Version 13.03.2007

Hochschule Darmstadt - University of Applied Sciences
Fachbereich Media

Module Handbook

Content

5. Semester

6. Semester

7. Semester

8. Semester

9. Semester

10. Semester

Electives

MP1_1.1 Media Project, Media Project 1					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		152 h	5 cr	1. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Project coaching Sprint Projects	4 SWS / 48 h	80 h	5 cr
	b) Seminar “Basics in Media Culture“	2 SWS / 24 h		

2 Teaching Methods

Seminar/Lectures
Pier Review & Tutorials
Presentations & Demonstrations
Assisted team work

4 Learning Outcomes

On successful completion of this module the student will be able to:
- Demonstrate an awareness of the range of audiovisual languages and tools typically applied to creative media projects;
- Demonstrate an ability to select appropriate media in the communication of ideas;
- Demonstrate an understanding of experimentation as an integral part of the creative process;
- Show an awareness of the broader cultural implications of a project;
- Show an awareness of audiences in the communication and interpretation of ideas.

5 Subject Aims

The aim of the Project 1 is to foster the development of creativity within the student through a series of short, well defined, project activities. These activities should promote awareness of the issues associated with the development of ideas and the use of appropriate audio visual language in the communication of those ideas. Short sprint projects involving image sequence, motion graphics, and audio, for linear and interactive applications should be developed to allow the student experience the scope of the creative activities within contemporary multimedia practice.

Indicative Module Content:
Series of short projects of one or two weeks in duration which are well defined and involving constraints that promote creative solutions:
- Develop a short stop frame animation using photographic imagery around a particular theme possibly drawn from the ‘Basics in Media & Culture’ component of the module. Example themes could be ‘social interaction’, ‘convergence’, ‘media communication’, etc.;
- Produce a sequence of images to be presented as a slideshow which are guided/determined by a technical constraint such as camera focus, lighting, or camera viewpoint;
- Develop a short motion graphics sequence that communicates a concept through the combination of media types such as typography and shape, or typography and photographic image, or typography and colour;
- Develop a library of short animations, image sequences or audio content to be fed back in response to user input or user presence. The rate of playback or order of the audiovisual sequences may be controlled by the user via traditional input devices or through sensor technologies.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

	Presentation of practical work – 70 % Presentation of project ideas and outcomes supported by oral & visual presentation – 30 %
11	**Frequency of Module** Semester 1
12	**Name of Lecturer(s)** h_da: Project coaching project “Sprint Projects” Claudia Söller-Eckert, Katharina Kafka, Andrea Krajewski, Tilmann Kohlhaase, Sabine Breitsameter, Moritz Bergfeld, Thomas Burnhauser, Thomas Carlé Lecture “Basics in Media Culture 1 “ Hans Puttnies CIT:
13	**Other Information**

MM1_1.1 Media Management, Business Enterprise & Communication					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		146 h	5 cr	1. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Theory	3 SWS / 36 h	110 h	5 cr

2 Teaching Methods

Theory

4 Learning Outcomes

On successful completion of this module the students shall be able to:
- Analyse and discuss the holistic properties of business enterprises as socio-economic organisations;
- Recognise the role and contribution of business enterprises in open economic systems;
- List the functional components of the business enterprise and describe their contribution to overall business performance;
- Clearly communicate information in written form to a range of audiences demonstrating good use of grammar and language structure;
- Prepare and compose reports, project proposals, agendas and minutes appropriate in the business setting.

5 Subject Aims

This module provides the learner with knowledge of business systems and operations. By placing business enterprise in the context of the broader economic systems it allows them to understand the complex socio-economic inter-relationships involved in business organisations and broader society. The module further provides the learner with the formal communication skills and competencies required in a business setting with particular emphasis on writing and business documentation.

Indicative content:

Business Enterprise
- Main sectors of open economic systems. Role of the business enterprise in society. Forms of business ownership. Organisational culture. Regulation of business at national and EU levels. The business organisation as social systems. Organisational culture;
- The business enterprise as responsible corporate citizen. Increasing importance of corporate social responsibility internationally. CSR as integral element of business strategy. CSR case studies;
- Functional components of the business enterprise – human resources, production/services, marketing & sales, research and development, finance;
- Basics of financial accounting (financial statements, balance sheets, cash flow management etc);
- Taxation - personal and corporate, VAT;
- Introduction to e-commerce.

Business Communication
- Grammar, Language and Fundamentals of Good Writing**:** Sentence structure and word order. Punctuation and basic grammar. The basic principles of good writing. How to achieve clarity in writing. Sentence/ paragraph structure. Common writing faults;
- Reports, proposals, abstracts, business letters, emails, press releases, brochures, bibliographies;
- Constructing agendas and writing minutes: different styles of minutes: narrative, decision, and action;
- The importance of accurate documentation: concepts of democracy, openness, transparency and

	accountability.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous assessment (Presentation/documentation of practical results and findings) – 30 % Written examination – 70 %
11	**Frequency of Module** Semester 1
12	**Name of Lecturer(s)** h_da: NN, Hubert Eisner CIT: Frank O'Donovan, Olive Murphy O'Dwyer
13	**Other Information**

<table>
<tr><th colspan="7">MD1_1.1 Media Design, Design Basics 1 – Still Image</th></tr>
<tr><td colspan="2">mandatory
x</td><td>elective</td><td>student workload
148 h</td><td>total credits
5 cr</td><td>semester
1. sem</td><td>duration
1 sem(s)</td></tr>
<tr><td rowspan="3">1</td><td colspan="3">Type of Course</td><td>contact hours</td><td>independent study</td><td>credits</td></tr>
<tr><td colspan="3">a) Theory</td><td>1 SWS / 12 h</td><td rowspan="2">100 h</td><td rowspan="2">5 cr</td></tr>
<tr><td colspan="3">b) Practical</td><td>3 SWS / 36 h</td></tr>
<tr><td>2</td><td colspan="6">Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Seminar</td></tr>
<tr><td>4</td><td colspan="6">Learning Outcomes

On successful completion of this module the student shall be able to:
- Explain and evaluate basic 2D design, communication and media concepts within personal and cultural contexts;
- analyse 2D design artefacts such as signs, symbols and images using appropriate methodologies and terminology;
- resolve design challenges through the considered application of appropriate practical, technical and creative competencies and skills;
- demonstrate the effective application of media based communication (e.g. formulation of messages by typography, text, sign, symbol, image);
- present concepts, process and outcomes in a clear and coherent manner.</td></tr>
<tr><td>5</td><td colspan="6">Subject Aims
This module provides a foundation for all media design activities. It introduces the learner to processes and methods of interpreting, translating and realising visual design concepts. This module encourages learners to adopt an analytic, structured and ethical approach to the resolution of basic media design problems.

Indicative Content:

Theory
- Creative thinking: creative and lateral thinking techniques - generating, exploring and expanding ideas;
- Semiotics: Formulation of messages, signs and symbols; vocabulary of analysis and composition of signs and communication. Saussure’s linguistic theory: Features of textual construction and deconstruction; Process theory: Analysis of the concepts of process, information; redundancy; entropy; noise; signal, feedback; channel; medium;
- Aims of design: Visualisation of ideas, messages and content; structuring and reduction of complexity; correspondence of form and content;
- Rules of perception - gestalt, principles of design; balance - contrast - rhythm – symmetry/asymmetry
- Elements of Visual Language: Point / Line / Surface / Space. Tone/value. Colour;
- Layout: Formats. Proportions in nature, in geometry, in art and in architecture; Golden Section, formats; white space; grid systems. Composition: White space, text tone and colour;
- Text & Typography: Historic review of letterforms/typefaces, typology of a typeface. Legibility & readability: text hierarchy. Combining text and image.

Practical
- Image: Visual investigation of object-figure-space-perspective in a range of mediums; e.g. drawing, collage, print and photography;</td></tr>
</table>

	- Colour: Colour and space – foreground/background; colour semantics; Colour models, colour mixing; colour animation; monochromes and colour combinations; - Text: typographic design - text design; characteristics of typefaces, display and body type, Type and expression - type as image; readability and legibility; logo typography; colour typography; - Layout: format, positive/negative space – white space, active/passive composition; layout hierarchy; grid and sequence, finding a style; navigation; page/screen layout.
7	**Prerequisite subjects / Co-requisite subjects** none
8	**Assessment Methods** Continuous Assessment (CA) – practical examination by studio/portfolio presentation/display – 100 %
11	**Frequency of Module** Semester 1
12	**Name of Lecturer(s)** h_da: Claudia Söller-Eckert, all design teachers CIT: Hilda O'Driscoll, Phil Curtin, Steven Young, Mike Murphy
13	**Other Information**

<table>
<tr><th colspan="7">MD1_1.2 Media Design, Moving Image and Sound</th></tr>
<tr><td colspan="2">mandatory
x</td><td>elective</td><td>student workload
150 h</td><td>total credits
5 cr</td><td>semester
1. sem</td><td>duration
1 sem(s)</td></tr>
<tr><td rowspan="3">1</td><td colspan="3">Type of Course</td><td>contact hours</td><td>independent study</td><td>credits</td></tr>
<tr><td colspan="3">a) Theory</td><td>1 SWS / 12 h</td><td rowspan="2">102 h</td><td rowspan="2">5 cr</td></tr>
<tr><td colspan="3">b) Practical</td><td>3 SWS / 36 h</td></tr>
<tr><td>2</td><td colspan="6">Teaching Methods

Lecture + presentation
Studio/lab presentation + practice</td></tr>
<tr><td>4</td><td colspan="6">Learning Outcomes

On successful completion of this module the student shall be able to:
- Explain and evaluate time-based; design, communication and media concepts within personal and cultural contexts;
- analyse and describe time-based media artefacts’ including film/video, animation and sound in terms of their use of space, time, motion and sound;
- resolve motion/sound based design and production challenges through the considered application of appropriate practical, technical and creative competencies and skills;
- present concepts, process and outcomes in a clear and coherent manner.</td></tr>
<tr><td>5</td><td colspan="6">Subject Aims

This module provides a basis for understanding the moving image design and production process: the learner is introduced to the theories and practical processes involved in time-based audio/visual media production. Through the completion of analytical, creative and technical exercises the learner is enabled to achieve effective solutions to time based design challenges.

Indicative Content:

Theory
- Motion graphic design: time-based media examples, theory and concepts;
- Motion: motion within a single frame; motion graphics and motion typography; still camera and moving camera, still scene and moving scene;
- Montage: montage principles;
- Sound and Music: sourcing and creating audio resources. Acoustical design of image and space; the score.

Practical: Space, Time, Motion, Sound
- Space: object photography and modelling with light; natural and constructed light; continuity and montage of space; perspective;
- Time: symbolic visualisation of time; the sequence; linearity and interpretation; storyboarding;
- Motion: shot action, montage and continuity; 2D-animation, rhythm and internal motion (emotion);
- Sound: Recording of noise, sound and speech; Image sound relationships; sound design; music selection and application.</td></tr>
<tr><td>7</td><td colspan="6">Prerequisite subjects / Co-requisite subjects
None</td></tr>
<tr><td>8</td><td colspan="6">Assessment Methods</td></tr>
</table>

	Continuous Assessment (CA) – practical examination by studio/portfolio presentation/display – 100 %
11	**Frequency of Module** Semester 1
12	**Name of Lecturer(s)** h_da: Claudia Söller-Eckert, all animation, video, sound and design teachers CIT: Paul Green, Phil Curtin, Trevor Hogan, Hugh McCarthy, Johnny McCarthy
13	**Other Information**

MT1_1.1 Media Technology, Basics of Digital Media Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		150 h	5 cr	1. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	24 h	5 cr
	b) Practical	2 SWS / 24 h	78 h	

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate a technical and practical knowledge of the properties of digital audio/visual media;
- Demonstrate a technical and practical knowledge of digital audio/visual equipment;
- Use a range of digital media input/output devices to acquire and store audio/visual resources.

5 Subject Aims

Provide a firm basis of knowledge and practical use of relevant types of digital media formats and devices.

Indicative Content:

Theory
- The Multimedia Computer: CPU; motherboard, microprocessor; RAM, ROM, BIOS; computer bus. Storage Devices: hard disc; CD-ROM, DVD; File Formats: FAT; HFS; UDF;
- I/O-devices: keyboard; mouse, trackball/trackpad, graphics tablet; flatbed scanner, camera. Monitor - CRT, LCD, plasma display. Printers: inkjet; laser, dye-sublimation. Connection of Peripherals: Firewire (IEEE-1394), Universal Serial Bus (USB);
- Computer Hierarchy: The Von Neumann model: Operating systems: Event-driven OS. Graphical User Interface (GUI); Windows; Mac OS; UNIX. Firmware: BIOS. Applications: text; image (still and video); audio. How a computer processes data. Abstraction layer model of computer system;
- Data Storage: Primary: RAM; ROM; VRAM. Secondary: hard disc; flash disc. Disc formatting and optimization for real-time data processing (video and audio). Optical Storage: CD-ROM, DVD-ROM, Blu-Ray, HDDVD, etc.;
- File Formats: Data Formats - ASCII, Postscript, and EPSF. Static multimedia documents - multimedia “text” document formats eg. Word, PDF, HTML/CSS. Image - vector vs. raster; image resolution & file size, common image formats - BMP, SVG, JPG, RAW. Data reduction (sub sampling), lossy/ lossless compression;
- Computer Displays: CRT/LCD display: Bit-mapped display. The picture element (pixel). Pixel bit-depth: 1-bit, 8-bit, and 24-bit. Plasma display. Pixel and sub-pixel. RGB colour.

Practical
- I/O-devices – scanners, still cameras: formats, functions and use;
- Equipment training for still image input/output: scanning, sampling, storage, import/export.

7 Prerequisite subjects / Co-requisite subjects

None

8	**Assessment Methods** Continuous Assessment – 20 % Practical – 30 % Examination – 50 %
11	**Frequency of Module** Semester 1
12	**Name of Lecturer(s)** h_da: K. Fischer, A. Steinmetz, Th. Carlé CIT: J O'Driscoll, P. Curtin, J. Cummins
13	**Other Information**

MI1_1.1 Media Informatics, Basics in Computer Science					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		150 h	5 cr	1. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture
Practical
Instructed single or group work

4 Learning Outcomes

At the end of the module the student should be able to:
- Explain basic computer concepts relevant to interactive environments;
- Describe and employ the environments that interactive content will be deployed in;
- Understand and use a basic markup language;
- Style the markup they create.

5 Subject Aims

The purpose of this module is to give a students an understanding of the various levels of environment that their interactive content will be deployed in (The internet, Web browsers, Interactive Players, Web pages etc).

Indicative Content:
Computer Concepts
Introduction to Computer hardware;
- The Internet
  How the internet works, Basic Routing, IP addresses, Domain names;
- Interactive Environments
  Web Browsers, Flash Players, etc;
- Markup
  Understanding markup, Character Sets, XML, web standards, HTML vs. XHTML;
- (X)HTML
  Tags, attributes, logical vs physical tags, inline vs block tags, basic tags, tables, images, links;
- Styles
  CSS, Styles, properties, selectors.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20 %
Presentation/documentation of practical results and findings – 20 %
Written examination – 60 %

11 Frequency of Module

Semester 1

12	**Name of Lecturer(s)** h_da: C. Busch, A. Steinmetz, K. Fischer, CIT: Gary Couse, Valerie Renehan
13	**Other Information**

MP1_2.1 Media Project, Media Project 2					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		152 h	5 cr	2. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Project	4SWS / 48 h	80 h	5 cr
	b) Theory	2SWS / 24 h		

2 Teaching Methods

Seminars/Lectures
Tutorials, group discussions and peer reviews
Presentation and demonstration

4 Learning Outcomes

On successful completion of this module the student will be able to:
- Describe the scope of creative activities within a typical media project;
- Recognise the relationships between the subject/module streams in the course;
- Design and produce documentation to support work completed as part of a project;
- Use relevant and appropriate etiquette in communicating with stakeholders;
- Present ideas developed a part of a project in an appropriate manner.

5 Subject Aims

The aim of the Project 2 is to foster the development of a 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 area and the use of appropriate audio visual language, tools and techniques. Projects involving actual or virtual scenarios, simple games, animations, video and audio, for linear and interactive applications should be developed to allow the student experience the scope creative and technical methods within contemporary multimedia practice.

Indicative Content:

Presentation Methodology
This component provides learners with presentation skills and mechanisms. Learners develop presentation ideas and strategies tailored to an audience; visualize and verbalize the essential of a message, address and present to an audience and reply to critical questions.

Sample projects:

Project “Interface”
In this project the students explore and apply functions and design principles of interfaces. They learn to design and to produce various mental models for interfaces and virtual scenarios. Thus the module imparts basic competences for the development of interfaces for complex media products. Students explore conceptual design, structuring media content, dynamic and interactive scenarios as well as technological skills and tools. They design and produce complex media objects, interactive events, virtual environments, virtual characters and interfaces for virtual spaces, virtual exhibitions, learning environments, simulations or games.

