Lecture, seminar, practical sessions

5	Prerequisite Subjects
	-
6	Assessment Methods
	Examination Prerequisite: Homework, practical work and demonstration (50%)
	Examination: Written exam (50%)
7	Prerequisites for CP
	-
8	Used in Other Courses
	-
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-Responsible and Teaching Professors
	Module-responsible:
	Prof. Tilmann Kohlhaase (Animation & Game)
	Prof. Dr. Arnd Steinmetz (Interactive Media Design)
	Prof. Dr. Kyrill Fischer (Sound)
	Prof. Dr. Frank Gabler (Video)
	Tanahina Drafagana
	Teaching Professors:
	Prof. Dr. Christoph Busch Prof. Dr. Kyrill Fischer
	Prof. Dr. Torsten Fröhlich
	Prof. Dr. Frank Gabler
	Prof. Dr. Arnd Steinmetz
	Froi. Dr. Arnu Steilinietz
11	Other Information
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MM1	MM1 – Basic Principles of Communication and Teamwork						
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		p) 30		

2 Learning Outcomes / Competencies

The Media Design Module "mm1" provides a foundation for communication and cooperation in heterogenious project-teams. The student is introduced to theories, methods and practical communication processes involved in media production.

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

- 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

3 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

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 Module-Responsible and Teaching Professors
	<u>Prof. Andrea Krajewski</u>
	N.N. (associate lecturers)
11	Other Information
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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		Contact Hours	Self-Study	Size of Groups	
	a) Theory: Collaborative teaching / Lecture/Seminar		a) 1 SWS/16 h	77 h	a) 30	
	b) Practical		b) 2 SWS/32 h		p) 30	

2 Learning Outcomes / Competencies

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

- 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:

- Introductions into
- The origins and meanings of "Culture", "Media" and "Communication", introducing into their historical developments and their relationship to technological and social

	developments
	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 sociopolitical structures
	Scientific and scholarly methods appropriate for culture and media
	The culture industry: creation, production, consumption; high, mass and popular culture
4	Teaching Methods
	Lecture and presentation
5	Prerequisite Subjects
	-
6	Assessment Methods
	Examination Prerequisite: Homework, practical work and demonstration (40%),
	Examination: Written 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 Module-Responsible and Teaching Professors
	Prof. Sabine Breitsameter
	Prof. Claudia Söller-Eckert
	Prof. Katharina Kafka
	Prof. Moritz Bergfeld
	N.N.
11	Other Information
	-

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

MP2	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		Contact Hours	Self-Study	Size of Groups		
	Main Module: Project/problem based learning		5 SWS/80 h	170 h	10		
	Sub-modules: Problem based learning/workshops/seminars/						
	lectures						

2 Learning Outcomes / Competencies

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.

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

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

- Understand and experience key characteristics of team based projects, solve team problems; use relevant and appropriate etiquette in communicating with stakeholders
- Apply basic principles of research such as: examine the topic and identify the audience/user, existing products, the social and cultural environment, functional and technical conditions of the media application
- Demonstrate methodical and practical skills in creating, visualizing and evaluating different ideas and concepts
- Produce media artefacts in an appropriate media language and with necessary technical skills

• Understand and apply basic methods of project management

3	Indicative Module Contents
3	
	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%)
	Trouble 2 co.ig.iii nomoni, written er er at exam (50,676)
	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 Module-responsible and Teaching Professors
	Module-responsible:
	Prof. <u>Katharina Kafka</u> (Animation & Game)
	Prof. <u>Claudia Söller-Eckert</u> (Interactive Media Design)
	Prof. Moritz Bergfeld (Sound)
	Prof. <u>Thomas Carlé</u> (Video)
	Tron. <u>Thomas darke</u> (video)
	Teaching Professors:
	All professors of Digital Media
11	Other Information
	<u> </u>

3.1

Indicative Module Contents Animation & Game: Simple Games/Animations

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.

Sub-module Media Informatics/Technology

- 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

- 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 nonlinear storytelling and dramaturgy)
- Introduction to sound design: the role of sound for animation & game

3.2

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
- 00P: 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 Æ
 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

- 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

Indicative Module Contents Sound: Radio Play

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.

Sub-module Media Informatics/Technology

- 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

- 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

- 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	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		Contact Hours	Self-Study	Size of Groups	
	a) Lecture/Seminar		a) 1 SWS/16 h	77 h	a) 60	
	b) Workshops/Seminar/Practical		b) 2 SWS/32 h		b) 60	
2	Learning Outcomes / Competencies This module introduces the students to the major challenges of professional practices in an economically globalized and socially highly diversified media arena. After the successful completion of the module the students shall be able to • 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			na. le to rsity and es related to the in media in diverse media ers and diversity and rigins and causes as well as irements of		
3	Indicative Module Contents					
	• Introduction into the topics of diversity, gender and interculturality from a historical as well as from a contemporary perspective			om a historical		
	 Specification and exemplification of the topics towards their occurrence, influence and relevance in media 				nce, influence	
	Organizations :	such as UN or EU	aches and policies and their subdivisi tivity/creativity and	ons to improve co	mmunication,	
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 Module-responsible 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	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		Contact Hours	Self-Study	Size of Groups
	Main Module: Project/problem based learning		9 SWS/145 h	230 h	10
	Sub-modules: Problem based learning/workshops/seminars/				
	lectures				

2 Learning Outcomes / Competencies

Sound processing and programming skills, Advanced mixdown and studio mastering.