Project “Simple Games”
This project imparts knowledge about the fundamentals of game design, methodology and theory of gaming. The students gain fundamental knowledge in complex storytelling and conceptual work related to game design. They experience the essentials of this medium combining traditional cinematic skills

	with their knowledge of digital media. This project imparts tools and techniques for development, design and presentation of concepts producing simple games based on concepts describing interactive and narrative approaches, i.e. user controlled animation, interactive short stories or “Machinima”-projects. Project “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”. Project “Sonic Diaries” In this project the students get acquainted with concepts and strategies of sonic narration and representation and the established language of audio and radio-phonic forms. Steps are Conceptualization of a sonic narrative production, mastering the necessary tools for production 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.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Project – 100 %
11	**Frequency of Module** Semester 2
12	**Name of Lecturer(s)??** h_da: All professors and lecturers CIT: Project lecturers
13	**Other Information**

MC2.1 Media Culture 1, Media & Culture Studies						
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**	
x		146 h	5 cr	2. sem	1 sem(s)	
1	**Type of Course**		**contact hours**	**independent study**	**credits**	
	a) Theory		2 SWS / 24 h	110 h	5 cr	
	b) Practical		1 SWS / 12 h			
2	**Teaching Methods** lecture seminar tutorial presentation					
4	**Learning Outcomes** On successful completion of this module the student shall be able to: - Discuss the origins and meaning of the terms ‘media’ and ‘culture’; - Demonstrate knowledge of the role and influence of visual communication modes in contemporary culture; - Apply different strategies to the analysis, interpretation and appreciation of media and cultural artefacts demonstrating a knowledge of process, social & cultural context and influences; - Discuss concepts relevant to the creation, production and consumption of media and cultural artefacts e.g. ‘creator/author’, artist/designer, the visual consumer, etc.					
5	**Subject Aims** This module provides the learner with an understanding of visual communication, paying special attention to contemporary media based products. The module develops the learners critical awareness of the relationship between the transmission of cultural values and media. It addresses the sociological, psychological and technological influences on the creation and interpretation of the cultural ‘artifact’ with particular emphasis on the primacy of the image in contemporary culture. **Indicative Content:** - Origins and Meanings of ‘Culture’: defining culture - the historical development of culture, relationship to social and political structures; - Philosophical concepts relating to culture – identity, gender, power; - Different cultural models – high, mass and popular culture, cultural traditions – science/arts; - The culture industry – creation, production, consumption. Media: "The Evolution of Images" A history of the making and function of images from the cave paintings of the Stone Age to the digital imagery of our time. Special emphasis on selected periods and their imaging techniques e.g.: Medieval Christianity and illumination in cathedrals and books; Renaissance scholarship and printmaking; Industry, Salon Art, and the birth of photography; Twentieth Century cinema and Modernism in art; television, computer animation and video art. “Reality in Photographic and Digital Imagery” Analysis of visual photographic structures - visual structures in lens based imagery from renaissance; the use of the camera obscura in painting prior to the invention of the dauguerreotype/callotype, composition in nineteenth century photographic works within contexts such as fine art, survey					

	photography, portraiture, and pornography. Current realist theories relating to photography; institutions that employ photography, issues relating to the authorship and interpretation of the image by different audiences and cultures. Photography and simulation - constructed realities through photography, digital manipulation of photography, simulation and virtual reality.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous assessment – 70 % Written examination – 30 %
11	**Frequency of Module** Semester 2
12	**Name of Lecturer(s)** h_da: Hans Puttnies CIT: Ann Wilson, Padraig Trehy, Emmett Coffey
13	**Other Information**

<table>
<tr><th colspan="7">MD1_2 1 Media Design, Interface Design</th></tr>
<tr><td colspan="2">mandatory</td><td>elective

x</td><td>student workload

150 h</td><td>total credits

5 cr</td><td>semester

2. sem</td><td>duration

1 sem(s)</td></tr>
<tr><td rowspan="3">1</td><td colspan="3">Type of Course</td><td>contact hours</td><td>independent study</td><td>credits</td></tr>
<tr><td colspan="3">a) Theory</td><td>1 SWS / 12 h</td><td rowspan="2">102 h</td><td rowspan="2">5 cr</td></tr>
<tr><td colspan="3">b) Practical</td><td>3 SWS / 36 h</td></tr>
<tr><td>2</td><td colspan="6">Teaching Methods

Lecture + presentation
Studio/laboratory practice
Seminar</td></tr>
<tr><td>4</td><td colspan="6">Learning Outcomes

On successful completion of this module the student shall be able to:
- Analyse design issues and identify best practice in existing interactive products especially in regard to interface design;
- List the fundamental principles of human-computer interaction;
- Describe the creative and scientific issues involved in the development of effective interface design;
- Demonstrate the application of best principles in the design of an interactive interface.</td></tr>
<tr><td>5</td><td colspan="6">Subject Aims

The module introduces the learner to the principles of interactivity and interface design. It addresses the process as one encompassing the design of structures and acting processes as well as the design of audiovisual signs. By so doing it aims to provide the learner with the conceptual and practical skills and competencies required to design and develop effective human-computer interactions for a range of applications.

Indicative Content:

Theory
- A history and appraisal of interface design – from classical interactive media to media systems;
- Principles / heuristics of interface design;
- Elements of interface design – usability, visualisation, functionality and accessibility;
- Sociological and psychological issues in interaction design;
- Definition of the interface as action area of the user;
- Man-machine-relationship;
- Intuitive acting and orientation;
- Mental models and metaphors;
- Language functions of design / functions of language in design;
- Interaction, dialogue and interaction design.

Practical
Exploring the terms „Orientation“, „Interaction“, „Relationship“

Orientation
The students analyze learned orientation strategies and prove their practicability for interfaces. They develop different navigation models and analyze their suitability for different situations of use and target groups.

Interaction</td></tr>
</table>

	The students develop interaction scenarios that mirror intuitive processes and natural dialogues. They develop and apply a design language to communicate the interaction demands of the system. They learn to develop anticipation-conform interfaces with respect to different target groups. Relationship The students create man-machine-dialogues and analyse the influences of their design to the man-machine-relationship They analyse which part of design (structure, action process of the user, audiovisual appearance) has effects to the man-machine relationship.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – 40 % Project (examination of product/documentation) – 60 %
11	**Frequency of Module** Semester 2
12	**Name of Lecturer(s)** h_da: Andrea Krajewski CIT: Rose McGrath, Valerie Renehan
13	**Other Information**

MD1_2.2 Media Design, Game Principles					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	2. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture “Theory of Interface”	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture + presentation
Some attended pieces of work
presentation

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Analyse design issues and identify best practice in existing games especially in regard to game interface design;
- List the fundamental principles of human-computer interaction;
- Describe the creative and scientific issues involved in the development of game design;
- Demonstrate the application of best principles in the design of a game;
- Understand genres and platforms.

5 Subject Aims

This module will impart knowledge about the fundamentals of game design, methodology and theory of gaming. Students will understand genres, platforms, interactive interfaces, possibilities of visualization. Another focus is on no-linear storytelling. Students know about the creative and technical development of digital games starting from concept up to simple prototyping.

Indicative Content:

Lecture
Genres, platforms, interface design, interactive plots, visual story (words and pictures), principles of games, traditional game play, impact of character and story, game-balance/game logic, skills vs. coincidence, game-critics, history and analysis of games.

Practicals
Exercises in the fields of interface design, game analysis, research and preparation, creation of simple game assets, simple prototyping, fixed stories und interactive plots (branches), visual storytelling, board- and role games, introduction into 2D and 3D authoring, use of technology and tools (2D und 3D).

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 40 %
Project (examination of product/documentation) – 60 %

11 Frequency of Module

Semester 2

12	**Name of Lecturer(s)** h_da: Tilmann Kohlhaase CIT:
13	**Other Information**

MD1_2.3 Media Design, Film Language					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	2. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture “Film Language”	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture + presentation
Some attended pieces of work
presentation

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate proficiency in the planning and production of video pieces;
- Demonstrate proficiency in the post-production of video pieces;
- Identify and apply basic knowledge on the means of film-language;
- Identify and apply basic skills in analytic and creative use of film language;
- Identify and apply basic skills in practical use of film language.

5 Subject Aims

The module introduces the learner to the principles of video and film language. It aims to provide the learner with the conceptual and practical skills and competencies required to design and develop video pieces for a range of applications.

Lecture

Vision of light
- Framing;
- Stills and motion picture;
- Visual language;
- Cinematographic codes;
- Dealing with 3 dimensions;
- Drawing with light;
- Semiotics.

Vision of sound
- Sound and moving pictures – an introduction;
- The three columns of sound;
- Ambient, wild, sync;
- Music and moving pictures;
- Reception and impact;
- Methods and style;
- Music and sound design.

Practical
The above listed content of the lectures will be accompanied by various hands-on practical etudes to turn theoretical knowledge into applied use of cinematographic language.

7 Prerequisite subjects / Co-requisite subjects

	None
8	**Assessment Methods** Continuous Assessment – 40 % Project (examination of product/documentation) – 60 %
	Frequency of Module Semester 2
	Name of Lecturer(s) h_da: Thomas Burnhauser, Thomas Carlé CIT:
	Other Information

MD1_2.4 Media Design, Field Recording - Sound, Speech & Noise					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	2. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture + presentation
Studio/laboratory practice
Seminar

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Produce high quality original-sound materials in non-studio settings;
- Demonstrate proficiency in the planning, implementation and post-production of audio pieces;
- Direct and arrange environmental settings in order to obtain best content quality for a range of situations including, interview, sound scapes, etc.;
- Identify and apply semiologic aspects of non-language-based sound material;
- Process, direct and produce auditory media content, based on classical as well as innovative radiophonic forms.

5 Subject Aims

Achieve proficiency in handling all sonic materials to ensure aesthetic and conceptual coherence and content clarity. This module would provide the learner with the skills and competencies required to operate and create effective audio materials in both studio and field settings encompassing all stages from concept, to production and post-production.

Theory
- Audio semiology, types of media specific auditory forms and languages;
- Acoustics: spatial awareness, Relationship of sound and environment to meaning and interpretation.

Practical
- Field recordings of sound and spoken word;
- Acquaintance with suitable microphones, portable recording devices and its resp. handling;
- Direction of voices, recording situations;
- Audio material processing, editing, mixing, and (post)production;
- Appropriate presentation.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 40 %
Project (examination of product/documentation) – 60 %

11 Frequency of Module

Semester 2

12	**Name of Lecturer(s)** h_da: Sabine Breitsameter, Kyrill Fischer CIT:
13	**Other Information**

<table>
<tr><th colspan="7">ME1_2.1 Media Elective Project Time Based Media Design</th></tr>
<tr><td colspan="2">mandatory</td><td>elective

x</td><td>student workload

150 h</td><td>total credits

5 cr</td><td>semester

2. sem</td><td>duration

1 sem(s)</td></tr>
<tr><td rowspan="3">1</td><td colspan="3">Type of Course</td><td>contact hours</td><td>independent study</td><td>credits</td></tr>
<tr><td colspan="3">a) Theory</td><td>1 SWS / 12 h</td><td rowspan="2">102 h</td><td rowspan="2">5 cr</td></tr>
<tr><td colspan="3">b) Practical</td><td>3 SWS / 36 h</td></tr>
<tr><td>2</td><td colspan="6">Teaching Methods

Lecture + presentation
Studio/laboratory practice</td></tr>
<tr><td>4</td><td colspan="6">Learning Outcomes

On successful completion of this module the student shall be able to:
- Recognise and describe different methodologies, genres, platforms, and design issues in a range of time-based media inc. animation, video and sound;
- Analyse and identify good practice in existing animation, video/film and/or sound works especially in terms of narrative structure and characterisation;
- Describe the creative and technical processes involved in the development of an A/V motion design product from concept to completion;
- Apply appropriate principles and practice in the creation of a short 2D A/V motion design sequence.</td></tr>
<tr><td>5</td><td colspan="6">Subject Aims

The module provides a practical skills and theoretical knowledge of analogue and digital motion design techniques. It provides the learner with knowledge of the principles of motion graphic design as it relates to animated and/or audio/video sequences. It provides the learner with appropriate methods for developing A/V content for both traditional/linear and dynamic/interactive delivery environments.

Indicative Content:

Theory
- An overview of the concepts relating to time based A/V media. Video, film, animation and motion graphics: traditional and contemporary approaches. Genres and styles. Differences and similarities between traditional and contemporary methods of producing video and animation - stop motion and frame by frame techniques, keyframing and tweening, spacial concepts relating to 2D and 3D animation environments, delivery environments and contexts.;
- Techniques and approaches to production: Straight-ahead and planned;
- Narratology: story structure, characterisation, dramatic/narrative tension and structure, interactivity and narrative, narrative – linear and non-linear;
- Visual design: visual story (words and pictures), storyboarding, basic principles of video and animation;
- Morphology of motion design: a lexicon of space, form and time principles;
- Sound and image: inter-dependencies, sound for effect and mood;
- Overview and analyses of the delivery, broadcast and publication of time based work in a range of contexts such games, broadcast, film industries.

Practical
Exercises in the fields of audiovisual design:
- analysis, research and preparation;
- storyboarding and animatics, fixed linear and interactive plots (branches), visual storytelling;
- Introduction to 2D and 3D authoring, use of technology and tools (2D and 3D);</td></tr>
</table>

	- Creation of short animations/video and/or audio sequences.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – 40 % Project (examination of product/documentation) – 60 %
11	**Frequency of Module** Semester 2
12	**Name of Lecturer(s)** h_da: Tilmann Kohlhaase CIT: Paul Green, Trevor Hogan, Rose McGrath
13	**Other Information**

ME1_2.2 Media Elective Project, Animation Principles					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	2. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture + presentation
Some attended pieces of work
presentation

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Describe the principles of animation;
- Recognise and describe different methodologies, genres, platforms, and design issues in the field of animation;
- Analyse and identify good practice in existing animation works especially in terms of narrative structure, characters, environments and visual language;
- Describe the creative and technical processes involved in the development of an animation product from concept to completion;
- Apply appropriate principles and practice in the creation of a short animation sequence.

5 Subject Aims

This module acknowledges the importance of temporal and spatial pixel-manipulation within digital media. It develops the student's technical and conceptual skills in animation and enables them to master virtual image processing using relevant industrial standard tools and techniques. The students acquire a fundamental understanding of the vocabulary of movement. They know about the basic techniques of working on a frame by frame basis in digital media. Based on the knowledge of animation history as well as the principles of animation they recognize animation as a form of audiovisual expression suitable for all media formats. They are capable of developing platform-independent production concepts for time-based graphic design products, animated linear and non-linear stories, digital simulations and virtual worlds.

Indicative Content:

Lecture
The lecture covers the traditional principles of animation in order to convey an understanding of the role of animation in the whole area of digital and virtual media. Students learn about the characteristics of animation and the related specific approaches in concept-making, visual languages and production techniques which qualifies them to take part in any type of production within digital media. Fundamental explanation will be given on issues like: storyboarding, developing a character, achieving personality by movement, creating visual effects, compositing different type of media.

Practical
In short exercises the students will deepen their knowledge of the history of animation, genres, styles and artists, principles of animation, the relationship of animation and sound. They will do experimental work with classic animation techniques and will use 2D- and 3D- computer animation techniques. Practical exercises will be done in developing motion graphics, planning and developing concepts for computer generated animations, designing virtual environments and exploring the interactive potential

	of animation.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – 40 % Project (examination of product/documentation) – 60 %
11	**Frequency of Module** Semester 2
12	**Name of Lecturer(s)** h_da: Tilmann Kohlhaase, Claudia Söller-Eckert CIT:
13	**Other Information**

<table>
<tr><th colspan="7">MT1_2.1 Media Technology, Digital Media Technology 2</th></tr>
<tr><td colspan="2">mandatory

x</td><td>elective</td><td>student workload

144 h</td><td>total credits

5 cr</td><td>semester

2. sem</td><td>duration

1 sem(s)</td></tr>
<tr><td>1</td><td colspan="3">Type of Course</td><td>contact hours</td><td>independent study</td><td>credits</td></tr>
<tr><td></td><td colspan="3">a) Theory</td><td>2 SWS / 24 h</td><td>24 h</td><td rowspan="2">5 cr</td></tr>
<tr><td></td><td colspan="3">b) Practical</td><td>2 SWS / 24 h</td><td>72 h</td></tr>
<tr><td>2</td><td colspan="6">Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration</td></tr>
<tr><td>4</td><td colspan="6">Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate technical and practical knowledge of audio and video processes and equipment;
- Use a range of digital media input/output devices to correct and manipulate audio/video resources;
- Discuss the technical properties of sound and video.</td></tr>
<tr><td>5</td><td colspan="6">Subject Aims

This module aims to provide the learner with knowledge, skills and competencies in the area of audio and video technology. Learners develop their knowledge of the properties and use of audio video recording, storage and editing equipment and processes.

Indicative Content:

Lecture
- 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, analog → 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, color correction / white balance. TV standards – PAL, NTSC, SECAM.

Practical
- 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.</td></tr>
<tr><td>7</td><td colspan="6">Prerequisite subjects / Co-requisite subjects

None</td></tr>
<tr><td>8</td><td colspan="6">Assessment Methods

Continuous Assessment – 20%
Practical – 30%</td></tr>
</table>

	Examination – 50%
11	**Frequency of Module** Semester 2
12	**Name of Lecturer(s)** h_da: K. Fischer, A. Steinmetz, Th. Carlé CIT: J O'Driscoll, P. Curtin
13	**Other Information**

MI1_2.1 Media Informatics, Programming					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	2. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lectures
Practical
Instructed single or group work
Presentation

4 Learning Outcomes

At the end of the module the student should have basic knowledge in:
- Capability to write simple programs and scripts;
- Capability to apply appropriate data and control structures;
- Formulation of elementary tasks in a high level programming language;
- Object-oriented programming.

5 Subject Aims

This module introduces the concept of interactivity through programming. It concentrates on manipulating scriptable elements and environments and also introduces the student to the basic programming concepts and gives students a grounding for interactive development and problem solving.

Indicative Content:

- Computing concepts;
- Binary computing, arithmetic and Boolean operations;
- Basic programming concepts;
- Basis programming concepts: Data types, variables, control structures, functions;
- Introduction to programming and scripting;
- Stored programs/scripts; writing simple scripts; Apply basic concepts: variables; loops; conditional, branching; functions; methods; proper formatting to support code maintenance and reuse; use a scripting language for this purpose;
- OOP;
- Introduction to object oriented programming, objects with private and public variables and methods;
- Advanced data structures;
- List, tables, abstraction over data structures;
- Programming Language;
- Formulate elementary tasks in a high level programming language Introduction to JAVA, usage of available classes, Integration of algorithms and media objects (image, sound).

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%

	Presentation/documentation of practical results and findings – 20% Written examination – 60%
11	**Frequency of Module** Semester 2
12	**Name of Lecturer(s)** h_da: C. Busch, A. Steinmetz, K. Fischer CIT:
13	**Other Information**

MI1_2.2 Media Informatics, Scripting					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	2. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lectures
Practical
Instructed single or group work

4 Learning Outcomes

At the end of the module the student should be able to:
- Describe basic programming/scripting concepts;
- Develop interactive content in scriptable/programmable environments;
- Identify and manipulate scriptable/programmable components;
- Explain and implement event based interactivity.

5 Subject Aims

This module introduces the concept of interactivity through scripting/programming. It concentrates on manipulating scriptable elements and environments and also introduces the student to the basic programming concepts and gives students a grounding for interactive development and problem solving.

Indicative Content:
- Programming:
  Statements, commands, Numbers, String and Boolean data types. Loosley and strictly typed languages. Variables, expressions, operators, functions;
- Object-based programming:
  Identify/Use/Control objects, references, properties, methods. Document Object Model;
- Event based programming:
  Events, Triggering Events, Event Handlers;
- Case Studies:
  E.g. Standards based scripting, Scripting in commercial interactive media authoring environments. Etc.

7 Prerequisite subjects / Co-requiste subjects

None

8 Assessment Methods

Continous Assessment – 20%
Presentation/documentation of practical results and findings – 20%
Written examination – 60%

11 Frequency of Module

Semester 2

12	**Name of Lecturer(s)** h_da: C. Busch, K. Fischer, A. Steinmetz CIT: Gary Couse, Valerie Renehan
13	**Other Information**

MP2_3.1 Media Project, Media Project 3					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		152 h	5 cr	3. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Project	6 SWS / 72 h	80 h	5 cr

2 Teaching Methods

Seminars/Lectures
Tutorials, group discussions and peer reviews
Presentation and demonstration

4 Learning Outcomes

On successful completion of this module the student will be able to:
- Conceive, develop and articulate ideas and identify an original or personal approach to a project brief;
- Apply project management techniques and tools to the development and management of a project;
- Describe the complexities of team working and an ability to discuss relevant issues using appropriate language;
- Identify strengths and weaknesses in aspects of a multimedia production for themselves and others in their team;
- Demonstrate an awareness of research and its function within creative practice;
- Articulate the broader cultural context of the project was created.

5 Subject Aims

The aim of this Project is to combine design, technology and management in the development and realisation of an ambitious media product. The project should promote awareness of the professional issues associated with the conception, production and post production process of a standard media product in the area of interactive media, animation, game, video or sound. There is an emphasis on conceptual design, professional methods and techniques and management of complex workflows. The whole project workflow is accompanied and controlled by a professional project management.

Indicative Content:

Sample projects

Project “Interactive Media Product”
Students learn to analyse project workflows, to design and structure media content and media actions, to apply them to appropriate information architectures for implementation. They learn to design and develop interfaces that address objectives of communication, media content creation and organisation and the needs of user and provider.
The students train in the use of scientific methods of media analysis and user needs; in conceptual design and the planning of complex workflows as well as in recognition and reflection on the major role of the user. They develop, produce and implement interactive scenarios, interfaces and media content.

Project “Virtual Worlds”
This project focuses on the creative and production processes that are specific to game design and development from concept to final delivery. The students combine technical and creative knowledge to produce a functional computer game or playable prototype. In particular they create three-dimensional, interactive worlds and generate ideas, concepts and solutions in response to the framework of these worlds.
Students will be exposed to relevant game industry tools and techniques and will be required to realize this project in a workflow comparable to real world conditions. By following the standard stages of game development from concept, planning, preproduction, production and testing students will expand their

	producing knowledge and abilities. Project “Large TV or Movie” This project focuses on the production of a large, application-oriented project. Students will work in small groups and achieve concepts, pre-production, production and post-production. A strong focus will be on finding the appropriate media for different contents and/or different presentation of content. The phases of the realization are based on economic and organizational knowledge of idea creation, research, content development, picturization, realization, post production and presentation. Project “Radio Play” In this project the students get acquainted with sound based and audio-media dramaturgies. They achieve proficiency in content development, script writing, concept of direction, professional direction of sound materials and speakers/actors. They develop professional knowledge and skills in voice and environmental sound recording, editing, mix down, mastering and effect processing. They gain experience in the realization of content and dramaturgy oriented sound production.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Project – 100%
11	**Frequency of Module** Semester 3
12	**Name of Lecturer(s)??** h_da: All professors and lecturers CIT: Project lecturers
13	**Other Information**

MM2_3.1 Media Management, Project Management					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		148 h	5 cr	3. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	32 h	5 cr
	b) Practical	1 SWS / 12 h	80 h	

2 Teaching Methods

Theory
Practical

4 Learning Outcomes

On successful completion of this module the students shall be able to:
- Describe the role of the project manager;
- Describe the project management life cycle;
- Plan, analyse cost and control a project;
- Evaluate and discuss a project team's group dynamics;
- Identify and handle project risks.

5 Subject Aims

This module covers both the theory and practice of project management and prepares learners for applied project work in this and later stages of the course.

Indicative Content:

Theory
- How to define a project. Project stakeholders. What is project management? Role of the project manager. Project management life cycle. Triple Constraints - Time, Cost, Quality. Project selection - financial and other models. Project organisational structures. Responsibility charts;
- Project planning: Work breakdown structure. Time estimating. Forward and backward scheduling. Multiple dependencies. Gannt Charts. Activity-on-Arrow & Activity-on-Node diagrams. Network analysis. Critical path. Probability scheduling. Resource allocation, Resource levelling. Resource cumulation. Project reduction techniques. Crashing. Multiple projects;
- Project tracking and control: Communications management. Earned value analysis - schedule performance index, cost performance index. Project completion issues;
- Risk identification Risk quantification. Risk response development. Risk response control;
- Quality management: Introduction to quality. History of Quality (QC, QA, TQC, TQM). Quality costs. Teamwork. Quality circles.

Practical
The above listed content will be accompanied by various hands-on practical exercises and assignments designed to turn theoretical knowledge into applied use of project management.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous assessment – 40%
Examination – 60%

11	**Frequency of Module** Semester 3
12	**Name of Lecturer(s)** h_da: NN, Hubert Eisner CIT: Martin Connolly
13	**Other Information**

MD 2_3.1 Media Design, Design Methodology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	3. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture + presentation
Studio/laboratory practice
Seminar

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Interpret a design brief and evaluate design projects in terms of their design methods, processes and outcome;
- Select and apply appropriate design methods and tools to the design of interactive media products;
- Develop an effective design process and management plan in response to specific design projects;
- Describe and apply user centred design methodologies incorporating testing, evaluation and documentation.

5 Subject Aims

This module provides learners with the conceptual and practical skills required to analyse and respond to design briefs and products. It develops research skills and provides design and management methodologies upon which the learner can build their personal approach and practice. Comprehension and competence in design methodologies and practice will be demonstrated by the production of an interactive media product with associated documentation.

Indicative Content:

Theory
- Approaches to design analysis and evaluation through an investigation of case-studies.
- Design process models;
- User research methods and how to convert user observation into design solutions;
- Concept methods and how to progress from concept to visualisation to realisation;
- Connecting Information architecture with look and feel;
- Project management – life cycle. Triple constraints – time, cost, quality. Time management – estimation, forward/backward scheduling. Multiple dependencies. Documenting the process.

Practical
Two-week practical's supporting every milestone of the design process

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 40%
Project (examination of product/documentation) – 60%

11	**Frequency of Module** Semester 3
12	**Name of Lecturer(s)** h_da: Andrea Krajewski CIT: Valerie Renehan, Rose McGrath
13	**Other Information**

<table>
<tr><th colspan="7">MD2_3.2 Media Design, Concept, Character, Environment</th></tr>
<tr><td colspan="2">mandatory</td><td>elective

x</td><td>student workload

150 h</td><td>total credits

5 cr</td><td>semester

3. sem</td><td>duration

1 sem(s)</td></tr>
<tr><td rowspan="3">1</td><td colspan="3">Type of Course</td><td>contact hours</td><td>independent study</td><td>credits</td></tr>
<tr><td colspan="3">a) Theory</td><td>1 SWS / 12 h</td><td rowspan="2">102 h</td><td rowspan="2">5 cr</td></tr>
<tr><td colspan="3">b) Practical</td><td>3 SWS / 36 h</td></tr>
<tr><td>2</td><td colspan="6">Teaching Methods

Lecture + presentation
Studio/laboratory practice</td></tr>
<tr><td>4</td><td colspan="6">Learning Outcomes

On successful completion of this module the student shall be able to:
- Describe the process of animation/game pre-production and production using appropriate terminology and reference;
- Plan and document a short linear animation/game from concept generation to realisation paying particular reference to plot/storyline, character and setting;
- Produce a short animation/game sequence which demonstrates the application of basic principles of production.</td></tr>
<tr><td>5</td><td colspan="6">Subject Aims

This module addresses the concepts, characters and environments involved in the creation of narrative based animations and/or computer games. By developing the learner’s critical appreciation of animation and/or computer games they develop an awareness of appropriate language, terminology and process. Students learn the importance of story, character and setting in storytelling and develop the skills required to design and present developed concepts in visual and written forms, addressing story, character, visual style and sound.

Indicative Content:

Lecture
- Analysis and comparison - story, concepts and characters, scripted events, cinematics, dialogue, supporting texts, back-story, conversion between movies, animations and games, character-player relationships, game-play;
- Narratology: story line, plot structure & script development, characterisation, dramatic/narrative tension, interactivity and narrative, linear and non-linear narratives;
- Interactivity: dialogue structures – linear/branching. Character development and AI;
- Process and documentation: The Design Document - idea/Vision statement, expose, rough and detailed concept proposal;
- Tools and technologies in animation or game production.

Practical
Resource creation, acquisition, manipulation. Production skills in animation and/or game development. Character design and development: motion analysis, expression, representation, sound.

Learners will be required to produce a detailed proposal document for a final animation or computer game concentrating on concept, narrative, character and environment.</td></tr>
<tr><td>7</td><td colspan="6">Prerequisite subjects / Co-requisite subjects

None</td></tr>
</table>

8	**Assessment Methods** Continuous Assessment – 40% Project (examination of product/documentation) – 60%
11	**Frequency of Module** Semester 3
12	**Name of Lecturer(s)** h_da: Tilmann Kohlhaase CIT: Eva Juhl, Paul Green, Trevor Hogan
13	**Other Information**

<table>
<tr><th colspan="7">MD2_3.3 Media Design, Cinematography</th></tr>
<tr><td colspan="2">mandatory</td><td>elective
x</td><td>student workload
150 h</td><td>total credits
5 cr</td><td>semester
3. sem</td><td>duration
1 sem(s)</td></tr>
<tr><td rowspan="3">1</td><td colspan="3">Type of Course</td><td>contact hours</td><td>independent study</td><td>credits</td></tr>
<tr><td colspan="3">a) Theory</td><td>1 SWS / 12 h</td><td rowspan="2">102 h</td><td rowspan="2">5 cr</td></tr>
<tr><td colspan="3">b) Practical</td><td>3 SWS / 36 h</td></tr>
<tr><td>2</td><td colspan="6">Teaching Methods

Lecture
Studio/lab presentation + practice
Tutorial
Seminar/critique</td></tr>
<tr><td>4</td><td colspan="6">Learning Outcomes

On successful completion of this module the student shall be able to:
- Describe the process of film/video pre-production and production using appropriate terminology and reference;
- Critically evaluate examples of film/video work in terms of their use of cinematographic language;
- Plan and document a short video production from concept generation to production stage;
- Produce a short visual sequence which demonstrates the application of basic principles of film production inc. framing, sequencing, lighting;
- Edit a short video sequence from assorted content.</td></tr>
<tr><td>5</td><td colspan="6">Subject Aims

This subject aims to introduce the learner to the basic principles and practice of video production from concept development, to planning, selection and resolution. By developing the learner's critical appreciation of film/video they develop an awareness of film/video language, terminology and process. By practically applying this knowledge to the development and realisation of a concept the learner is directed through the production of a shot sequence in a structured and supportive manner.

Indicative Content:

Lecture
- The visual production process: pre-production, production and post production. Roles and responsibilities: producer, director, screenwriter, camera operator, lighting operator, etc.;
- The pre-production process – planning & preparation. Concept development, production design, scripting, storyboarding. Stills and the motion picture;
- The production process:
The shot: framing: Stills and motion picture,
Shot duration,
Lighting: drawing with light, light and atmosphere/mood;
- Narrative: principles of formal narrative construction;
- Narrative conventions and formats – plot, expectation, causality, motivation, parallelism, plot development/progression;
- Linear and non-linear narratives. Realism and the construction of illusion. Genre.

Practical
- Application of theory to practice through directed assignments and projects;
- Storyboarding;
- Camera operation;</td></tr>
</table>

	- Lighting; - Fundamental principles of editing.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – 40% Project – 60%
11	**Frequency of Module** Semester 3
12	**Name of Lecturer(s)** h_da: Thomas Burnhauser, Thomas Carlé CIT: Phil Curtin, Trevor Hogan, Padraig Trehy
13	**Other Information**

MD2_3.4. Media Design, Radio Programming and Broadcasting					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	3. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture + presentation
Demonstration
Studio/laboratory practice

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Describe different types of radio and audio-media programs;
- Apply appropriate skills for the production of quality radio content;
- Demonstrate proficiency in radio direction, guiding of actors;
- Demonstrate proficiency in editorial work and radio management;
- Ability of writing, composing and producing audience oriented programs.

5 Subject Aims

This subject aims to introduce the learner to the basic principles and practice of radio production from concept development. By developing the learner's critical appreciation of radio they develop an awareness of radio characteristics, terminology and process. By practically applying this knowledge to the development and realisation of a concept the learner is directed through the production of a radio piece in a structured and supportive manner.

Indicative Content:

Theory
- Introduction into radio history, defining the relationship towards the audience;
- Range of organizational models of radio production and broadcast;
- Radio-phonic semiotics, formats and forms;
- Writing, composing, producing for radio;
- radio programs and their production including original sound, sound scapes, music and spoken word.

Practical
- Use of audio software and radio hardware, for editing, mixing, processing, producing, mastering, presenting, internet-streaming and on-air-broadcasting;
- Production of live and pre-produced radio shows.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 40%
Project – 60%

11 Frequency of Module

	Semester 3
12	**Name of Lecturer(s)** h_da: Sabine Breitsameter CIT: Hugh McCarthy, Johnny McCarthy
13	**Other Information**

MT2_3.1 Media Technology, Interactive Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	3. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate technical and practical knowledge of multimedia formats and applications;
- Use appropriate authoring environments for the creation of interactive multimedia products;
- Discuss the technical properties of different time-based and interactive authoring environments;
- Sketch the implementation of “native” UI development.

5 Subject Aims

This module aims to provide the learner with a solid foundation in multimedia authoring environments. Learners will develop skills in the use of a range of proprietary and non-proprietary multimedia development tools.

Indicative Content:

- 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.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Practical – 30%
Examination – 50%

11 Frequency of Module

Semester 3

12 Name of Lecturer(s)

h_da: K. Fischer, A. Steinmetz, C. Busch
CIT: G. Couse, V. Renehan, P. Green

13	**Other Information**

MT 2_3.2 Media Technology , Application Specific Know How In Audio-Visual Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	3. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate an advanced technical and practical knowledge of a range of digital media properties including still image, audio, video, interactive and 3D media;
- Use a range of digital media input/output devices to correct and manipulate audio/visual resources;
- Discuss the technical properties of digital image, sound and video.

5 Subject Aims

- Work and operate selected audio / video devices;
- Explain the operation of different modules;
- Indicate the typical problems and real-world aspects;
- Demonstrate the effects caused by setting specific technical parameters;
- Description of the operation of the selected devices with respect to the underlying technology.

Indicative Content:
- Recording and instrument acoustics: (Aspects of high quality recording, Microphones);
- Background in optics;
- Light, light temperature, Camera technology;
- some relevant parameters: focus, depth of field, aperture, exposure, etc.;
- 3D: coordinate system in the context of audio / video (preparing understanding of spatial audio information, positional video camera tracking systems, etc.);
- Application training for 3D, interactive authoring, audio and video.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Practical – 30%
Examination – 50%

11 Frequency of Module

Semester 3

12 Name of Lecturer(s)

h_da: K. Fischer, A. Steinmetz, Th. Carlé, S. Breitsameter, M. Bergfeld

	CIT: G. Couse, V. Renehan, P. Green
13	**Other Information**

MI2_3.1 Media Informatics, Information Systems					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	3. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lectures
Practical
Instructed single or group work
Presentation

4 Learning Outcomes

At the end of the module the student should have a capability to:
- Understand database design;
- Design and build dynamic web sites;
- Write client side and server side scripts.

5 Subject Aims

This module concentrates on local and remote persistent storage and retrieval of information to be used in interactive media.