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

Overall Competencies:

- Apply analytical and methodological skills with more routine
- Transfer skills
- Apply problem solving skills
- Work in a mid-sized team
- Define quality standards

Project competencies:

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

I	1
	Disciplinary Competencies:
	Design: • Describe the scope of creative activities within a typical media project in the selected
	focus
	Apply a basic design methodology, typical for the focus,
	Develop a reasonable design concept considering an argued strategy
	Create a product or artwork aesthetics that corresponds to the intended design targets
	Media Informatics & Technology:
	Apply mathematical sound analysis
	Apply interactive signal synthesis
	Media Management:
	Cope with crises and failures
	Apply business-planning methodologies
4	Teaching Methods
	Project work, seminar, lecture
5	Prerequisite Subjects
6	Assessment Methods
	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%)
	Examination:
	Project: Final Presentation and documentation (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 Module-responsible and Teaching Professors

Module-responsible:

Prof. Tilmann Kohlhaase (Animation & Game)

Prof. Andrea Krajewski (Interactive Media Design)

Prof. Moritz Bergfeld (Sound)

Prof. Thomas Carlé (Video)

Teaching Professors:

All professors of Digital Media

11 Other Information

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3.1

Indicative Module Contents Animation & Game: Professional Animation and Game

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.

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

- 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-computerinterface 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.

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

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

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

- 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.
- Pulscode modulation (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 -	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		Contact Hours	Self-Study	Size of Groups	
	a) Lecture		a) 2 SWS/30 h		a) 30	
	b) Tutorials, grou		b) 2 SWS/30 h		b) 15	
	c) Industrial plac	ement		c) 690 h		
_	1					

2 Learning Outcomes / Competencies

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

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

3 Indicative Module Contents

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

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

Students have to produce a detailed report about their projects.

The students work in the fields of:

- 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
	• Lectures
	Tutorials, group discussions and peer reviews
	Presentation
	• Fresentation
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
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40	None (0%)
10	Name of Module-responsible and Teaching Professors
	Prof. Dr. Kyrill Fischer
	All professors of Digital Media
11	Other Information

MP5	MP5 – Transmedia Projects					
ID	Workload	Credits	Semester	Frequency of Module	Duration	
MP5	375	15	5th Semester	Summer Term	1 Semester	
1	Type of Course		Contact Hours	Self-Study	Size of Groups	
	Problem based		9 SWS/145 h	230 h	10	
	learning/workshops/seminars/					
	Lectures					

2 Learning Outcomes / Competencies

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.

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.

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.

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

Overall Competencies:

- Lifelong learning skills
- Ability to generate synergies by the cooperation of project members with different media perspectives

Project competencies:

- 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 & serviceportfolio

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

- 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

	Sub module Media Management
	Sub-module Media Management
	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	Teaching Methods
	PBL-Workshops
5	Prerequisite Subjects
	Successful completion of all modules of semester 1-3, except two elective modules
6	Assessment Methods
	Examination Prerequisite:
	project work (0%)
	Media Design: homework, written or oral exam (25% Media Informatics/Technology: written or oral exam (25%)
	Media Management: written or oral exam (25%)
	Examination:
	Project: Final Presentation and documentation (25%)
7	Prerequisites for CP
	-
8	Used in Other Courses
	_
9	Significance of Mark for Final Mark
	According to CP: 7,27%
	ı

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

MP6	5 – Advanced Me	edia Projects				
ID	Workload	Credits	Semester	Frequency of Module	Duration	
MP	375	15	6th Semester	Winter Term	1 Semester	
6						
1	Type of Course		Contact Hours	Self-Study	Size of Groups	
	Problem based		9 SWS/145 h	230 h	10	
	learning/worksho	ops/seminars/				
	Lectures					
2	Learning Outcomes	/ Competencies				
	On successful completion of this module the student will be able to:					
	Overall Competencies:					
	Lifelong learning	ng skills				
	Ability for critic	al thinking concer	ning innovation, n	ew formats and te	chnologies	
	Ability to transfer technical innovation into cultural and/or social innovations				ovations	
	Project competer	ncies				
	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					

- 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	Assessment Methods			
	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%)			
	rectia informatics, rectinology. Written of orat exam (2576)			
	Examination:			
	Project: Final Presentation and documentation (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			
	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)			
	Teaching Professors:			
	All professors of DM			
11	Other Information			
	-			

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

- Advanced C++ programming for games
- Al 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)

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

- 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

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

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

- 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

MP7R	- Research-F	Project			
ID	Workload	Credits	Semester	Frequency of	Duration

MP7R	375 h	15	7th Semester	Module Every Term	10 weeks
1	Type of Course		Contact Hours	Self-Study	Size of Groups
	Seminar		7 SWS/110 h	265 h	60
	Tutorials, group discussions				
	and peer reviews				

2 Learning Outcomes / Competencies

On successful completion of this subject the student will – in accordance to his or her chosen study focus – be able to:

- Use appropriate methodologies to explore the topic for an interactive or linear product; and/or
- Demonstrate the advantages of carrying out extensive and detailed user or situation research for a product; and/or
- Use appropriate methodologies with regard to research for product development;
 and/or
- Use appropriate methodologies with regard to market research; and/or
- Use appropriate methodologies with regard to product concept and development;
 and/or
- Use appropriate methodologies to plan the project organisation and financing of a media-project; and/or
- Identify and design for the cultural environment in which a product will be used or experienced

3 Indicative Module Contents

The student(s) submits a briefing document for a linear and/or interactive to a desired project coach. Once this brief has been accepted, the student then writes a planning document, containing:

- A project proposal
- The results of the necessary research, developing the project
- The description of a developed rough concept for the project
- A project plan

Project Schedule:

- Application with briefing document
- Agreement on deliverables according to chosen subject with coach

	Delivery of research- and concept-plan
	Discussion sessions and review of preliminary results (group/peer reviews)
	Final Presentation (assessment)
4	Teaching Methods
	• Coaching
	Tutorials, group discussions and peer reviews
	Presentation and demonstration
5	Prerequisite Subjects
	Successful completion of all modules of semester 1-3, 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 Module-responsible and Teaching Professors
	All professors of Digital Media
11	Other Information
	-

МР7В	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		Contact Hours	Self-Study	Size of Groups
	Seminar		3 SWS / 45 h	330 h	20
	Tutorials, group discussions and peer reviews				
	and peer reviev	vo			

2 Learning Outcomes / Competencies

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

- Discuss the design, cultural, technical and economic issues related to the project
- Show appropriate use of project management skills and tools in application of project resources and in meeting project milestones on time and to specifications
- Demonstrate judgement in the application of appropriate research and design methods in arriving at final solution(s) for the proposed project
- Demonstrate specialised technical, creative or conceptual skills and tools in the development, completion and presentation of the project outcomes
- Show critical personal reflection and accountability in relation to learning from successful and unsuccessful project outcomes

3 Indicative Module Contents

Students may develop and realise a complete media system or media product, such as an interactive media system, an animation, a game, a video or a sound product. The work should demonstrate an understanding of how to apply a range of methods and tools in arriving at a professional solution.

Students may explore a concept from a cultural or market perspective that they wish to develop as a proposal to industry. Students developing ideas should cater for the cultural, technical, aesthetic and business aspects of a particular idea and explore all these aspects through sound research methods. Students should be able to create and present a prototype that has a sound basis in technology as well as being appropriate to the needs of the target stakeholders. Such projects should demonstrate an awareness of the market in which the proposed project will operate or be displayed. Prototypes may be aimed at business, cultural, academic or community based environments.

Projects can be the product of individual or team effort and in the case of team work the project proposed should outline clearly the areas of responsibility for each

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

4. Modulbeschreibungen der Electives ME1 im 1. Semester

ID	Workload	Credits	Semester	Frequency of Module	Duration
ME1- D	125 h	5	1st Semester	Winter Term	1 Semester
1	Type of Course	<u> </u>	Contact Hours	Self-Study	Size of Groups
	Practical		3 SWS/48 h	77 h	20
2	Learning Outcomes / Competencies This elective module complements the foundations in media design students acquire though 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. On successful completion of this module the student shall be able to: 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	Indicative Module Contents Students can choose from the following specialized electives: • Media Design for "Animation and Game" • Media Design for "Interactive Media Design" • Media Design for "Sound" • Media Design for "Video"				
4	Teaching Meth	ods ures, seminar, p	practical		

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 Module-Responsible and Teaching Professors			
	Module-responsible:			
	Prof. Katharina Kafka (Animation&Game)			
	Prof. <u>Claudia Söller-Eckert</u> (Interactive Media Design)			
	Prof. Moritz Bergfeld (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	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		Contact Hours	Self-Study	Size of Groups
	Practical		3 SWS/48 h	77 h	20
	1 . 0				

2 Learning Outcomes / Competencies

This elective module complements the foundations in media informatics/technology students acquire though 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.

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

- 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 it's basics underlying technology
- Resolve informatics and technology challenges through the considered application of appropriate theoretical and practical competencies and skills

3 Indicative Module Contents

Students can choose from the following specialized electives:

- 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 Teaching Methods

Impulse lectures, seminar, practical

5 Prerequisite Subjects

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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:		
	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)		
	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		
11	Other Information		
	-		

5. Rahmenmodulbeschreibungen der Electives ME2 im 2. bis 6. Semester

ME2	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		Contact Hours	Self-Study	Size of Groups
	Seminar/workshop/lectures/		3 SWS / 50 h	75 h	20 Design
	project				20 IT
					20 Philosophy

2 Learning Outcomes / Competencies

Media Electives shall enable the student to:

- 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

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

- Develop and describe media concepts in a broad cultural and social horizon as well as in adaption to the 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 Indicative Module Contents

The modules are clustered here in the following fields:

- Media Informatics & Technology
- Media Design
- Media Management

	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 Module-Responsible and Teaching Professors		
	Media Informatics/Technology:		
	Prof. Moritz Bergfeld		
	Prof. Dr. Christoph Busch		
	Prof. Dr. Torsten Fröhlich		
	Prof. Dr. Frank Gabler		
	Prof. Dr. Kyrill Fischer		
	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.		

Media Management: Prof. Andrea Krajewski, Prof. Thomas Burnhauser, N.N. Media Philosophy: Prof. Sabine Breitsameter, Prof. Katarina Kafka, Prof. Tilmann Kohlhaase, Prof. Claudia Söller-Eckert, N.N. 11 Other Information * The catalogue offers two modules from the socio-scientific programme of the University of Applied Sciences Darmstadt: a) Media and Entertainment Law, b) a free of choice-course from the respective catalogue.