Indicative Content:
- Databases (Designing tables, normalization, querying databases, SQL);
- DOM (DOM und JavaScript);
- Advanced Markup (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).

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Presentation/documentation of practical results and findings – 20%
Written Examination – 60%

11 Frequency of Module

Semester 3

12 Name of Lecturer(s)

h_da: A. Schütte, C. Busch, A. Steinmetz, K. Fischer, Succ. Krier
CIT:

13 Other Information

MI2_3.2 Media Informatics, Persistence					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	3. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lectures
Practical
Instructed single or group work

4 Learning Outcomes

At the end of the module the student should be able to:
- Store and retrieve persistent information in client-server environments;
- Store and retrieve persistent information in stand-alone environments;
- Use markup for data handling;
- Identify and employ the best persistence solution for interactive media.

5 Subject Aims

This module concentrates on local and remote persistent storage and retrieval of information to be used in interactive media.

Indicative Content:
- XML
  XML, parsing, events, DOM;
- Databases/Remote storage
  Tables, SQL Queries, Database Design, Incorporating search results into interactive content;
- Local Storage/Standalone environments
  Files, SharedGlobalObjects, Cookies;
- Client-Server environments
  Flash-remoting, Cookies, AJAX, HTTP Methods.

7 Prerequisite subjects / Co-requiste subjects

None

8 Assessment Methods

Continous Assessment – 20%
Presentation/documentation of practical results and findings – 20%
Written examination – 60%

11 Frequency of Module

Semester 3

12 Name of Lecturer(s)

h_da: C. Busch, K. Fischer, A. Steinmetz
CIT: Gary Couse, Valerie Renehan

13	**Other Information**

MP2_4.1 Media Project, Media Project 4					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		152 h	5 cr	4. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Project	6 SWS / 72 h	80 h	5 cr

2 Teaching Methods

Seminars/Lectures
Tutorials, group discussions and peer reviews
Presentation and demonstration

4 Learning Outcomes

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

- 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.

5 Subject Aims

The aim of the Project 4 is the combination of all disciplines in the development, production and implementation of high quality media products. This project should promote understanding of the professional issues and tools associated with a media product in the area of interactive media, animation, game, video or sound. There is an emphasis on conceptual design, professional methods, techniques standard workflows and project management.

Indicative Content:

Sample projects:

Project “Interactive Media System Production”
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.

Project “Professional Game”
This project develops skills in problem solving and quality assurance, budgeting and project management. This group project focuses on the development of a functioning game product or prototype. By creating a game for a selected platform and audience, the students learn to generate ideas, concepts and solutions, in response to identified market needs.

Project “Professional TV-/Movie Production”
This project develops skills in problem solving and quality assurance, budgeting and project management. The students learn to generate ideas, concepts and solutions, in response to the marketability of a TV or movie production. By focusing on the professional production of a realistic

	moving pictures project the students will be able to apply their knowledge of cinematographic language to the requirements of ‘real-world’ production and distribution media. Project “Professional Sound Production” This project develops 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.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Project – 100%
11	**Frequency of Module** Semester 4
12	**Name of Lecturer(s)??** h_da: All professors and lecturers CIT: All project lecturers
13	**Other Information**

MC2_4.1 Media Culture, Interpreting Sound & Music					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		146 h	5 cr	4. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	110 h	5 cr
	b) Practical	1 SWS / 12 h		

2 Teaching Methods

Lecture
Seminar
Presentation – aural and visual

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate a knowledge of sound based and related aspects of culture both in relation to music concepts, 20th century music and sound languages and digital audio forms and technologies;
- Evaluate the impact of sound on popular culture with particular reference to music and film;
- Demonstrate a knowledge of sound colour and orchestration;
- Apply different strategies to the analysis, interpretation and appreciation of sound works;
- Critically assess the assumed dominance of the visual in contemporary civilization.

5 Subject Aims

This module provides the learner with a critical understanding of audio communication, paying special attention to music, sound art, film and audio design. The module develops the learners critical understanding of the relationship between the cultural values and audio traditions. It addresses the sociological, psychological and technological influences on the creation and interpretation of the audio 'artifact' with particular emphasis on the 'digital age'.

Indicative Content:
- Appreciation of music and sound art inc. contemporary compositional, design-oriented and discursive approaches;
- Structural analysis of key music works: time division, sound languages, sound color, orchestration, etc.;
- Identifying cultural concepts and rationale which led to artistic/creative change: from Renaissance to 21st Century mass communication/globalization;
- Relationship of sound to image – the importance of sound in film and 'digital media' products;
- Relationship of sound to technology – development from live to recorded music in performance and distribution;
- Introduction to traditional music notation and theory:

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous assessment – 60%
Project – 40%

11 Frequency of Module

Semester 4

12	**Name of Lecturer(s)** h_da: Sabine Breitsameter CIT: Hugh McCarthy, Johnny McCarthy, Padraig Trehy
13	**Other Information**

MD2_4.1 Media Design, Usability					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	4. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture + presentation
Studio/laboratory practice
Seminar

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Plan, develop, conduct and evaluate user research and usability tests;
- Set up checklists for heuristic evaluations;
- Develop and conduct expert evaluations;
- Present optimization approaches in conclusion to test results.

5 Subject Aims

This module provides learners with an understanding of the important conceptual, theoretical, social, technical and design issues related to use and usability in interaction design. The module is designed to provide learners with the knowledge, skills and competencies required to establish and apply effective user testing, analysis, evaluation and optimisation strategies for a range of interactive applications and situations.

Indicative Content:

Theory
- Definitions of usability. User / design heuristics for interactive applications – web, mobile, iTV, etc.;
- Physiological and psychological aspects of usability design – the human factors. Accessibility issues in interface design – validation, platform independence, consistency, compliance, special needs;
- User research and usability methods and practices - integration of usability measurements and user integration. Tools and techniques of user testing and evaluation;
- Participatory design and the role of a designer in his / her role as human-computer-interface expert and the interpreter of user demands.

Practical
Design and application of heuristic and usability tests.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 40%
Examination – 60%

11 Frequency of Module

Semester 4

12	**Name of Lecturer(s)** h_da: Andrea Krajewski CIT: Valerie Renehan, Rose Mc Grath, Trevor Hogan.
13	**Other Information**

<table>
<tr><th colspan="7">MD2_4.2 Media Design, Professional Game Design</th></tr>
<tr><td colspan="2">mandatory</td><td>elective

x</td><td>student workload

150 h</td><td>total credits

5 cr</td><td>semester

4. sem</td><td>duration

1 sem(s)</td></tr>
<tr><td rowspan="3">1</td><td colspan="3">Type of Course</td><td>contact hours</td><td>independent study</td><td>credits</td></tr>
<tr><td colspan="3">a) Theory</td><td>1 SWS / 12 h</td><td rowspan="2">102 h</td><td rowspan="2">5 cr</td></tr>
<tr><td colspan="3">b) Practical</td><td>3 SWS / 36 h</td></tr>
<tr><td>2</td><td colspan="6">Teaching Methods

Lecture + presentation
Studio/laboratory practice</td></tr>
<tr><td>4</td><td colspan="6">Learning Outcomes

On successful completion of this module the student shall be able to:
- Discuss fundamental theories underlying interactive game design including selected aspects of narratology, ludology, communication theory, developmental / behavioural psychology, sociology, writing practice and the games industry;
- Display the analytical skill to assess selected design issues and to identify good practice in existing digital games;
- Develop concepts and plotlines appropriate to interactive games;
- Design resources required to support a 3D interactive game or prototype;
- Apply the theoretical insights, analytical and practical skills gained to a practical game design project involving the conceptual development, design and writing of selected elements of a digital game.</td></tr>
<tr><td>5</td><td colspan="6">Subject Aims

The aim of this module is to develop a detailed understanding of the theory and practice of game design especially as it relates to computer based interactive games. Students study the role of design within the game development process and explore the process and practice involved in creating and integrating all elements that make up a game.

Indicative Content:

Theory
- The Experience of Digital Games: Demonstration and exploration of a variety of digital game genres (e.g. FPS, RTS, RPG, simulation, racing), platforms (PC, console, mobile phone) and gaming modes (single player, multiplayer);
- Narratology: Story structure (V. Propp), character, dramatic/narrative tension and structure, interactivity and narrative;
- Ludology: Game typology (inc. genres, single player/multiplayer modes), interactivity, immersion and presence, AI issues, time and space in games;
- Analysis, Concept Development, Design and Writing for Digital Games: The interplay of the game elements (story and environment, game play, technology); Structure, narrative logic and narrative tension in non-linear narrative; Interactivity: possibilities and limitations; Dialogue structure and development (linear/branching dialogue); Character development and AI;
- Game play issues (reward system, matching game play and player skill, player training); Starting points, the design process; Designing for different platforms and game modes; Issues of writing interactive dialogue;
- The design document.

Practical
Throughout the practical the students develop their concept into a realised game design document</td></tr>
</table>

	and/or game prototype by combining and applying technical and creative competencies.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – 40% Project (examination of product/documentation) – 60%
11	**Frequency of Module** Semester 4
12	**Name of Lecturer(s)** h_da: Tilmann Kohlhaase CIT: Paul Green, Trevor Hogan
13	**Other Information**

MD2_4.3 Media Design, Advanced Storytelling					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	4. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture + presentation
Demonstration
Studio/laboratory practice

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Identify and discuss the use of cinematographic language in a range of film/video product;
- Demonstrate a basic knowledge of cinematographic production for different genres;
- Create a detailed storyboard and/or script for a video production;
- Use a range of camera and editing techniques to compliment narrative style;
- Record/capture quality footage under a range of different circumstances e.g. day time, night time and studio based recording;
- Produce a finished piece of video work individually or as part of a team.

5 Subject Aims

This module develops the learners understanding and application of cinematographic principles and language. By addressing short feature or documentary production for example, the module develops the learner's ability to function as an audio/visual storyteller, communicating ideas and information in a planned and structured manner.

Indicative Content:

Theory

- Scripting, pre- production, camera techniques;
- Montage vs. editing:
  The shot
  Montage vs. mis-en-scene
  Rhythm
  Continuity vs. "montage of attractions"
  Picture and sound
  Emphasis, a synchronism, counterpoint
  Strategies of montage: perspective, backbone, tone;
- Video Post Production;
- Non-linear editing.

Practical
The above listed content of the lectures will be accompanied by various hands-on practical assignments designed to convert theoretical knowledge into applied use of cinematographic language.

7 Prerequisite subjects / Co-requisite subjects

	None
8	**Assessment Methods** Continuous assessment – 40% Project – 60%
11	**Frequency of Module** Semester 4
12	**Name of Lecturer(s)** h_da: Thomas Burnhauser, Thomas Carlé CIT: CIT: Trevor Hogan, Phil Curtin, Padraig Trehy
13	**Other Information**

MD2_4.4 Media Design, Expanded Radio, Innovative Audio					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	4. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Seminars
Lectures
Workshops

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Describe the concepts and applications of future oriented audio concepts, investigating various methods of conveying and creating sonic arts;
- Exploit different types of media (i.e. network-based or audiovisual combinations, generation and/ or installation) to enhance the program aims of the intended delivery medium;
- Develop content and sound languages, and set up technological and organizational structures to support the creation of innovative and creative audio products;
- Produce high quality, audience oriented content;
- Evaluate the legal, social, interdisciplinary and aesthetic contexts and frameworks on innovative content production and distribution.

5 Subject Aims

- Introduction into audio-oriented media and their technical, social and aesthetical implications;
- Altering and adaptation of traditional audio-media towards an expanded understanding of the use of audio and sonic art;
- Audio-media/inter-media semiotics, formats and forms;
- Development and realization of creative-audio including original sound, sound scapes, music and spoken word;
- Introduction to synthesis software and various hardware for audio generation and installation;
- Legal, social and political issues and models for audio-media, identification of program aims, models of defining the possible relationships of innovative audio towards the audience.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous assessment – 40%
Project – 60%

11 Frequency of Module

Semester 4

12 Name of Lecturer(s)

h_da: Sabine Breitsameter
CIT: H. McCarthy, J. McCarthy

13	**Other Information**

MT2_4.1 Media Technology, I/O Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	4. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	24 h	5 cr
	b) Practical	2 SWS / 24 h	78 h	

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate an advanced technical and practical knowledge of a range of advanced input and output devices;
- Compare different i/o approaches and select the appropriate device for a given development task;
- Design and develop user interfaces for different size displays.

5 Subject Aims

- Introduce classic I/O devices from office, game and mobile environments;
- Give classification of input parameters and dimensions of freedom per device;
- Provide taxonomy of output devices, esp. on screen sizes and technology of combining displays;
- Explain “blending” technology for multi display setups;
- Provide insight to upcoming and on the edge I/O technology.

Indicative Content:
- 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

7 Prerequisite subjects / Co-requisite subjects

None

8	**Assessment Methods** Continuous Assessment – 20% Practical – 30% Examination – 50%
11	**Frequency of Module** Semester 4
12	**Name of Lecturer(s)** h_da: A. Steinmetz, K. Fischer CIT: J. O'Driscoll, G. Couse
13	**Other Information**

MT 2_4.2 Media Technology, The Analogue and Digital Domain					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	4. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Use analogue and digital video and sound recording equipment in a studio settings;
- Discuss perception-related issues (e.g. controlling perceived room size by using acoustical as well as video related methods);
- Select suitable technology for a given recording situation;
- Discuss the technical properties of digital image, sound and video;
- Describe the process of mastering and editing in the context of post processing.

5 Subject Aims

- Describe analogue and digital properties of selected devices in our studios;
- Present examples of perceptive effects in audio and video;
- Discuss pros and cons of different devices;
- Explain the process of a prototypical production;
- Describe means of simulating analogue effects in the digital domain.

Indicative Content:
- The analog and digital way of dealing with video, film and audio signals;
- Representation, storage, compression, transmission of analog and digital A / V material;
- Several examples of implications and limitations caused by analog/digital signal processing differences;
- FBAS, color hierarchy, legal color ranges;
- Color correction;
- Sound and film synchronization, time code considerations;
- Dynamic range;
- Linearity / magnetic storage devices;
- Linear / nonlinear gain;
- Analogue and digital aspects of EQ, mixing.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Practical – 30%
Examination – 50%

11	**Frequency of Module** Semester 4
12	**Name of Lecturer(s)** h_da: K. Fischer, A. Steinmetz, Th. Carlé, S. Breitsameter, M. Bergfeld CIT: G. Couse, V. Renehan, P. Green, N.N.
13	**Other Information**

MI2_4.1 Media Informatics, Software Engineering					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	4. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lectures
Practical
Instructed single or group work
Presentation

4 Learning Outcomes

At the end of the module the student should have a: capability to:
- Apply software engineering concepts;
- Use software development environments;
- Use advanced mark-up.

5 Subject Aims

This module introduces the concept of software engineering. It concentrates on the various phases othe development process and on suitable environments.

Indicative Content:
- 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).

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Presentation/documentation of practical results and findings – 20%
Written examination – 60%

11 Frequency of Module

Semester 4

12 Name of Lecturer(s)

h_da: K. Fischer , C. Busch, A. Steinmetz
CIT:

13 Other Information

MI2_4.2 Media Informatics, Control Structures					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	4. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lectures
Practical
Instructed single or group work

4 Learning Outcomes

At the end of the module the student should be able to:
- Specify the order in which statements are executed in their scripts/programs;
- Specify the conditions under which statements are executed in their scripts/programs;
- Create variable-response interactive media;
- Demonstrate problem solving skills in the implementation of interactive solutions.

5 Subject Aims

This module introduces the concept of interactivity through scripting/programming. It concentrates on manipulating scriptable elements and environments and also introduces the student to the basic programming concepts and gives students a grounding for interactive development and problem solving.

Indicative Content:
- Conditional Computing:
  if statements, switch statements, boolean conditions, compound conditions, boolean logic;
- Functions:
  declaring and invoking functions, parameters, return values, scope issues;
- Repetition:
  Loops, for statements, while statements, halt conditions, recursion, looping through simple computer and data structures;
- Case studies:
  e.g. Form validation, Advanced DHTML..

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Presentation/documentation of practical results and findings – 20%
Written examination – 60%

11 Frequency of Module

Semester 4

12 Name of Lecturer(s)

	h_da: C.. Busch, A. Steinmetz CIT: Gary Couse, Valerie Renehan
13	**Other Information**

MP3_5.1 Media Project, Media Project 5					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		152 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Project	6 SWS / 72 h	80 h	5 cr

2 Teaching Methods

Seminars/Lectures
Tutorials, group discussions and peer reviews
Presentation and demonstration

4 Learning Outcomes

On successful completion of this module the student will be able to:
- Manage a self-initiated project from brief through to presentation;
- Demonstrate creativity, independence and inventiveness in the approach and methods used to develop and implement a project;
- Make informed choices through a critical approach to information gained through appropriate research methods in the development and implementation of ideas for a project;
- Effectively use quality control techniques and methods to ensure a high quality finish to their product;
- Present a project in a coherent and clear fashion using a range of appropriate documentation and communication skills.

5 Subject Aims

The aim of the Project is to develop, produce and implement an innovative media product from brief through presentation. This project should promote exploration of the experimental approaches associated with innovative media products in the area of interactive media, animation, game, video or sound. There is an emphasis on experimental design, methods, techniques and workflows. 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.

Indicative Module Content:

Sample projects:

Project “Ubiquitous Media 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. 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 a ubiquitous 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 might include: ubiquitous education systems, products for the elderly, wearable media, smart objects, tangible media.

Project “Experimental Game”
Students design a fully functioning interactive product in the field of interactive entertainment separate

	from the constraints of the mainstream game industry.. This product should possess a strong experimental character, investigating solutions for innovative design, content, format or genre. At the same time the students will develop ideas, concepts and conditions for an environment and conditions where their project might be used or applied successfully. They will be required to apply self-reflection at all stages and to evaluate decisions made in the production process to optimize the results. Project “Experimental feature/documentary” This project focuses on pre-production of a short film or a short documentary film either individual or in groups up to 3 students. AV-Production of a linear AV-production (feature film): The students develop their idea to a script. The items of pre-production are break-Down, schedule, budget, storyboard, teambuilding, casting, pitch and presentation and financing. Production of a short 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. Project “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.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Project – 100%
11	**Frequency of Module** Semester 5
12	**Name of Lecturer(s)??** h_da: All professors and lecturers CIT: All project lecturers
13	**Other Information**

MM3_5.1. Media Management, Marketing & Media Law					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		146 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory b) Practical	3 SWS / 36 h	110 h	5 cr

2 Teaching Methods

Lecture + presentation
Studio/laboratory practice
Seminar

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate knowledge of the basic principles of marketing and its role within the business environment;
- Discuss the role of market research within the marketing mix and understand sales strategies;
- Demonstrate a knowledge of the legal aspects of the media business;
- Describe the importance of digital rights management and Intellectual Property Rights in the multi-media environment.

5 Subject Aims

Indicative Content:

Marketing Environment
- The 4 Ps of marketing. Pricing strategies and limitations. Channel selection and management;
- Marketing management: analysis, planning, implementation and control;
- Market research. Media- and target group-specific marketing and sales strategies;
- The Marketing Plan, its structure and importance;
- Product life cycle. Developing a new product and its marketing strategy,
- Advertising media. Evaluation of advertising media. The advertising agency. How advertising is organised. Planning and conducting an advertising campaign. Regulatory environment for advertising. Advertising and the Internet;
- Media business models,
- Co-productions and financing.

Media Law
- Constitutional law (freedom of expression & right to good name & privacy); case law/precedent - the tort of defamation (including libel). Legislation - FOI, Data Protection, Broadcasting Authority Act, Defamation, Privacy Bill; Confidentiality agreements;
- Content rights protection and rights management. Watermarking and fingerprinting. Intellectual property rights / Copyright / Trademarks. International Intellectual Property Alliance (IIPA);
- Freedom of Information Act. Function and operation of FOI and media uses;
- The Regulatory environment – advertising, broadcast, (non)regulation and the Internet;
- European Union and International law in regard to media;
- Content exploitation and licensing.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

	Examination – 100%
11	**Frequency of Module** Semester 5
12	**Name of Lecturer(s)** h_da: NN, Hubert Eisner, NN, Dr. Knorz? CIT: Emmett Coffey, Olive Murphy O'Dwyer
13	**Other Information**

MD3_5.1 Media Design, Immersive Environments					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture + presentation
Studio/laboratory practice
Seminar

4 Learning Outcomes

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

- Understand the interface as a cross-media environment encompassing a range between hard- and software, virtual and real, tangible and intangible;
- Critically describe the fundamental concepts involved in the use of haptic interfaces and immersive interactive environments;
- Evaluate the effect human factors have on the design and use of technology in an immersive environment;
- Assess the practical and technical issues to be considered when implementing immersive environments with current hardware and software technology;
- Plan, construct and/or synthesize an immersive interactive environment, justifying and explaining the decisions made.

5 Subject Aims

This module provides learners with an understanding of the important conceptual, theoretical, social, technical and design issues related to haptic and ubiquituous interactive products and immersive environments. The module is designed to develop high levels of intellectual and technical competency in an environment of rapid change and aims to foster creative and innovative responses to the challenges met.

Indicative Content:

Theory

- Evaluation of the interactive products: effectiveness, interactivity, usability, robustness and social integration;
- Developments in 3D digital environments, to include 19th Century and early 20th century three-dimensional displays, Sensorama, first HMD based VR displays, modern VR systems, Aeorspace technology, the CAVE system; future trends and directions;
- Current interface development: interfaces and the user. Innovations, technological developments and social-cultural evolutions, possible influences on the life scenarios work and leisure.

Finally the interfaces in hard- and software design will be compared and a thesis for future interfaces, integrating hard- and software-interfaces and/or real and virtual interfaces will be established.

Practical
In the practicals the students analyse Scenarios for an innovative use of interfaces in the field of work or leisure. For adequate scenarios innovative interfaces will be realised exemplary as models. Basis of the interface concept is the evaluation of concrete problems of use. Deliberately no industry-product shall

	be developed. The practicals rather should sensitize for experimental new forms of interfaces, solving assumed problems of users in future.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – 40% Project – 60%
11	**Frequency of Module** Semester 5
12	**Name of Lecturer(s)** h_da: Andrea Krajewski CIT: Rose McGrath, Valerie Renehan, Trevor Hogan
13	**Other Information**

MD3_5.2 Media Design, Experimental Game					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	4. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 13 h	102 h	5 cr
	b) Practical	3 SWS / 39 h		

2 Teaching Methods

Lecture + presentation
Studio/laboratory practice
Seminar/Tutorial

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Display the analytical skill to assess selected design issues and to identify good practice in existing 3D digital games;
- Develop concepts, plotlines and strategies appropriate to experimental games in a 3D environment;
- Apply the theoretical insights, analytical and practical skills gained to an experimental game design project involving the development of selected elements of a digital game prototype;
- Create a 3D game prototype demonstrating an appropriate range of techniques.

5 Subject Aims

The aim of this module is to extend the learners perception of gaming beyond the 'normal' entertainment context. It enables the learner to apply their knowledge of the theory and practice of game design especially as it relates to 3D computer based interactive games. Students explore the process and practice involved in creating and integrating all elements that make up a game.

Indicative Content:

Theory
Experimental games, experimental interfaces. Storylines/plots, games and learning (edutainment), serious gaming, game art.

Practical
The practicals will concentrate on the development of the resources required to produce a 3D computer game prototype or product.. The students apply advanced skills in character and environment creation and animation so as to develop an emotionally immersive game experience.
3D modelling, lighting, cameras, materials, textures, animation and rendering;
Rendering and Output: 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.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 40%
Project (examination of product/documentation) – 60%

11	**Frequency of Module** Semester 5
12	**Name of Lecturer(s)** h_da: Tilmann Kohlhaase CIT: Paul Green, Trevor Hogan
13	**Other Information**

MD3_5.3 Media Design, Experimental Video					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture
Studio/lab presentation + practice
Tutorial
Seminar/critique

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Explore interdependencies of the art of moving pictures with other arts such as pictorial, performing and dramatic arts as well as music, dance, etc;
- Analyze different influences of new forms of mass communication, techniques and contemporary arts to audio-visual storytelling (documentary, feature and experimental);
- Evaluate the differing properties and principles of content developed for different media audiences such as Cinema, TV, iTV, web, etc);
- Produce a short video piece to operate in an interdisciplinary context.

5 Subject Aims

This module encourages the learner to address video as an expressive communications medium. Through exploration and experimentation the learner investigates the interdependencies and interrelationships that can exist between audio/visual art, design and communications media. Storytelling is addressed in an open manner using non-narrative and multi-media presentational forms.

Indicative Content:

Theory
The mutual influence of audio-visual mass media and arts through the history of moving pictures
Audio-visual arts and the dialogue with contemporary art and mass communication
Visualization of music and the interdependencies between music and moving pictures
Moving pictures as part of performing arts, art installation, dance, etc.
Influence of differing techniques and styles on pace, speed, rhythm of mis-en-scène and montage
Non-narrative systems: categorical, rhetorical, abstract, associational.

Video Post Production
- Editing: techniques employed to support non-narrative; continuity editing, graphic and rhythmic editing, discontinuity editing;
- Fundamentals of film sound: acoustic properties, selection, combination and integration;
- Compositing techniques and choreography of audio visual elements; Title sequences and special effects.

Practical
The above listed content of the lectures will be accompanied by various hands-on practical etudes to turn theoretical knowledge into applied use of cinematographic language.

7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – 40% Project – 60%
11	**Frequency of Module** Semester 5
12	**Name of Lecturer(s)** h_da: Thomas Burnhauser, Thomas Carlé CIT: Trevor Hogan, Phil Curtin, Padraig Trehy
13	**Other Information**

MD3_5.4 Media Design, Audio for Video and Animation					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lectures
Seminar

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Develop appropriate audiovisual strategies according to contents and target groups;
- Display knowledge of and proficiency with professional production standards for audio;
- Proficiency in audio post-production for video;
- Display knowledge of sound design techniques, and source/create appropriate sounds for synchronization with video and animation.

5 Subject Aims

- Choosing appropriate audio for animation and video;
- Recording on set and practical experience in the studio, an introduction to recording and editing techniques including surround sound;
- Introduction to sound design and development for video;
- Audio Post-production for video,synchronising audio with video and animation projects.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous assessment – 40%
Project – 60%

11 Frequency of Module

Semester 5

12 Name of Lecturer(s)

h_da: Moritz Bergfeld, Sabine Breitsameter, Thomas Carlé
CIT: H. McCarthy, T. Hogan, P. Green

13 Other Information

MT3_5.1 Media Technology, Interactive Broadcast Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Define the specifics of interaction technologies in the distribution of media via broadcast;
- Sketch and script interactive DVDs by using adequate tools;
- Assemble the components necessary to set up a broadcast i-TV system.

5 Subject Aims

- TV system standards;
- DVD Content Format standards;
- In-Car/in-Flight component and bus technology;
- IP-TV standards and Systems;
- Home Entertainment Distribution Systems.

Indicative Content:
- Broadcast / Transmission Scheduling Systems;
- Cisco IP-TV, Microsoft Media Center Edition , HAVi;
- TV: issues, configuration and implementation, MHP, OpenTV, Media Center Edition;
- In-Car / In-Flight Information Systems: MOST, CAN.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Practical – 30%
Examination – 50%

11 Frequency of Module

Semester 5

12 Name of Lecturer(s)

h_da: A. Steinmetz, K. Fischer, H.Eisner
CIT: J. O'Driscoll

13 Other Information

MT3_5.2 Media Technology, Game Engines					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Describe the main characteristics of different game engine implementations;
- Be able to select an appropriate engine for a given task;
- Install a game engine for development purposes and script simple behaviors in one engine;
- Describe the technical requirements of off-line vs. on-line and mobile vs. immobile gaming set ups.

5 Subject Aims

- Requirements and characteristics of mayor game engines;
- Event model and physics simulation of a game engine;
- Render pipeline;
- On-line game examples and requirements;
- Mobile game examples and requirements.

Indicative Content:
- Game engines (Irrlicht, Panda 3D, etc);
- Online games (MMOs e.g. Ultima Online);
- Mobile gaming (e.g PDA, Smart phone, PSP, Gameboy technology and programming model).

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Practical – 30%
Examination – 50%

11 Frequency of Module

Semester 5

12 Name of Lecturer(s)

h_da: A. Steinmetz , T. Kohlhaase, K. Fischer
h_da practical work: A. Steinmetz, T. Kohlhaase
CIT: Paul Green

13 Other Information

MT 3_5.3 Media Technology, Advanced Audio-Visual Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Discuss the techniques of using special effects in the context of recording, mastering and producing a high-quality video / audio product;
- Demonstrate basic knowledge in applying sound and video effects;
- Demonstrate advanced knowledge in recording equipment characteristics and parameters relevant for special effects;
- Exhibit individual creative, technical and artistic abilities;
- Demonstrate basic knowledge of 5.1 surround recording principles and practice.

5 Subject Aims

- Describe the similarities and differences in the number based representation of a / v data;
- Explain the basis of digital effect algorithms for audio and video;
- Explain the mathematical equivalence of time-/space-domain and spectral-domain representation;
- Provide examples (e.g. scaling of amplitude and/or pixel values, etc.);
- Explain effects based on both the time/space representation as well as the spectral domain representation.

Indicative Content:
- Instrument recordings;
- Combinations of real and virtual rooms;
- Live recordings in stereo and 5.1 surround;
- Digital filters;
- Editing and mix-down;
- Image analysis principles;
- Object detection and tracking;
- Variants of keying; their specific difficulties;
- Frame-based operations;
- On-set methods;
- Sound recording principles, esp. for film;
- Sound effects relevant for film.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%

	Practical – 30% Examination – 50%
11	**Frequency of Module** Semester 5
12	**Name of Lecturer(s)** h_da: K. Fischer, A. Steinmetz, Th. Carlé, S. Breitsameter, M. Bergfeld CIT: G. Couse, V. Renehan, P. Green, N.N.
13	**Other Information**

MI3_5.1 Media Informatics, Networks					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture
Practical
Instructed single or group work
Presentation

4 Learning Outcomes

At the end of the module the student should have a: capability to:
- Network technology and modelling;
- Layer/stacking models;
- Use appropriate network environments for media systems.

5 Subject Aims

This module cover concepts for networking and streaming.

Indicative content:
- Networks and communication technologies
- Protocol stacks, IP, OSI, standards and components, Bluetooth, LAN, WLAN, GSM, UMTS
- Remote method invocation
- Concurrent Computing, load balancing
- Basics and application of Grid-Computing

7 Prerequisite subjects / Co-requiste subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Presentation/documentation of practical results and findings – 20%
Written examination – 60%

11 Frequency of Module

Semester 5

12 Name of Lecturer(s)

h_da: M. Massoth, C. Busch, A. Steinmetz, K. Fischer, Succ. Krier
CIT:

13 Other Information

MI3_5.2 Media Informatics, Dynamic Content					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture
Practical
Instructed single or group work

4 Learning Outcomes

At the end of the module the student should be able to:
- Create content dynamically;
- Place dynamic content in existing media;
- Write dynamic programming code;
- Store and retrieve data for insertion in dynamic media.

5 Subject Aims

This module cover concepts necessary for creating dynamic content for interactive design and development. It covers the storing, retrieval, creation and insertion of that content.

Indicative Content:
- Introduction to server-side scripting:
  PHP basics;
- Data structures:
  Advanced arrays, array functions, creating/using objects;
- Servers:
  Web servers, server configuration;
- 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
- Case studies:
  E.g. creating dynamic interactive media in PHP, actionScript DHTML and/orAJAX

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Presentation/documentation of practical results and findings – 20%
Written examination – 60%

11 Frequency of Module

Semester 5

12	**Name of Lecturer(s)** h_da: C. Busch, A. Steinmetz, K. Fischer CIT: Gary Couse, Valerie Renehan
13	**Other Information**

MP3_6.1 Media Project , Bachelor Project / Major Project					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		450 h	15 cr	6. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Project	10 SWS / 120 h	330 h	15 cr

2 Teaching Methods

Seminars/Lectures
Tutorials, group discussions and peer reviews
Presentation and demonstration??

4 Learning Outcomes

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.

5 Subject Aims

The aim of the project is to develop the student's capability for self-directed learning and professional practice with specific reference to design, research, and project management processes. The module also seeks to challenge and develop the student's communication skills especially in the presentation of the concepts and practical outcomes of the project. The form the final project outcomes take should demonstrate a respect for the overall project process and the quality of media incorporated should be to a professional standard - technically and aesthetically.

Indicative Content:

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);
- Student Proposals (to be accepted by the project examination board);

	- Paper Prototyping (group/peer reviews); - Prototype Presentation (group/peer reviews); - Final Presentation (assessment).
7	**Prerequisite subjects / Co-requisite subjects** All modules of semester 1-5
8	**Assessment Methods** Project – 100% Bachelor Project: – 75 %, Colloquium – 25 %
11	**Frequency of Module** Semester 6
12	**Name of Lecturer(s)** h_da: All professors and lecturers CIT: All project lecturers
13	**Other Information**

MM3_6.1 Media Management , Business and Information Management					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		146 h	5 cr	6. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Theory	3 SWS / 36 h	110 h	5 cr

2 Teaching Methods

Lecture + Presentation
Seminar

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Explain the basic concepts, roles and responsibilities of management;
- Recognise and apply management techniques and strategies;
- Identify and describe the fundamental components of organisational structures;
- Evaluate organizational concepts, and handle organizational challenges;
- Direct group activities and projects using appropriate planning, organizational and motivational techniques.

5 Subject Aims

Indicative Content:

Management:
- Management: functions and roles, styles and leadership. Management skills. Fayol's principles of management. Human relations /resources perspectives;
- Basics of management concepts and management techniques:
  Recent management concepts. Strategic management. Techniques of operational management. Motivation and leadership. Psychological contract. Handling groups.
- Planning: The planning process. External environment analysis, company competencies, management information and MIS. Planning for results and resources. Budgets. Planning as a basis for control. Contingency plans. Functional plans.
- Organisation & Staffing: factors that influence organisational structure: authority and responsibility. Different approaches to organising - functional, product, geographical, customer, project and divisional. Work teams. Outsourcing. Core business processes.
- Theory and approaches to staff motivation: satisfaction theories, incentive theories, intrinsic theories. Psychological contracts. Rewards and incentives. Job design, job enrichment, participation and employee involvement. Control: The nature of control, measuring, reporting and assessing performance. Quality control. TQM /SPC. ISO9000.