5.2 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

The main indicative topics are:

- Advanced Media Systems
- Advanced System Technology
- Interface Technology
- Mobile/Web Technology
- 3D Interactive Environments
- Music & Technology

Several versions of these modules can be offered servicing different domains and foci. Basic indicative elements are:

- 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 handing 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, artistical, 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

- 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

6. Modulbeschreibungen der Electives ME2 im 2. bis 6. Semester

6. 1 Modulbeschreibungen der Design Electives

ME2_0	1 – Advanced An	imation			
ID	Workload	Credits	Semester	Frequency of	Duration
ME2 _01	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course		Contact Hours	Self-Study	Size of Groups
	Seminar/Worksh	nop/Practical	3 SWS/50 h	75 h	20
2	Learning Outcome	s / Competencies			
	On successful co	ompletion of this n	nodule the student	t shall be able to:	
	Create a story	board and task lis	ting for an animat	ion	
	Outline a rang animation	ge of core of editin	g and production t	ools for tools for bo	th 2D & 3D
	Design a shore	t 2D animation us	ing a range of tech	niques	
	 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 o authorware 			nodelling,	
				ment such as	
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 conta	ain but are not limi	ited to the following	aspects:
Advanced Animation Overview: Analysing a range of animation types with specific consideration given to the function of the animation within the overall design of a given product. Anather online and offline products or services. Differences and similarities between and contemporary digital methods of producing animation. Overview of 20 concepts relating to analogue and digital animation. Examine in detail est practices, styles, narratives and elements of visual language employed in		nalysis includes ween traditional 2D/3D animation stablished			

multimedia. Animation Methods 1: A range of methods applicable to the production of short 2D web-based or featurelength animation such as Storyboarding techniques, key framing, tweening, onion skinning, timing and frame rates. 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. 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. 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. 4 Teaching Methods Lecture, seminar, practical and presentation 5 Prerequisite Subjects 6 Assessment Methods Final presentation and documentation Prerequisites for CP 7 Used in Other Courses 8 Significance of Mark for Final Mark 9 According to CP: 2,42% 10 Name of Module-responsible and Teaching Professors Module-responsible: Prof. Tilmann Kohlhaase

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

ME2_0	02 – Advanced Ga	me 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	I	Contact Hours	Self-Study	Size of Groups
	Seminar/Workshop/Practical		3 SWS/50 h	75 h	20
2	Learning Outcomes	s / Competencies		L	
	On successful co	mpletion of this n	nodule the student	shall be able to:	
	Extend the ab	ility to work with g	ame- and rule-en	gines	
	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	Indicative Module (Contents			
	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.				
	Contents of this	module may conta	ain but are not limi	ted to the following	aspects:
		velop and realise and with all system	, ,	with interface, cha	racters,
	Research and	analysis of games	5		

- 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 Module-responsible and Teaching Professors
	Module-responsible:
	Prof. Wil Weber
	Teaching Professors:
	all animation, design and media technology teachers
11	Other Information
İ	

ME2_0	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	1	Contact Hours	Self-Study	Size of Groups	
	Seminar/Worksh	nop/Practical	3 SWS/50 h	75 h	20	
2	Learning Outcomes / Competencies					

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

- 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 Indicative Module Contents

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.

Contents of this module may contain but are not limited to the following aspects:

Visual Research:

Examination of established practices, styles, narratives and elements of visual language employed in film, TV, and multimedia.

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.

Recording and Capturing:

Camera and shooting techniques applicable to a variety of situations to include day and

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.

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.

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 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.

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

	Teaching Professors: all professors of Digital Media
11	Other Information

ME2_0	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/Worksh	nop/Practical	Contact Hours 3 SWS/50 h	Self-Study 75 h	Size of Groups 20
2	Learning Outcome	s / Competencies		· I	

2 Learning Outcomes / Competencies

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

- 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 Indicative Module Contents

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.

Contents of this module may contain but are not limited to the following aspects:

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.

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.

Compositing:

Animation, motion control and Keying. Using either shot footage or Library material.

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

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

ME2_0	5 – Interaction &	Interface Desig	n		
ID	Workload	Credits	Semester	Frequency of	Duration
ME2	125 h	5	2-6	Winter Term	1 Semester
_05				Summer Term	
1	Type of Course		Contact Hours	Self-Study	Size of Groups
	Seminar/Worksh	nop/Practical	3 SWS/50 h	75 h	20
2	Learning Outcomes	s / Competencies			
	design, prototype will learn the pri design. Besides	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.			
	On successful co	mpletion of this n	nodule the student	shall be able to:	
	• Discuss and e	valuate good user	interaction design	า	
	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	Indicative Module (Contents			
	Contents of this	module may conta	in but are not limi	ted to the following	aspects:
	Human-comp	uter interaction			
	Social interact	tion and participat	ion		
	Emotional inte	eraction and aesth	etics		
	Interaction with	th gestures			
	Interface designation	_			
	 Spatial Intera 	ction			
	 Interaction de 	sign in web			
		sign in mobile app			
		sign in museum a			
	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 Module-responsible 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_0	06 – Media Instal	llation					
ID	Workload	Credits	Semester	Frequency of	Duration		
ME2 _06	125 h	5	2-6	Winter Term Summer Term	1 Semester		
1	Type of Course		Contact Hours	Self-Study	Size of Groups		
	Seminar/Workshop/Practical 3 SWS/50 h 75 h 20						
2	Learning Outcom	es / Competencies					
	On successful o	completion of this i	module the studen	t shall be able to:			
	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.						
	tial simulations. cal media follows orofessional						
4	Teaching Methods	5					
	Lecture, semina	ar, practical and p	resentation				
5	Prerequisite Subj	ects					
6	Assessment Meth	ods					
	Final presentat	ion and documenta	ation				