"Information Management":
- Information and knowledge management strategies;
- Information retrieval.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous assessment – 40%
Examination – 60%

11	**Frequency of Module** Semester 6
12	**Name of Lecturer(s)** h_da: NN, Hubert Eisner, NN (Honorarprofessor Media) CIT: Olive Murphy O'Dwyer
13	**Other Information**

<table>
<tr><th colspan="7">MC3_6.1 Media Culture , Ethics & Aesthetics</th></tr>
<tr><td colspan="2">mandatory
x</td><td>elective</td><td>student workload
146 h</td><td>total credits
5 cr</td><td>semester
6. sem</td><td>duration
1 sem(s)</td></tr>
<tr><td rowspan="3">1</td><td colspan="3">Type of Course</td><td>contact hours</td><td>independent study</td><td>credits</td></tr>
<tr><td colspan="3">a) Theory</td><td>2 SWS / 24 h</td><td rowspan="2">110 h</td><td rowspan="2">5 cr</td></tr>
<tr><td colspan="3">b) Practical</td><td>1 SWS / 12 h</td></tr>
<tr><td>2</td><td colspan="6">Teaching Methods

Lecture
Seminar
Presentation</td></tr>
<tr><td>4</td><td colspan="6">Learning Outcomes

On successful completion of this module the student shall be able to:
- Place ethics in the context of philosophy and demonstrate a knowledge of fundamental philosophical questions;
- Describe the development of ethical and aesthetic theories and discuss their relationship to contemporary media with particular reference to social responsibility, interpersonal values, ethical behaviour, artistic freedom and beauty;
- Demonstrate skills of reflection and methods of argumentation that advance beyond common sense;
- Discuss the cultural, social, political and moral implications of publishing to a virtually global audience.</td></tr>
<tr><td>5</td><td colspan="6">Subject Aims

This module aims to provide the learner with a detailed knowledge of ethics and Western cultural aesthetics. Through an investigation of the philosophical, moral, and aesthetic principles that underpin Western society the learner is encouraged to explore issues of personal and collective rights, duties and responsibilities in contemporary society especially in the context of the media.

Indicative Content:
"Ethics and Aesthetics":
A narrative of the milestones in the art of thinking: mythology, religion, epistemology (Erkenntnistheorie), moral philosophy, anthropology, and aesthetic theory are discussed in major writings that shaped our understanding of man 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 reasoning of idealism (Plato to Kant), materialism (Descartes to Darwin), and existentialism (Nietzsche to Baudrillard); and theories of art that justified and directed aesthetic production from Renaissance perspective to the Dogma vow of chastity.</td></tr>
<tr><td>7</td><td colspan="6">Prerequisite subjects / Co-requisite subjects

None</td></tr>
<tr><td>8</td><td colspan="6">Assessment Methods

Continuous Assessment – 100%</td></tr>
<tr><td>11</td><td colspan="6">Frequency of Module

Semester 6</td></tr>
<tr><td>12</td><td colspan="6">Name of Lecturer(s)</td></tr>
</table>

	h_da: Hans Puttnies CIT: Frank O'Donovan, Padraig Trehy
13	**Other Information**

MI3_6.1 Media Informatics, Information Retrieval					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	6. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture
Practical
Instructed single or group work
Presentation

4 Learning Outcomes

At the end of the module the student should have a capability to:
- Understand media and information retrieval mechanisms;
- Use appropriate media detection environments.

5 Subject Aims

The purpose of this module is to give the students the skill to understands features and platforms that are used in information retrieval.

Indicative Content :
- Content descriptors/metadata standards,
- Image, audio- and video descriptors;
- Retrieval mechanisms;
- Communication and messaging;
- Retrieval systems and platforms;
- Client-server based systems, agent based systems, sample platforms.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Presentation/documentation of practical results and findings – 20%
Written examination – 60%

11 Frequency of Module

Semester 6

12 Name of Lecturer(s)

h_da: C. Busch, A. Steinmetz, K. Fischer, Succ. Krier
CIT:

13 Other Information

MI3_6.2 Media Informatics, Interaction and Media					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	6. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture
Practical
Instructed single or group work

4 Learning Outcomes

At the end of the module the student should be able to:
- Prepare visual content for publishing in an interactive environment;
- Deploy external media in design solutions;
- Implement and control layout of visual content in those environments;
- Apply the principles behind the separation of style and content;
- Employ different development environments.

5 Subject Aims

The purpose of this module is to give the students the skill to express visual designs in interactive environments with due concern for accessibilty, usability and technical issues.

Indicative Content:
- Media:
  Deploying existing video, sound and graphics in interactive environments, suitable compression algorithms/formats;
- Advanced style sheets:
  CSS, selectors, the cascade, inheritance, specificity, box model, measurements, absolute and relative values. CSS Incompatibilities, CSS hacks;
- Accessibility/usability:
  Section 508, W3C WAI, XHTML, aural style sheets, usability metrics & testing;
- Development environments:
  WYSIWG, authoring software, text editors, converters and generators.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Presentation/documentation of practical results and findings – 20%
Written examination – 60%

11 Frequency of Module

Semester 6

12 Name of Lecturer(s)

	h_da: CIT: Gary Couse, Valerie Renehan
13	**Other Information**

MP4_7.1 Media Project, Direction Concepts					
mandatory x	**elective**	**student workload** 152 h	**total credits** 5 cr	**semester** 7. sem	**duration** 1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Project	6 SWS / 72 h	80 h	5 cr

2 Teaching Methods

Assisted team work
Project work
Presentation

4 Learning Outcomes

On successful completion of this module the student will be able to:
- Demonstrate a substantial knowledge of contemporary practitioners and work that is relevant to the aims and objectives for the proposed project;
- Show a sophisticated critical approach to evaluating their own ideas and the ideas presented by others .through argument or debate;
- Use a range of research methods to develop ideas and identify the aims and objectives of a project;
- Clearly communicate the aims and objectives of a project using a range of audiovisual communication skills integrated so as to clarify the intentions of a project;
- Demonstrate the wider economic, cultural, social, ethical implications of a project through project proposal documentation;
- Present a project proposal in an accurate and professional fashion using a range of appropriate documentation and communication techniques.

5 Subject Aims

Inspiration and innovation are often based on the team work of individuals from different disciplines who exchange opinions and views, who ask new questions and who develop solutions together. The aim of Project 7 is to foster the systematic development of concepts (idea management) from initiating ideas to the final definition of several precise solutions. A number of short exercises incorporating mindsets and methods of different disciplines: design, cinema, TV, digital technology, computer science, media culture, psychology, social studies, marketing and management will stimulate the learners to investigate and explore initial ideas in new and challenging ways.

Indicative Content:

In project 7 learners investigate and develop creative concepts for various current and future communication media. They explore conceptual, content and technical issues associated with different media products, media platforms and media systems In this way they learn to draft innovative ideas and unusual solutions for existing platforms and to propose approaches for new media systems and products.

Potential areas of investigation under the module “Concept Direction“ would include communication tasks in the fields of game, mobile entertainment, ubiquitous computing, edutainment, interactive television et al.:
- Conception of new entertainment formats for interactive media;
- Conception of new entertainment formats for mobile platforms;
- Conception of new applications for ubiquitous media systems;
- Conception of new interfaces for ubiquitous media systems;
- Conception of new ideas for games;
- Conception of new interfaces for games.

	Through a mixture of research, brainstorming, play and evaluation; proposals and concepts will be initiated. These concepts will be examined for usability and feasibility. For this concept factory the team members should ideally come from different education backgrounds (interactive media, moving images, sound, design, digital technology, computer science, media management, media culture, et al.).
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Project – 100%
11	**Frequency of Module** Semester 7
12	**Name of Lecturer(s)** h_da: All professors and lecturers CIT: All project lecturers.
13	**Other Information**

MM4_7.1 Media Management, Media Business & Enterprise Studies					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		144 h	5 cr	7. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	120 h	5 cr

2 Teaching Methods

Lecture + presentation
Seminar

4 Learning Outcomes

On successful completion of this module the students shall be able to:
- Identify the main sectors of the multimedia industry and analyse its relationship with other business and media sectors;
- Identify and describe the stages, players, processes and strategies in interactive media industries from the development of media application concepts, resource generation and production to budgeting, financing, sales and distribution;
- Understand and assess the role of the entrepreneur and enterprise culture especially in the context of digital media;
- Research the market so as to identify and evaluate business opportunities for a media product;
- Formulate a business proposal and develop this into a basic business plan.

5 Subject Aims

This module aims to provide learners with a detailed awareness of the stages, participants, decision-makers, processes and strategies in digital media industries from the development of media application concepts, resource generation and production to budgeting, financing, sales and distribution. It further provides them with the entrepreneurial knowledge, skills and competencies required to identify, develop and present a structured business proposal.

The Business of Multimedia
- The multimedia industry- sectors and business models, relationships with traditional mass media;
- Participants in the media industry's value chain and their roles in the production process (developers, production companies, financing partners, distributors etc.);
- International financing, co-production and recoupment strategies;
- Managing the pre-production and production process, contracting, insurances, workflow of production units, accounting and cost control;
- Empirical market research; primary and secondary research; data collection and analysis; regression and variance analysis;
- Media product life cycle, new product development, pricing policies.

Enterprise Studies
- Definitions of entrepreneurship and enterprise culture;
- Stimuli for business start-ups and feasibility assessment (operational, market, financial).;
- Business plans – preparation and purpose;
- Development of business models for media products, distribution and marketing;
- Brand development strategies;
- Developing a marketing plan; successfully marketing media products.

7 Prerequisite subjects / Co-requisite subjects

None

8	**Assessment Methods** Project – 60% Written examination – 40%
11	**Frequency of Module** Semester 7
12	**Name of Lecturer(s)** h_da: NN, Hubert Eisner CIT: Emmett Coffey, Olive Murphy O'Dwyer, Martin Connolly
13	**Other Information**

MC4_7.1 Media Culture, Culture in the Digital Age					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		146 h	5 cr	7. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	110 h	5 cr
	b) Practical	1 SWS / 12 h		

2 Teaching Methods

Lecture
Seminar
Presentation

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Describe philosophical concepts related to ‘culture’ within the context of the ‘digital age’;
- Apply appropriate research methods to the study of specific cultural phenomenon;
- Analyse the rituals, beliefs and idiosyncrasies of different cultural models;
- Describe the essential methods and results of current inter-cultural research and discourse.

5 Subject Aims

”Cyber-cultural Studies” provides a comprehensive exploration of the impact of the internet and digital technologies on our personal, social and cultural lives. Referencing contemporary works in the fields of ethnography, cultural anthropology, sociology, psychology, and the young discipline of cultural studies itself the module provides the learner with an opportunity to analyse and reflect on the social and cultural influence of their chosen discipline.

Indicative Content:
- Presentation of the individual in a digital age - individuality and identity in a virtual world. (Re)construction of self, changing modes of communication and representation (avatars, blogs, web cams, chat rooms, etc);
- The digital community: the ‘network’ society, communities – virtual and real. Social networks and the emergence of virtual communities. Social relationships - ethnic groups and their relation to nature; family, values, and ritual; religion as a cultural system; genesis of stereotypes;
- Globalisation of communication – impact on cultural values. Democracy and control, censorship and the rights of the individual;
- Uni-culturalism versus multi-culturalism. Globalization and the clash of cultures; towards a new understanding of human action;
- Approaches to cultural analysis: self-reflection, observation and field research.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous assessment – 70%
Examination – 30%

11 Frequency of Module

Semester 7

12	**Name of Lecturer(s)** h_da: Hans Puttnies CIT: Emmett Coffey, Brian McMahon
13	**Other Information**

MD4_7.1 Media Design, Creative Strategies					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		150 h	5 cr	7. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	20 h	5 cr
	b) Practical	3 SWS / 36 h	82 h	

2 Teaching Methods

Lecture + presentation
Studio presentation + practice
Seminar & tutorial

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Critically evaluate media concepts with regard to their innovative potential, their general interest, their technical dimensionality and their potential to be realized;
- Discuss the principle theories of creativity;
- Apply a variety of creative and analytical methods of idea generation and development;
- Identify and develop professional concepts for innovative digital media products;
- Describe and apply professional methods of presentation, simulation and prototyping of media concepts.

5 Subject Aims

This module aims to provide learners with the knowledge, skills and competencies required to identify, investigate and develop advanced media design proposals to a professional level. By encouraging a diverse approach to idea generation it gets learners to expand their thought processes and to adopt an open and creative approach to problem solving. Through the application of advanced analysis, evaluation and reflection practices learners develop their ability to generate creative solutions to self-initiated or set challenges.

Indicative Content:

Theory
- Psychological theories of creativity and convergent thinking;
- Concepts of innovation in Aesthetics and Art Theory (“creation”, “idea”, “genius”, “avant-garde”, etc.);
- The evolution of ideas and concepts from the point of view of Theory of Science;
- Techniques and strategies of creative idea generation and development.

Practical
- Case studies innovative products and projects: analysis of current examples from disciplines like media arts, entertainment industry, computer science, product development, marketing and engineering;
- Staff-led, individual and collaborative exercises in idea generation;
- Script, model, scenario, simulation: how to develop and materialize ideas;
- Development of individual projects through feed-back discussions.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

	Project – 100%
11	**Frequency of Module** Semester 7
12	**Name of Lecturer(s)** h_da: Hans Puttnies, Katharina Kafka CIT:
13	**Other Information**

ME4_7.2 Media Design Elective, Innovative Games					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	5. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture + presentation
Studio/laboratory practice

4 Learning Outcomes

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

5 Subject Aims

This module encourages learners to investigate innovative approaches to game design outside of the mainstream. It fosters an extended understanding of games and game-play, extending the learners experience beyond the boundaries of day-to-day computer games and exploring the application of games in a range of non-leisure contexts for example, educational, informational, artistic and therapeutic.

Indicative Content:

Theory
Experimental games, innovative structures in play, experimental interfaces, interactive sound design, cross platform development, structural, social, creative and technical aspects of multiplayer games, artificial intelligence, agent-systems, group-simulation, acting.

Practical
The practicals will concentrate on psychological and emotional aspects of gaming. The students will integrate advanced skills in character animation and in the creation of empathy into the development of more emotional game play.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 40%
Project (examination of product/documentation) – 60%

11 Frequency of Module

Semester 7

12 Name of Lecturer(s)

h_da: Tilmann Kohlhaase
CIT: Paul Green, Trevor Hogan

13	**Other Information**

ME4_7.3 Media Design Elective, Independent Video Production					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	7. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	1 SWS / 12 h	102 h	5 cr
	b) Practical	3 SWS / 36 h		

2 Teaching Methods

Lecture
Studio/lab presentation + practice
Tutorial
Seminar/critique

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Initiate, develop and produce video projects that investigate, analyse, develop and interpret ideas and information;
- Identify, organize and coordinate the multiple components required in video production including human, technical and aesthetic;
- Produce a short video program that is conceptually and technically optimized for 'traditional' and/or 'new' delivery and presentational modes/systems/styles;
- Demonstrate a coherent and integrated approach in the use of audio-visual language.

5 Subject Aims

This module aims to provide the learner with the knowledge, skills and competencies required to realise video based projects that demonstrate ambition, vision and professionalism. It develops the learner's conceptual, aesthetic and technical capabilities within a supportive professional context. It requires the learner to exercise a high degree of self-motivation, organisation and critical reflection.

Indicative Content:
The Production process including development of concepts leading to the creation of a client pitch.
Production planning and implementation.
Storyboard development and scheduling.
Cinematic techniques in professional video environments.
The production crew – composition, organization and management.
Finance and planning within real world film/video productions.
Editing and post production in relation to delivery platform. Choosing Camera (capture) systems and quality issues relating to delivery.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous assessment – 40%
Project – 60%

11 Frequency of Module

Semester 7

12	**Name of Lecturer(s)**
	h_da: Thomas Burnhauser, Thomas Carlé CIT: Trevor Hogan, Phil Curtin, Padraig Trehy
13	**Other Information**

MT4_7.1 Media Technology, Virtual Reality Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	7. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate understanding of the technical functionality of positional tracking devices;
- Analyze the requirements of a specific application scenario for specific studio tracking needs;
- Select adaequate components for the realization of systems in the VR context;
- Synthesis of components and devices based on their technical properties.

5 Subject Aims

- Explain principles of VR Technology;
- provide basics (incl needed math) in 3D position description and capture;
- Explain and demonstrate 3D scanning technology;
- Explain basic image understanding used in augmented reality systems;
- Use modelling and rendering tools and framesets.

Indicative Content;
- Virtual studio technology:
  blue screen technology,
  positional camera tracking and measurement,
  multi camera recording;
- Data formats relevant in the VR domain (VRML, OBJ, DXF, X3D…);
- Components of augmented reality (audiovisual enhancements).

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Practical - 30%
Examination – 50%

11 Frequency of Module

Semester 7

12 Name of Lecturer(s)

h_da: K. Fischer, A. Steinmetz, Th. Carlé
CIT: G. Couse, V. Renehan, P. Green

13	**Other Information**

MI4_7.1 Media Informatics, Computer Graphics					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr	7. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture “Computer Graphics”	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture
Practical
Instructed single or group work
Presentation

4 Learning Outcomes

At the end of the module the student should have a capability to:
- Understand the techniques used in computer generated imagery for entertainment content production;
- Demonstrate the ability to implement computer graphics algorithms with an de facto standard such as the OpenGL Language or Python;
- Analyse the advantages and limitations of advanced computer graphics algorithms for realistic, computer generated imagery.

5 Subject Aims

- Provide an introduction to the principles and practice of computer graphics used for entertainment cintent production in film, broadcast and games:
- Provide detailed knowledge of the state-of-the-art techniques used to produce computer generated imagery

Indicative Content::
- 3D Modelling (Geometry, point/lines, polygonal surfaces;
- Viewing Transforms (Orthogonal and perspective projection;
- Clipping;
- Image Synthesis (Rendering, Ray-Tracing, Occlusion, Z-Buffer);
- Light and Color (Color spaces, color maps, reflection, shading;
- Texture (Images, interpolation, texture mapping, bump maps).