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

ID	Workload	Credits	Semester	Frequency of	Duration				
ME2	125 h	5	2-6	Winter Term	1 Semester				
_07				Summer Term					
l	Type of Course		Contact Hours	Self-Study	Size of Groups				
	Seminar/Works	shop/Practical	3 SWS/50 h	75 h	20				
2	Learning Outcom	es / Competencies							
	concept, write, interactive med	design, prototype dia. They will learı	and evaluate narra	ial knowledge and sative strategies for larration, dramaturation, dramaturationstelling media.	linear and				
	On successful completion of this module the student shall be able to:								
	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	Indicative Module Contents								
	Contents of this module may contain but are not limited to the following aspects:								
	Narratology								
	Dramaturgic concepts								
	Creative writing methods								
	Character development								
	Linear storyt	telling in film and	animation						
	Nonlinear st	orytelling in film a	and animation						
	Interactive fi	lm and animation							
	Narration in	games and intera	ctive application						
	 Narration in games and interactive application Web documentaries 								
	Web docume	entaries	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 Module-responsible 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 1	Learning Outcor On successful Identify impaspects of e Understand Understand	ortant media expe		Winter Term Summer Term Self-Study 75 h nt shall be able to:	1 Semester Size of Groups 20						
	Learning Outcom On successful Identify impleaspects of elements Understand	nes / Competencies completion of this portant media expenses	3 SWS/50 h	75 h nt shall be able to:	•						
2	Learning Outcor On successful Identify impaspects of e Understand Understand	nes / Competencies completion of this portant media expenses	module the stude	nt shall be able to:	20						
2	On successful Identify impaspects of e Understand Understand	completion of this ortant media expenses experimentation									
	Identify impaspects of eUnderstandUnderstand	ortant media expe									
	aspects of eUnderstandUnderstand	experimentation	riments in history								
	Understand	I the plurality of the		and presence and th							
			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. 										
	Indicative Module Contents										
	Contents of this module may contain but are not limited to the following aspects:										
	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	Teaching Metho	ds									
	Lecture, semi	nar, practical and p	resentation								

	-
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		Contact Hours	Self-Study	Size of Groups	
	Seminar/Worksh	nop/Practical	3 SWS/50 h	75 h	20	
2	Learning Outcomes / Competencies					
	On successful completion of this module the student shall be able to:					
	1		•	erms of antecedent ritically evaluate its		

- 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 principl features of the main E-Learning platforms, in particular Learning Management Systems and Virtual Classroom systems
- Identifythemaintypesofe-learningstandardsandarticulatetheirpurpose
- Describe and apply a framework for selecting and using a range of different elearning technologies and content development tools
- Evaluate, select and use of arrange of content development tools to create pedagogically effective E-Learning content

3 Indicative Module Contents

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.

Contents of this module may contain but are not limited to the following aspects:

History of E-Learning:

Distance education, computer-aided learning, the emergence and ongoing development of internet and web technologies and their affordances for learning;

	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;
	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);
	E-Learning Standards: To include coverage of various packaging standards, communications standards and metadata standards;
	Technology Evaluation: To include a look at criteria such as effectiveness/ usability, reliability, interactivity, scalability, robustness, novelty etc.;
	Content Development: Course authoring, testing and assessment, web design, media editors, content converter tools and criteria for their use and selection.
4	Teaching Methods
	Lecture, seminar, practical and presentation,
5	Prerequisite Subjects
6	Assessment Methods
	Final presentation and documentation
7	Prerequisites for CP
8	Used in Other Courses
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-responsible and Teaching Professors
	Module-responsible:
	Prof. Dr. Arnd Steinmetz
	Teaching Professors:
	All professors of Digital Media
11	Other Information

1	I				

6. 2 Modulbeschreibungen der Informatis/Technology Electives

ID	Workload	Credits	Semester	Frequency of	Duration			
ME2	125 h	5	2-6	Winter Term	1 Semester			
_10				Summer Term				
1	Type of Course		Contact Hours	Self-Study	Size of Groups			
	Seminar/Work	shop/Practical	3 SWS/50 h	75 h	20			
2	Learning Outcon	mes / Competencies						
	On successful	completion of this	module the studer	nt shall be able to:				
	Apply scientific methods in analysing media, user needs, socio-cultural contexts an media markets							
	Criticallyexamineinnovativeformsofinformationtechnologyintheirsocial-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	Indicative Module Contents							
	Contents of this module may contain but are not limited to the following aspects:							
	The students develop a reasonable ubiquitous application with regard to a defined targe 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.							
	Teaching Method	ds						
4	readming reamon	Lecture, seminar, practical and presentation						

	-
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

ID	Workload	Credits	Semester	Frequency of	Duration		
ME2 _11	125 h	5	2-6	Winter Term Summer Term	1 Semester		
1	Type of Course		Contact Hours	Self-Study	Size of Groups		
	Seminar/Worl	kshop/Practical	3 SWS/50 h	75 h	20		
2	Learning Outco	mes / Competencies					
	On successful	completion of this	s module the stud	ent shall be able to:			
	 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:						
	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 Su	bjects					
	-						
6	Assessment Me	thods					
	Final presenta	ation and documer	ntation				
	Prerequisites fo						

	_
8	Used in Other Courses
	-
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-responsible and Teaching Professors
	Module-responsible:
	Prof. Dr. Arnd Steinmetz
	Teaching Professors:
	All interactive design, informatics and media technology teachers
11	Other Information

ID	Workload	Credits	Semester	Frequency of	Duration		
ME2	125 h	5	2-6	Winter Term	1 Semester		
_12				Summer Term			
1	Type of Course	l	Contact Hours	Self-Study	Size of Groups		
	Seminar/Workshop/Practical		3 SWS/50 h	75 h	20		
2	Learning Outco	mes / Competencies					
	On successful	completion of this	s module the stude	ent shall be able to:			
	• In depth un	derstand commor	user interface me	echanics, methods a	nd 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:						
	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						
	HCl 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						
	Lecture, semi	nar, practical and	presentation				

6	Assessment Methods
	Final presentation and documentation
7	Prerequisites for CP
	-
8	Used in Other Courses
	-
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-responsible and Teaching Professors
	Module-responsible:
	Prof. Dr. 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_1	3 – 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		Contact Hours	Self-Study	Size of Groups		
	Seminar/Worksh	nop/Practical	3 SWS/50 h	75 h	20		
2	Learning Outcome	s / Competencies					
	On successful co	ompletion of this n	nodule the student	t shall be able to:			
	Apply a user of	entred design me	thodology, typical	for mobile or web a	pplications		
	Develop a rea	sonable design co	ncept considering	the target group			
	• Conceptualize targets	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:						
	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 Module-responsible and Teaching Professors
	Module-responsible:
	Prof. Dr. Arnd Steinmetz
	Teaching Professors:
	All professors of Digital Media
11	Other Information

ID	Workload	Credits	Semester	Frequency of	Duration		
ME2	125 h	5	2-6	Winter Term	1 Semester		
_14				Summer Term			
I	Type of Course	1	Contact Hours	Self-Study	Size of Groups		
	Seminar/Workshop/Practical		3 SWS/50 h	75 h	20		
2	Learning Outcom	nes / Competencies					
	On successful	completion of this i	module the studen	t shall be able to:			
	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:						
	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-ha	sed installations fo	r entertainment ar	nd education (nublic	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 Module-responsible 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		Contact Hours	Self-Study	Size of Groups	
	Seminar/Workshop/Practical		3 SWS/50 h	75 h	20	
2	Learning Outcomes / Competencies					
	On successful completion of this module the student shall be able to:					
	Conceive and	realize an individu	ial audio project us	sing the computer a	s 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 Indicative Module Contents

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.

Contents of this module may contain but are not limited to the following aspects:

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.

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

	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.
	student and may incorporate other aspects of muttimedia, e.g. video or animation.
4	Teaching Methods
	Lecture, seminar, practical and presentation,
5	Prerequisite Subjects
	-
6	Assessment Methods
	Final presentation and documentation
7	Prerequisites for CP
	-
8	Used in Other Courses
	-
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-responsible and Teaching Professors
	Module-responsible:
	Prof. Moritz Bergfeld
	Teaching Professors:
	Prof. Moritz Bergfeld
	Prof. Dr. Kyrill Fischer
	Prof. Wil Welber
	Prof. Tsune Tanaka
11	Other Information

6. 3 Modulbeschreibungen der Media Management Electives

ID	Workload	Credits	Semester	Frequency of	Duration			
ME2 _16	125 h	5	2-6	Winter Term Summer Term	1 Semester			
1	Type of Course		Contact Hours	Self-Study	Size of Groups			
	Seminar/Work	shop/Practical	3 SWS/50 h	75 h	20			
2	Learning Outcom	nes / Competencies						
	On successful	completion of this	s module the stude	nt shall be able to:				
	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	Indicative Module Contents							
	In this module students develop and perform a media event. For the event they implement and realise the whole marketing and funding process.							
	Contents of this module may contain but are not limited to the following aspects:							
	 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, 							

	cleaning
	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	Teaching Methods
	Lecture, seminar, practical and presentation
5	Prerequisite Subjects
6	Assessment Methods
	Final presentation and documentation
7	Prerequisites for CP
8	Used in Other Courses
9	Significance of Mark for Final Mark
	According to CP: 2,42%
10	Name of Module-responsible and Teaching Professors
	Module-responsible:
	Prof. Andrea Krajewski
	Teaching Professors:
	Prof. Thomas Burnhauser

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

ME2_1	17 – Media Produ	ıcing in Differei	nt Fields of Media	1	
ID	Workload	Credits	Semester	Frequency of	Duration
ME2 _17	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course		Contact Hours	Self-Study	Size of Groups
	Seminar/Works	shop/Practical	3 SWS/50 h	75 h	20
2	Learning Outcom	es / Competencies			
	This module enables participants to manage the preproduction/concept, production/realisation and post production process of typical media projects. The module examines critical methods for the various processes and offers strategies that maximize resources and time frames. Management methods, timelines and project life cycles are examined with a focus on supporting business growth and project properties. On successful completion of this module the student shall be able to: • Identify separate processes and deliverables within the overall production timeline; • Identify methods and tools for the various processes; • Use strategies to maximize resources and control finance; • Use project management methods and tools to organize timelines and project life cycles; • Use human resource management methods to organize teams.				
3	Indicative Module Contents Contents of this module may contain but are not limited to the following aspects: • Project management within media production • Time management and handling deliverables within media production • Staff management and organizing teams within media production • Finance management within media production • Fund raising and media promotion				
4	Teaching Method	S			
		ar, practical and	presentation		
5	Prerequisite Subj	ects			
6	Assessment Meth	nods			
	Final presentation and documentation				