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Practical – 20%
Examination – 60%

11 Frequency of Module

Semester 7

12 Name of Lecturer(s)

h_da: C. Busch, A. Steinmetz, K. Fischer

	CIT:
13	**Other Information**

MI4_7.2 Media Informatics, System Development					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x		5 cr	7. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Lecture	2 SWS / 24 h	30 h	5 cr
	b) Practical	2 SWS / 24 h	72 h	

2 Teaching Methods

Lecture
Practical
Instructed single or group work

4 Learning Outcomes

At the end of the module the student should be able to:
- Analyse problems with respect to developing interactive solutions;
- Design solutions with emphasis on client needs and requirements;
- Efficiently manage files, data, and other resources related to solutions;
- Understand the development considerations regarding Standards and Compliancy related systems.

5 Subject Aims

This module is concerned with the analysis, design and implementation techniques and prcoesses required to develop complete interactive solutions.

Indicative Content:

- Software Engineering:
  Requirements analysis, Analysis methods, Use case methods, etc.;
- Advanced Problem solving:
  Breaking problems down to programmable concepts (functions/objects);
- Compliancy:
  Content Development for Compliancy related systems (web standards, eLearning, eCommerce, etc);
- Deployment Environment:
  Consideraions for deploying content on various enviroments: mobile/web/standalone applications, etc.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Practical – 20%
Examination – 60%

11 Frequency of Module

Semester 7

12 Name of Lecturer(s)

h_da:
CIT: Gary Couse, Valerie Renehan

13	**Other Information**

MP4_8.1 Media Project, Bachelor (Hons.) Project / Direction and Production					
Mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		152 h	5 cr	8. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Project	6 SWS / 72 h	80 h	5 cr

2 Teaching Methods

Assisted team work
Project work
Presentation

4 Learning Outcomes

On successful completion of this module the student will be able to:
- Identify and apply an appropriate range of user testing methodologies in the development of a project;
- Implement appropriate and effective product testing and evaluation;
- Demonstrate professional expertise with the media, tools and methods selected to implement the project;
- Demonstrate creativity and innovation in the solutions presented as part of a project;
- Present project outcomes in an accurate and professional manner.

5 Subject Aims

The aim of this Project is the development and realisation of innovative media products and media systems. The project topic will usually be based upon the outcomes of Project 7 (MP7). Normally projects at this stage will be undertaken by from 4-6 learners working together in a team and will be expected operate to professional industry standards.

Indicative Content:

The learners will be required to develop a prototype solution to one of the innovative ideas from the project “Concept Direction“. Projects at this level must display appropriate ambition and challenge addressing issues and problems that are relevant to the target audience and potential producers. Projects would commonly address target sectors within the game, mobile systems, ubiquitous media systems, interactive TV or future media formats, including:
- Development and realisation of computer games, design of game stories, game logic, characters, environments;
- Development and realisation of games and entertainment products for mobile devices;
- Development and realisation of new formats and entertainment products for various media platforms;
- Development and realisation of mobile media systems;
- Development and realisation of ubiquitous media systems

The project may incorporate mindsets and methods from different disciplines: design, cinema, TV, game, digital technology, computer science, media culture, psychology, social studies, marketing and management. Cooperation with industry including broadcast companies, directors, producers and other companies would be encouraged. Professional project management strategies and methodologies should be applied.

“Project Production“ includes the complete design of all product or system elements and their technical production and implementation as a executable prototype. Within the product development innovative approaches and new technologies will be explored and applied.

7 Prerequisite subjects / Co-requisite subjects

	MP 4_7.1
8	**Assessment Methods** Project – 100%
11	**Frequency of Module** Semester 8
12	**Name of Lecturer(s)** h_da: All professors and lecturers CIT: all project lecturers
13	**Other Information**

MM4_8.1 Media Management, Business Ethics & Professional Practice					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		144 h	5 cr	8. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Theory	2 SWS / 24 h	120 h	5 cr

2 Teaching Methods

Lecture + presentation
Seminar

4 Learning Outcomes

On successful completion of this module the students shall be able to:
- Identify and discuss contemporary ethical issues in media and business;
- Describe various types of philosophical reasoning and moral arguments in debates about morally responsible business practices;
- Develop informed moral perspectives on business and corporate life so as to inform personal and professional business practice;
- Describe the ethics and social responsibilities associated with being a digital media professional.

5 Subject Aims

This module aims to help the learner understand the principles, concepts, and theories of ethical and moral reasoning in the business context with particular emphasis on the media industries. By acquainting the learner with some of the major moral dilemmas facing business and industry today it enables them to identify the ethical implications of corporate and managerial decisions and prepares them to more effectively manage the ethical problems that present themselves in everyday business life.

Indicative Content:
- Ethics & Issues in media – sustainability, globalisation and social responsibility;
- Professional bodies and ethical codes in the media;
- Workers rights and responsibilities;
- Legal issues; legal and economic models of budgeting and financing a media product;
- Multiplatform and multi-territory licensing strategies.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Project – 60%
Written examination – 40%

11 Frequency of Module

Semester 8

12 Name of Lecturer(s)

h_da: NN, Hubert Eisner
CIT: Emmett Coffey, Olive Murphy O'Dwyer, Martin Connolly

13 Other Information

MD4_8.1 Media Design, Avant Garde in Digital Media					
mandatory x	**elective**	**student workload** 150 h	**total credits** 5 cr	**semester** 8. sem	**duration** 1 sem(s)
1	**Type of Course**		**contact hours**	**independent study**	**credits**
	a) Theory		1 SWS / 12 h	20 h	5 cr
	b) Practical		3 SWS / 36 h	82 h	
2	**Teaching Methods** Lecture + presentation Studio presentation + practice Seminar & tutorial				
4	**Learning Outcomes** On successful completion of this module the student shall be able to: - Critically challenge the 'standard' or 'traditional' concepts of digital media design and development; - Extend their comprehension of digital media into previously unexplored areas through considered analysis and reflection; - Adapt and extend known strategies in order to establish individual methods and approaches; - Identify and evaluate radical approaches in current media research and practice; - Demonstrate a synthesise of knowledge and competencies through the development of avant-garde media responses.				
5	**Subject Aims** Any aspect of media language is in persistent progress. Digital communication presents itself as a highly productive domain for critical strategies and artistic innovation. Bending or breaking the principles for artistic or commercial reasons drives the development of the whole industry and human perception. In this module students learn to combine critical thinking with their sophisticated skills in their major field of study. Before breaking the rules they have understood what they are and why they work. They accept the inheritance of the avant-gardes of the last century that provides an enormously useful set of conceptual tools and references to develop a critical engagement with the conditions of digital mediation. At the same time they take these strategies far beyond the sanctified realm of the arts and play it out in a radically enlarged context of media in all areas of society. Starting from an analytic reflection of media and design in history and presence they are capable of using well founded violations of rules or taboos to broaden the spectrum of media communication. They learn to take risks and leave the traditional path of production. Theory Lectures concerning different aspects of media culture, techniques and contemporary examples following key issues such as: Digital code, breaking up the unified perspective, breaking the unity of time, breaking away from figuration, real-virtuality, continuity and discontinuity, history of avant-garde, contemporary avant-garde, borders and taboos, forms of communication in the network society, subculture, cheap and easy media, converging media, deconstruction of reality. Practical Students will develop and present an idea/concept/production proofing that they are competent crossing the borders of traditional common principles in media-production. The project should have a highly innovative aspect and handle seriously with the break of rules. The risky approach of this exercise will				

	include the chance of “terrific failure”. Thus the grading is not directly related to a successful result but to the process of development. This practical can support or contrast their development of the master thesis.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment and Practical – 40% Project – 60%
11	**Frequency of Module** Semester 8
12	**Name of Lecturer(s)** h_da: Tillmann Kohlhaase, all teachers CIT:
13	**Other Information**

MT4_8.1 Media Technology, Studio Technology						
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**	
	x	150 h	5 cr	8. sem	1 sem(s)	

1	**Type of Course**				**contact hours**
	a) Theory	2 SWS / 24 h	30 h	5 cr	
	b) Practical	2 SWS / 24 h	72 h		

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate understanding of studio technology, component interfaces and exchange formats;
- Analyse requirements of studio technology and workflow;
- Plan and manage studio equipment composition.

5 Subject Aims

- Point out and explain real-world workflow scenarios;
- Description and usage of multimedia archives and asset management systems;
- List hardware and software based interface standards to couple devices;
- List standards to couple studios;
- Explain technical skills and role concepts in studio production project management.

Indicative Content:
- Sudio / video / 3D studio technology and combination thereof (signal synchronisation, massive data storage and retrieval;
- Usage of the “Media Archive” system;
- Data and interchange formats and standards relevant in studio technology (MXF, GXF);
- Emerging standards in the TV and digital cinema domain.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 20%
Practical – 30%
Examination – 50%

11 Frequency of Module

Semester 8

12 Name of Lecturer(s)

h_da: K. Fischer, A. Steinmetz, Th. Carlé, S. Breitsameter, M. Bergfeld
CIT: G. Couse, V. Renehan, P. Green

13 Other Information

MI4_8.1 Media Informatics, CS Theory and AI						
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**	
	x	150 h	5 cr	8. sem	1 sem(s)	
1	**Type of Course**		**contact hours**	**independent study**	**credits**	
	a) Lecture “Intelligent Systems”		2 SWS / 24 h	30 h	5 cr	
	b) Practical		2 SWS / 24 h	72 h		
2	**Teaching Methods** Lecture and practical exercise					
4	**Learning Outcomes** At the end of the module the student should have a capability to: - Understand and define the different meanings of the term “information” in different scientific contexts; - Compare algorithms by understanding and calculating basic orders of complexities; - Understand the existence and characteristics of “non-computable” problems; - Understand the possible and impossible applications of AI; - Design the Architecture for DSS, ES.					
5	**Subject Aims** This module concentrates on the Computer Science Theory and Artificial Intelligence approaches - for instance the theory and practical implementation of Decision Support Systems. Techniques required for a specific problem domain will be covered. Sample application in the area of media usage in e.g. medical expert systems But also in future media composition automation (automated video cut, …) **Indicative Content:** - Provide a theoretical basis for the construction of IT-based systems; - Provide the vocabulary and termini to communicate with top end computer scientists; - Decision Support Systems; - AI Principles; - Expert systems; - Relevance Feedback.					
7	**Prerequisite subjects / Co-requisite subjects** None					
8	**Assessment Methods** Continuous Assessment – 20% Practical – 20% Examination – 60%					
11	**Frequency of Module** Semester 8					
12	**Name of Lecturer(s)** H_da: A. Steinmetz, K. Fischer, Succ. Krier CIT:					

13	**Other Information**

MI4_8.2 Media Interactivity, Applied Programming						
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**	
	x	148 h	5 cr	8. sem	1 sem(s)	
1	**Type of Course**		**contact hours**	**independent study**	**credits**	
	a) Lecture		2 SWS / 24 h	30 h	5 cr	
	b) Practical		2 SWS / 24 h	70 h		
2	**Teaching Methods** Lecture Practical Instructed single or group work					
4	**Learning Outcomes** At the end of the module the student should be able to: - Develop interactive media in a specified domain; - Describe the relevant concepts of that domain; - Assess and employ the technologies best suited to a particular solution; - Understand how those technologies can best be used in each case; - Implement and Test their Solutions.					
5	**Subject Aims** This module concentrates on the design and implementation techniques required for a specific problem domain and covers advanced concepts required for developing solutions in that domain. Several versions of the Module can be offered servicing different domains. **Indicative Content:** - Domain analysis; - Implementation Issues: Common implementation techniques/patterns for the target domain; - Compliancy issues: Creating solutions adhering to applicable standards; - Deployment: Issues related to the publication of the final product; - Testing;					
7	**Prerequisite subjects / Co-requisite subjects** None					
8	**Assessment Methods** Continuous Assessment – 20% Practical – 20% Examination – 60%					
11	**Frequency of Module** Semester 8					
12	**Name of Lecturer(s)**					

	h_da: CIT: Gary Couse, Valerie Renehan
13	**Other Information**

MM5_9.1 Media Management, Industry Context					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		144 h	5 cr	9. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Seminar	2 SWS / 24 h	120 h	5 cr

2 Teaching Methods

Lecture + presentation
Tutorial and seminar

4 Learning Outcomes

On successful completion of this module the students shall be able to:
- Demonstrate a critical awareness of recent and prospective issues, developments and opportunities in the media industry;
- Critically engage with established personnel in the media industries in order to expand existing knowledge and provide new insights on media creation, production and delivery;
- Identify and utilise the media industry's network of enterprises;
- Critically appraise new media products and services and provide an insightful report on their effectiveness and appropriateness to use.

5 Subject Aims

This module aims to give learners a detailed and up-to-date perspective on the digital media industry. Through invited presentations by industry experts the learner will have an opportunity to engage in direct dialogue with key personnel and potential employers. The module presents the learner with an insight into existing and prospective media strategies and affords an opportunity to investigate and present options for future development.

Indicative content:
Topics of the seminars include:
- Case studies of classical and unconventional media industry approaches;
- Examples and experiences with innovation management;
- (Best-) Practice reports;
- Strategies for digital media products and services;
- How to handle critical situations;
- How to handle stress.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – 40%
Project – 60%

11 Frequency of Module

Semester 9

12 Name of Lecturer(s)

h_da: NN, Hubert Eisner
CIT: Paul Green, Valerie Renehan

13	**Other Information**

MC5_9.1 Media Culture, Research Methods and Practice					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		144 h	5 cr	9. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	48 h	5 cr
	b) Practical	1 SWS / 12 h	60 h	

2 Teaching Methods

Lecture
Seminar
Presentation

4 Learning Outcomes

A student who has successfully completed this module/subject will be able to:

- Describe a range of research specific tools and techniques and select those most appropriate to a given problem or situation;
- Apply appropriate research methodologies to a wide range of research tasks;
- Practice standardisation, randomisation and assure internal and external validity of collected data and information;
- Construct an appropriate critical and methodological framework for postgraduate research;
- Implement chosen research methods in a systematic and rigorous manner, to summarise and reference data effectively, and to engage in critical evaluation of the outcomes;
- Develop own theories and apply them to his/her professional life.

5 Subject Aims

”Research Methods and Practice” introduces the learner to practical and experimental ways of gathering knowledge by researching in real-life environments and beyond the scope of published data. It will develop the students’ intellectual appreciation of their subject and the methods, processes and materials used in achieving this. The module presents techniques and methods used in the systematic analysis and interpretation of information along with effective forms of referencing and citation. The module is project based and supported by lectures in scientific methods of research.

Indicative Content:

- Identifying the research problem: developing the hypothesis, defining variables and selecting subjects; experimental design and case study;
- Information retrieval: types of information, methods of collation, analysis and interpretation;
- Ephemeral texts: the spoken word, communication media and phenomena: methods of analysis and interpretation;
- Empirical texts: participants in research, the use of observations: methods of analysis and interpretation;
- Written texts: transcripts, diaries, narratives, academic works: making a critique of the work of others, extracting theories, constructing discourse;
- The use of research methods and the idea of methodology: selecting appropriate methods, the research protocol; analysing results and determining significance; communicating results and replication, summarising data, referencing research outcomes;
- Referencing methodologies and standards;
- Online research strategies and techniques, citing online sources.

7 Prerequisite subjects / Co-requisite subjects

None

8	**Assessment Methods** Continuous assessment – 60% Project – 40%
11	**Frequency of Module** Semester 9
12	**Name of Lecturer(s)** h_da: Hans Puttnies CIT: Ann Wilson
13	**Other Information**

MD5_9.1 Media Design, Project Proposal					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		300 h	10 cr	9. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Seminar	4 SWS / 48 h	252 h	10 cr

2	**Teaching Methods** Seminar
4	**Learning Outcomes** At the end of the module the student should be able to: - Evaluate elements of media content critically and in respect to public interest; - Develop ideas methodically and keep them in focus through all stages of raw material work; - Create valuable content by writing, interview, document presentation, and scenic recreation; - Clear all content juridically and economically.
5	**Subject Aims** Research, lit review, focus concept develop a strategy for the implementation of a Masters project. ”Project Proposal” is a module that informs and clarifies aspects of a master project.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous assessment – 100%
11	**Frequency of Module** Semester 9
12	**Name of Lecturer(s)** h_da: all CIT:
13	**Other Information**

MT5_9.1 Media Technology, Emerging Technologies					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		296 h	10 cr	9. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	a) Theory	2 SWS / 24 h	48 h	10 cr
	b) Practical	2 SWS / 24 h	200 h	

2 Teaching Methods

Lecture + presentation
Studio/lab presentation + practice
Demonstration

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Demonstrate understanding of current trends in technologies;
- Describe the major conferences in the respective areas;
- Ability to read understand and evaluate technical research papers and publications;
- Ability to conceptualize, compose and write technological publications.

5 Subject Aims

- Point out emerging trends in the resp. fields;
- Presentation of on-the-edge topics from international research / development conferences;
- Identifying the basic essential structure and content of research publications;
- Explain visualisation techniques to present complex technological concepts.