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

	<u> </u>	Entertainment L				
ID	Workload	Credits	Semester	Frequency of Module	Duration	
SuK	125 h	5	2-6	Winter Term	1 Semester	
_18				Summer Term		
1	Type of Course	l	Contact Hours	Self-Study	Size of Groups	
	Lecture/Semi	nar	3 SWS/48 h	77 h	20	
2	Learning Outcor	mes / Competencies				
	to digital med On successful Identify and	ia production. completion of this	s to the legal frames module students epts of media law (should be able to:		
	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 production	explain basic elem	nents of legal conti	racts in the contex	t of media	
3	Indicative Modu	le Contents				
	Introduction in	nto				
	'	•	of Germany/Europe to media and its d			
	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					
	production o		ls and practices re (financing, insuran	·		
		•	ices in different se usic, Software etc.]		ment/media	
	Revenue cha	ains in the nationa	l and international	media industries	and typical legal	

	frameworks
	 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	Teaching Methods
	Lecture, seminar, presentations, individual and team-based research, case studies
5	Prerequisite Subjects
	-
6	Assessment Methods
	Presentation, research project (e.g. essay, case study)
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
	Prof. Katharina Kafka
	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

6. 4 Modulbeschreibungen der Media Philosophy Electives

ID	Workload	Credits	Semester	Module Frequency	Duration	
ME2 _19	125 h	5	2-6	Winter Term Summer Term	1 Semester	
1	Type of Cours	se	Contact Hours	Self-Study	Size of Groups	
	Lecture/Ser Workshop/F	•	3 SWS/48 h	77 h	20	
2	Learning Out	comes / Competer	ncies			
	On successi	ful completion o	of this module the stu	udent shall be able to	0:	
	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 actua 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.					
		ms and philosop	•	echnologies and too thetic transfers to ar	•	
4	Teaching Met	hods				
	Lecture, ser	minar, presenta	tions			
		' I				

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 Module-responsible and Teaching Professors
	Module-responsible:
	Prof. Sabine Breitsameter
	Teaching Professors:
	Prof. Sabine Breitsameter
	All media design teachers
11	Other Information
	-

ME2_20) – Cultures a	nd Creative Prac	tices in Digital M	ledia	
ID	Workload	Credits	Semester	Module Frequency	Duration
ME2 _20	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course	<u> </u>	Contact Hours	Self-Study	Size of Groups
	Lecture/Semi Workshop/Pra		3 SWS/48 h	77 h	20
2	Learning Outcor	mes / Competencies			
	On successful	completion of this	s module the stude	ent shall be able to	:
	age' and de	monstrate and ap	related to 'culture' ply knowledge of t , phenomena and	he history and the	-
		•	analytical methods te them to social a	•	specifity of digital
	 Analyse critically the own practice and use of digital media in private and professional contexts; analyse critically the general values, presumptions, be behaviours, frictions, rituals, and specifities of different cultural models in re- to the digital age 			mptions, beliefs,	
	Describe ar discourse.	nd apply the essen	tial terms and me	thods of current in	tercultural
3	Indicative Modu	le Contents			
	Study of:				
	Individuality	y and identity in th	e digital age's virtu	ual world.	
			acter, gender, med entation (avatars,	•	5 5
	Social netw emergence	orks and the eme	etworked' society, rgence of locally d ırs and values in d	ispersed commun	ities, the
			on – impact on cul ights of the individ		ocracy and
	cultures'; a		lti-culturalism. Glo deavors towards a		
	Approaches	s to cultural analys	sis: self-reflection,	observation and f	ield 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 Module-responsible and Teaching Professors
	Module-responsible:
	Prof. Sabine Breitsameter
	Teaching Professors:
	Prof. Sabine Breitsameter
	All media design teachers
11	Other Information
	-

ME2_21	1 – Media Envi	ronments and S _l	paces		
ID	Workload	Credits	Semester	Module Frequency	Duration
ME2 _21	125 h	5	2-6	Winter Term Summer Term	1 Semester
1	Type of Course	<u> </u>	Contact Hours	Self-Study	Size of Groups
	Lecture/Semin Workshop/Pra		3 SWS/48 h	77 h	20
2	Learning Outcor	mes / Competencies	l		l
	On successful	completion of this	s module the stude	ent shall be able to	:
	Relate med	ia to the diverse c	oncepts of space a	nd environment	
			ledge of non-linea tory of society and	•	•
	Demonstrate and apply a knowledge of the distinctive and conceptual prospace 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.			nedia,	
	conceptual	and technological	ledge of groundbrocharacteristics, the ssing/involving the	neir utilitarian and,	•
			current and own rability for experim	•	
3	Indicative Modu	le Contents			
			dge and understan tions such as in in:	•	ntal as well as of
	Study of:				
	analogue ai	nd digital media pr	es of spatial and e roductions and set spaces, games, ex	tings (e.g. in media	a architectural
	-	ation, identifying th	ncepts within the fine crucial technolo	·	•
	user's invol	vement and partic	ncepts, degrees an cipation, introducin immersion", "virtu	g and discussing o	
	Globalisation	on of communicati	on – impact on cul	tural values; demo	ocracy 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 communical 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 Module-responsible and Teaching Professors
	Module-responsible:
	Prof. Sabine Breitsameter
	Tooching Professors
	Teaching Professors:
	Prof. Sabine Breitsameter
	All media design teachers
11	Other Information
	-
<u> </u>	

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		Contact Hours	Self-Study	Size of Groups
	Lecture/Seminar/ Workshop/Practical		3 SWS/48 h	77 h	20
2	Learning Outcomes / Competencies			l	
	 On successful completion of this module the student shall be able to: 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	Indicative Modu	le Contents			
	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.				
	Special emphasis is given to:				
	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			n (Plato to s), and	
	the Renaiss culturalism	sance to contempo . Globalization and	rary positions Modern the color of the color of the color of cultivations.	t, perception and p ono-culturalism ve ures'; approaches creativity and produ	ersus multi- and endeavors
	Approaches	s to cultural analys	sis: self-reflection,	, observation and f	ield research.

Teaching Methods
Lecture, seminar, presentations
Prerequisite Subjects
-
Assessment Methods
Presentation of homework
Prerequisites for CP
Used in Other Courses
Significance of Mark for Final Mark
According to CP: 2,42%
Name of Module-responsible and Teaching Professors
Module-responsible:
Prof. Sabine Breitsameter
Teaching Professors:
Prof. Sabine Breitsameter
All professors of Digital Media
Other Information

ID	Workload	Credits	Semester	Module	Duration		
				Frequency			
ME2	125 h	5	2-6	Winter Term	1 Semester		
_23				Summer Term			
1	Type of Cours	e	Contact Hours	Self-Study	Size of Groups		
	Lecture/Ser Workshop/F		3 SWS/48 h	77 h	20		
2	Learning Outcomes / Competencies						
	On successf	On successful completion of this module the student shall be able to:					
	Demonstrate and apply a knowledge of major contemporary media and communication theories						
	Describe the theories' evolution from the mid-19th century until today						
	 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						
			-				
	beginning o	f mechanical re	production in the 19tl	n century, the start-	up of electric		
	beginning o	f mechanical re e beginning of th	-	h century, the start- e mid-century's med	up of electric dia diversificatior		
	beginning of media at the and prolifer	f mechanical re e beginning of th	production in the 19th ne 20th century to the urn of century's theo	h century, the start- e mid-century's med	up of electric dia diversificatior		
	beginning of media at the and prolifer media and in Special emp their conten	f mechanical re e beginning of th ation until the t ts pre- and succ phasis will be gi nporary develor	production in the 19th ne 20th century to the urn of century's theo	h century, the start- e mid-century's med ry models and disco ects relating the me	up of electric dia diversification ourses on digital dia theories to		
4	beginning of media at the and prolifer media and in Special emp their conten	f mechanical re e beginning of th ation until the t ts pre- and succ phasis will be gi nporary develop ef systems and	production in the 19th ne 20th century to the urn of century's theo cessors. ven to historical aspe oments and changes	h century, the start- e mid-century's med ry models and disco ects relating the me	up of electric dia diversification ourses on digital dia theories to		
4	beginning or media at the and prolifer media and in Special emp their content well as belief	f mechanical re e beginning of th ation until the t ts pre- and succ phasis will be gi nporary develop ef systems and	production in the 19th ne 20th century to the urn of century's theo cessors. ven to historical aspe oments and changes value concepts.	h century, the start- e mid-century's med ry models and disco ects relating the me	up of electric dia diversification ourses on digital dia theories to		
	beginning or media at the and prolifer media and in Special emp their content well as belief	f mechanical re e beginning of the ation until the te ts pre- and succe hasis will be gi nporary develop ef systems and the hods minar, presenta	production in the 19th ne 20th century to the urn of century's theo cessors. ven to historical aspe oments and changes value concepts.	h century, the start- e mid-century's med ry models and disco ects relating the me	up of electric dia diversification ourses on digital dia theories to		
5	beginning of media at the and prolifer media and in Special emptheir content well as belief their content well as their con	f mechanical re e beginning of the ation until the te ts pre- and succe phasis will be gi nporary developed f systems and the hods minar, presenta Subjects	production in the 19th ne 20th century to the urn of century's theo cessors. ven to historical aspe oments and changes value concepts.	h century, the start- e mid-century's med ry models and disco ects relating the me	up of electric dia diversification ourses on digital dia theories to		

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

ID	Workload	Credits	Semester	Module	Duration	
				Frequency		
ME2	125 h	5	2-6	Winter Term	1 Semester	
_24				Summer Term		
1	Type of Course		Contact Hours	Self-Study	Size of Groups	
	Lecture/Seminar/ Workshop/Practical		3 SWS/48 h	77 h	20	
2	Learning Out	comes / Compete	ncies			
	The elective introduces into the performative and process oriented aspects of media, from the creational as well as from the receptive point of view.					
	On successful completion of this module the student shall be able to:					
	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	Indicative Module Contents					
	Study of:					
	 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	Teaching Methods					
	Lecture, seminar, presentations					
		minar, presente	1110115			

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