Indicative Content:
- Emerging trends in the field of audio / video / 3D studio technology
  (such as, CHI, HCI, SIGGRAPH, EUROGRAPHICS, VIS, ICASSP, EUROSPEECH, IBC, eDIT …)
- Presenting technical research proposals and outcomes
- IEEE Paper Format, ACM Paper Format, Harvard Paper Format, Springer Journal format

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment and Practical – 100%

11 Frequency of Module

Semester 9

12 Name of Lecturer(s)

h_da: K. Fischer, A. Steinmetz, Th. Carlé, S. Breitsameter, M. Bergfeld
CIT: G. Couse, V. Renehan, P. Green

13 Other Information

MP5_10.1 Media Project, Master Project					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
x		900 h	30 cr	10. sem	1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Project	10 SWS / 120 h	780 h	30 cr

2 Teaching Methods

Assisted single work or team work with individual responsibilities
Project work
Colloquium

4 Learning Outcomes

The objective of the Master project is the proof of his/her ability to:

- Conduct informed independent research in an interdisciplinary context, informed by the most recent debates within the particular sub-field of his or her chosen focus to art, design, media, technology and/or informatics;
- Demonstrate comprehensive understanding of current and future trends within the particular subfield of media;
- Conceive an independent media product, derived from an individual mindset and informed by the theories of media and possible future trends in media, media technology and/ or media informatics;
- To initiate and direct work in collaborative and in interdisciplinary contexts;
- Interact in a professional manner with experts in various sub-fields of media;
- Demonstrate the Integration of critical thinking and the application of insight, emergent from current theoretical debates, into all aspects of practical work in their chosen sub-field of media;
- Understand the broader remit and the social, economic and public role of the particular sub-field of media as evidenced in specific proposals for future work.

5 Subject Aims

The main subject aim of the Master project is to enable the learner to contribute to the development of media as a communications medium. The Master topic should be the result of an independent approach to the issues identified through previous studies and focused research. It should be informed but not limited by current thinking in pertinent fields of research and practice and should extend our understanding and/or knowledge of the topic under investigation.

By addressing pertinent issues within the sectors of media systems, games, interactive media, video production, sound production, post production or experimental media the project outcomes should enhance our general and specific knowledge of the issues addressed.

7 Prerequisite subjects / Co-requisite subjects

All modules of semester 7-9

8 Assessment Methods

Project /Dissertation – 100%
Colloquium

11 Frequency of Module

Semester 10

12 Name of Lecturer(s)

	h_da: All professors and lecturers CIT: Masters Project lecturers
13	**Other Information**

Media Elective Projects

Overall Learning Outcomes

On successful completion of this module the student shall be able to:
- Develop and describe media concepts in a broad cultural and social horizon;
- 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 and technical skills to achieve a high quality media product;
- Evaluate and assess the product or service completed from the success and functionality of the design but also from a cultural perspective.;
- Integrate different media and different techniques to a complex product.

Subject Aims

This module allows the student to specialise in some fields of media production up to their personal interest and abilities, such as video production, iTV production, animation, games, media technology or others. In this way they can go deep in the selected area and they can achieve special knowledge and abilities in that field. It is also possible to take a wide range of media application in order to achieve conceptual abilities.

The following subjects can be elected:
- Advanced Animation
- Advanced Video Production
- Advanced Graphic Interface Design
- Advanced Post Production
- Advanced Image Creation
- Music & Technology
- iTV Concepts and Production
- Media Experiments
- Advanced Game Design
- Advanced Media Systems
- Advanced System Technology
- Advanced Interface Technology
- Web Application
- 3D Interactive Environments
- Music Performance
- Media Events and Marketing
- E-Learning

ME_1 Media Elective Project, Advanced Animation					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

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

- Create a storyboard and task listing for an animation;
- Outline a range of core of editing and production tools for tools for both 2D & 3D animation;
- Design a short 2D animation using a range of techniques;
- Design a short 3D animation using a range of techniques relating to modelling, lighting, cameras, materials, textures, animation and rendering;
- Outline the process of integrating animation in a broad range of delivery environments to include the web, a video editing/compositing environment such as Final Cut Pro or After Effects, an on-line authoring environment such as Director or authorware.

5 Subject Aims

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.

Indicative Content:

Advanced Animation Overview:
Analysing a range of animation types with specific consideration given to the context and function of the animation within the overall design of a given product. Analysis includes online and offline products or services. Differences and similarities between traditional and contemporary digital methods of producing animation. Overview of 2D/3D animation concepts relating to analogue and digital animation. Examine in detail established practices, styles, narratives and elements of visual language employed in animation for multimedia.

Animation Methods 1:
A range of methods applicable to the production of short 2D web-based or feature-length animation such as Storyboarding techniques, key framing, tweening, onion skinning, timing and frame rates.

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.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment– practical examination by studio/portfolio presentation/display – 100%
11	**Frequency of Module** Semester 3 – 5
12	**Name of Lecturer(s)** h_da: Tilmann Kohlhaase, all animation and design teachers CIT: Paul Green, Phil Curtin, Trevor Hogan, Hugh McCarthy, Johnny McCarthy
13	**Other Information**

ME_2 Media Elective Project, Advanced Video Production					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

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.

5 Subject Aims

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.

Indicative Content:

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.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment– practical examination by studio/portfolio presentation/display – 100%
11	**Frequency of Module** Semester 3 – 5
12	**Name of Lecturer(s)** h_da: Thomas Carlé, all animation, video, sound and design teachers CIT:
13	**Other Information**

ME_3 Media Elective Project, Advanced Graphic Interface Design					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Critically discuss the positive and negative components in an existing working user interface and provide recommendations for improvement;
- Use a professional project management from brief and concept through to implementation and presentation;
- Design an interface using typography as a major visual component;
- Outline the process of developing a graphic template for animated user interface;
- Produce a working animated interface based on an initial brief.

5 Subject Aims

This module is designed towards developing the student's existing knowledge with regard to graphic user interface design. It is intended that the subject will raise the student's ability to visualise an interface in a way that facilitates pleasing visual aesthetic qualities and easy of use. The practical assignment should demonstrate the student's ability to design and build an advanced graphic interface using animate components that are seamlessly merged with the design.

Indicative Content:

Product Analysis:
Analysing a range of multimedia products from the perspective of their visual interface design; analysing the interfaces with regard to the interactive utilities included in the screen design and the user feedback (audio and visual). Examining the products' design.

Advanced Typography:
An overview of advanced techniques in contemporary typographic practice; an analysis of a range of graphic user interfaces that employ typography as a main feature for navigation and illustration; the use of typography as visual metaphor or sign as well providing legible text based information.

Metaphor in Screen Design:
An analysis of a range of graphic user interfaces that successfully employ visual metaphors through icon design. The graphic user interfaces analysed could be from existing operating systems or interfaces targeted at a user profile with specific needs.

Design for Animated Interfaces:
Designing of an interface incorporating moving graphic elements; using video and animation as visual feedback to the user; transferring an interface from the design environment to the authoring environment and applying interactive behaviours; use of masking techniques to embed animation (interactive or otherwise) seamlessly within the working user interface.

Concept and Production:
The student is required to develop an advanced animated interface for an online or offline based multimedia product. A brief is provided by the lecturer containing a list of topics regarding the use or

	application of the interface. The animated components, which may for example incorporate video and 2D or 3D animation, may be produced by the student or can be taken from stock footage. The practical involves the development of an interface design from brief through to implementation in an appropriate authoring environment. The final presentation of the assignment should be in the form that the user would experience it (for example, available through a browser or standalone executable file).
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%
11	**Frequency of Module** Semester 3 – 5
12	**Name of Lecturer(s)** h_da: Andrea Krajewski, all design, animation, media technology and media management teachers CIT:
13	**Other Information**

ME_4 Media Elective Project, Advanced Post Production					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

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.

5 Subject Aims

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.

Indicative Content:

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 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 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.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%
11	**Frequency of Module** Semester 3 – 5
12	**Name of Lecturer(s)** h_da: Tilmann Kohlhaase, all animation, video, sound, design and media technology teachers CIT:
13	**Other Information**

ME_5 Media Elective Project, Advanced Image Creation					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Express a personal and distinctive vocabulary for visual communication to a professional standard;
- Create a range of inventive and effective image solutions that demonstrate advanced conceptual, aesthetic and technical skills;
- Investigate the strategies, methodologies and art of image making for effective communication;
- Explore and analyse story structure and narrative as a communication tool;
- Understand the links between visual motif and meaning.
-

5 Subject Aims

This module is designed to develop each student's ability to express concepts through every aspect of manual, photographic and digital imagery that can then be applied within the context of the multimedia environment. The student will develop an astute personal visual language, which together with advanced technique and craft will enable them to operate within a fully co-ordinated communication paradigm.

Indicative Content:

Assemblage:
Assemblage, collage and montage used to explore the possibility of unusual and unexpected juxtapositions, using acquired and self-created imagery in a variety of media to produce digital and physical work with narrative content.

Style and Substance:
Exercises aimed at developing abilities to identify, organise and design visual information allowing effective communication before addressing final solutions.

Storytelling for Animation:
An investigation into narrative and visual design as preparation for the animation process, starting with the function of visual imagery in sequence. Students shall create or adapt stories for a multi-page on-line graphic novel. Lights and cameras as effects tools within compositing. Merging 2D and 3D material.

Typography as an Image:
Experimenting with typography and integrating it with a range of imagery to explore and interpret the meanings of given word sets.

Photographic Manipulation:
Photographic exercises to provide imagery as reference material and for direct manipulation both analogue and digital to create imagery that is expressive of visual thinking beyond the direct subject matter.

Personal Visual Notebook:
The ongoing development of structured visual reference and research notebooks consisting of studies

	of a wide variety of man-made and natural structures, collected ephemera, photographs and personal observations of people, environment and popular culture.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%
11	**Frequency of Module** Semester 3 – 5
12	**Name of Lecturer(s)** h_da: Katharina Kafka, all animation, video, media culture and design teachers CIT:
13	**Other Information**

ME_6 Media Elective Project, Music & Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

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

- Conceive and realize an individual audio project using the computer as principal tool;
- Conceive and realize audio projects in the studio and associated audio processing facilities;
- Use a professional project management from brief and concept through to implementation and presentation;
- Describe and use analogue and digital recording techniques (CDR, DAT, ADAT, Minidisk and tape formats);
- Master and present a high-quality, marketable recording product.

5 Subject Aims

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.

Indicative Content:

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.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%

11 Frequency of Module

12	**Name of Lecturer(s)** h_da: Sabine Breitsameter, all sound and media technology teachers CIT:
13	**Other Information**

ME_7 Media Elective Project, ITV Concepts and Production					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Understand and discuss iTV concepts;
- Use a professional project management from brief and concept through to implementation and presentation;
- Develop an iTV concept to produce a life iTV application;
- Concept and Design the structure and all media elements of a life iTV application;
- Implement a life iTV application with all components.

5 Subject Aims

In this module students get to know conceptual aspects, design aspects and technological aspects and principles of interactive television. With this experience the students develop a life ITV Application with all media elements and with all system components.

Indicative Content:
- Project 1: research, concept development, creative design and production of an MHP-based iTV application;
- Project 2: research, concept development, creative design and production of an IPTV-based;
- iTV application.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%

11 Frequency of Module

Semester 3 – 5

12 Name of Lecturer(s)

h_da: Hubert Eisner, all animation, video, design, audio and media technology teachers
CIT:

13 Other Information

ME_8 Media Elective Project, Media Experiments					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Understand and discuss media installations;
- reflect social, cultural and technological aspects of media installations;
- Concept and design media installations and experimental environments;
- Develop IO-devices ;
- Realise and implement media installations and experimental environments.

5 Subject Aims

Students analyse and explore famous installations in media art (inclusive excursions to media festivals or media art museums). Another field of exploration is scientific simulation and process visualisation. The students explore the functionality of various IO-devices (i.e. sensors, midi device, external devices) and make small experiments with them.
After that the students develop small installations, simulations or experimental environments. The medial object will be designed, produced and implemented with all its media elements and system components. For that they have to develop and to realise the necessary programs, interfaces and net works. The objects will be exhibited in public.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%

11 Frequency of Module

Semester 3 – 5

12 Name of Lecturer(s)

h_da: Hans Puttnies, all sound, design, video, animation, media culture and media technology teachers
CIT:

13 Other Information

ME_9 Media Elective Project, Game Design and Production					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Extend the ability to work with game- and rule-engines;
- Get a broad knowledge and usage of advanced expert systems, artificial intelligence, agent technology;
- Gain in-depth knowledge of existing and planned input/output devices relevant for game;
- Develop a game idea, a game story, game rules;
- Develop, design and implement characters and environments, game interfaces, sound.

5 Subject Aims

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.

Indicative Content:
The students develop and realise a game completely with interface, characters, environments and with all system components:
- Research and analysis of games;
- Game concepts, game ideas;
- Characters, Dialoque, 3D-Modelling, Setup ;
- Environments ;
- Sound Concept and Production;
- Rendering, Implementation, Usability;
- Documentation.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%

11 Frequency of Module

Semester 3 – 5

12 Name of Lecturer(s)

h_da: Tilmann Kohlhaase, all animation, design and media technology teachers
CIT:

13 Other Information

ME_10 Media Elective Project, Advanced Media Systems					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- Apply scientific methods in analysing media, user needs, socio-cultural contexts an media markets;
- Critically examine innovative forms of information technology in their social-cultural-context;
- Critically examine physical interfaces;
- Develop action processes considering alternative interface manipulation methods (gesture, voice entry, eye tracking, vital parameter, learning interfaces, etc.);
- Apply and combine complex technologies;
- Develop complex media systems (software development, programming and application of knowledge in networks technologies).

5 Subject Aims

The task is to develop a reasonable ubiquitous application with regard to a defined target group, its needs and an economical market perspective. The product has to be conceived with all components. It has to be developed as prototype, mock up or simulation.
To ensure the up-to-date-ness and relevance of the project topic it will be defined yearly in the run-up to the project-planning phase. Topics can be: ubiquitous education systems, products for the elderly, wearable media, smart objects, tangible media. The topic should be broadly interpretable to leave latitude for different markets, target groups and their demands. The product has to be revisable in terms of its economic efficiency, and marketing opportunities. Parallel ethical, social and legal aspect should be taken into consideration.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment (CA) – practical examination by studio/portfolio presentation/display – 100%

11 Frequency of Module

Semester 3 – 5

12 Name of Lecturer(s)

h_da: Christoph Busch, all media technology, media management, design and sound teachers
CIT:

13 Other Information

ME_11 Media Elective Project, Advanced System Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

On successful completion of this module the student 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.

5 Subject Aims

The students learn to apply 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

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%

11 Frequency of Module

Semester 3 – 5

12 Name of Lecturer(s)

h_da: Arnd Steinmetz, all media technology teachers
CIT:

13 Other Information

ME_12 Media Elective Project, Advanced Interface Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

On successful completion of this module the student shall be able to:
- In depth understand common user interface mechanics, methods and elements;
- Understand advanced user interface technologies;
- Critically discuss the positive and negative components in an existing user interface and provide recommendations for improvement;
- Develop user interfaces;
- Implement user interfaces.

5 Subject Aims

The students learn to apply advanced interface methods and technology.

Indicative Content:
- 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 of standard UI elements, programming of Standard UI elements, tabled sequences;
- HCI devices;
- Advanced HCI: I/O devices (pen, tangibles, A/V), gesture recognition, audio based input, video based input, haptic UI / force feedback;
- Mobile interfaces.

7 Prerequisite subjects / Co-requisite subjects

None

8 Assessment Methods

Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%

11 Frequency of Module

Semester 3 – 5

12 Name of Lecturer(s)

h_da: Arnd Steinmetz, all media technology teachers
CIT:

13	**Other Information**

ME_13 Media Elective Project, Media Events and Marketing					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)
1	**Type of Course**		**contact hours**	**independent study**	**credits**
	Practical		4 SWS / 48 h	102 h	5 cr
2	**Teaching Methods** Seminar, Studio/lab presentation, practice				
4	**Learning Outcomes** On successful completion of this module the student 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.				
5	**Subject Aims** In this module students develop and perform a media event. For the event they implement and realise the whole marketing and funding process. **Pieces to be exhibited** choose and arrange the pieces choose and arrange the speeches, speakers, moderation **personal management** moderators, speakers servant stuff technical stuff 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 relation magazine, offer in newspapers, announcements, web-site **marketing and project management** funding, entrance fee, finance management, finance controlling time table project management legal aspects
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%
11	**Frequency of Module** Semester 3 – 5
12	**Name of Lecturer(s)** h_da: Thomas Burnhauser, all video, animation, design and media management teachers CIT:
13	**Other Information**

ME_14 Media Elective Project, E-Learning: Theory and Technology					
mandatory	**elective**	**student workload**	**total credits**	**semester**	**duration**
	x	150 h	5 cr		1 sem(s)

1	**Type of Course**	**contact hours**	**independent study**	**credits**
	Practical	4 SWS / 48 h	102 h	5 cr

2 Teaching Methods

Seminar, Studio/lab presentation, practice

4 Learning Outcomes

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

- To critically describe the evolution of e-learning in terms of antecedent educational/technological traditions and to also critically evaluate its likely characteristics and form for the future;
- To 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;
- To critically describe and make use of the principal features of the main e-learning platforms, in particular Learning Management Systems and Virtual Classroom systems;
- To identify the main types of e-learning standards and articulate their purpose;
- To describe and apply a framework for selecting and using a range of different e-learning technologies and content development tools;
- To evaluate, select and use of a range of content development tools to create pedagogically effective e-learning content.

5 Subject Aims

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.

Indicative Content:

- 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.
7	**Prerequisite subjects / Co-requisite subjects** None
8	**Assessment Methods** Continuous Assessment – practical examination by studio/portfolio presentation/display – 100%
11	**Frequency of Module** Semester 3 – 5
12	**Name of Lecturer(s)** h_da: Arnd Steinmetz, all animation, video, design and media technology teachers CIT:
13	**Other Information**