

Faculty of Cultural Sciences (Cologne Game Lab)

Module Catalog

[Game Development and Research]

[M.A.]

Content

1 Program Description	3
2 Graduate Profile	3
3 Fields of Activity	5
4 Study Plan	6
5 Alternative Study Plan	6
6 Modules	7
6.1 [Experience Assessment]	7
6.2 [Equalization & Exchange]	8
6.3 [Media & Games: History & Theory - I]	10
6.4 [Critical Play & Adaptation]	12
6.5 [Media & Games: History & Theory - II]	14
6.6 [Professionalization & Experimentation]	15
6.7 [Media & Games: History & Theory - III]	17
6.8 [Master's Project]	19
7 Module Matrix	20

Module Catalog | Game Development and Research, M.A.

1 Program Description

The postgraduate program Game Development and Research is aimed at media professionals (e.g., writers, journalists, filmmakers, graphic artists) as well as professionals from the industry and research sectors (e.g., software developers, game designers, game artists, programmers, educators, curators, health professionals) who consider digital game development as part of their occupational field and area of expertise.

In addition to a successful Bachelor's degree or comparable academic degree, admission to the program requires at least twelve months of practical experience in a relevant field. The Master's program thus gains its specific profile in the targeted interweaving of scholarship, art and craft, tradition and innovation, practice and future orientation.

The MA Game Development and Research program is strongly project-oriented and lasts four semesters. It is designed to allow part-time work (a job in the industry, the development of a personal project, etc.). Attendance time is therefore kept as compact as possible. Students have 12 contact hours per week (not including project work and self-study time), all day on Mondays and on Wednesday evenings.

The program offers a highly international and interdisciplinary environment where students receive guidance in the development of numerous game design projects as well as the theoretical foundations necessary for a critical approach to the design and research of video games.

2 Graduate Profile

Strongly project-oriented, the continuing education program focuses on the close integration of research, teaching and industry. Parallel to the project work, lectures and seminars form the platform for a future-oriented scientific discourse and research into non-linear audio-visuality.

In addition to a successful Bachelor's degree or a comparable academic degree, admission to the program requires at least twelve months of practical experience in a relevant field. The Master's program thus gains its specific profile in the targeted interweaving of science, art and craft, of tradition and innovation, of practice and future orientation. Approximately 20 students will be accepted. They graduate with a "Master of Arts" (M.A.).

Graduates of the MA Game Development and Research should have acquired comprehensive artistic and academic, methodological, historical, and technical knowledge and skills for the conception, planning, development, production, and marketing of digital games and other non-linear interactive audiovisual media. This involves the acquisition of general "game literacy" which is indispensable for interdisciplinary collaboration in the games industry. The above-mentioned general game literacy includes knowledge and skills in game design, game arts, game programming, project management, economics and entrepreneurship, game and media studies, player research, and game analysis.

At the end of their studies, graduates should have gained the ability to plan, execute, and supervise the developmental process of non-linear AV projects. They are furthermore capable of interdisciplinary collaboration and have acquired a range of necessary soft skills in areas such as communication, presentation, and time management. In addition, graduates should have gained theoretical and historical perspectives as well as artistic and ethical orientations. They are familiarized with current academic questions on the production, use, and impact of non-linear audio visions, and can analyze games as a form of culture in their historical, cultural, societal, and economic contexts. All in all, they are able to participate in the interdisciplinary discourse on games, their players, and the surrounding cultures. Thus, graduates should have gained a broad store of reference knowledge as well as analytical and critical thinking skills useful for game development. Graduates are also able to critically judge the cultural and social effects emanating from their own work. Their ethical competencies encompass an engaged attitude towards one's own artistic-academic actions. Last but not least, graduates are prepared for work in international contexts and intercultural teams.

MA Game Development and Research graduates should be employable within the traditional global games industry, including studios of various sizes and focuses (AAA, Indie, Serious Games), and in different roles according to their personal specialization. Those roles include (but are not limited to): game designer, narrative designer, level designer, project manager, character designer, 2D artist, 3D artist, animator, gameplay programmer. Furthermore, they should be employable in other sectors that develop or use digital games or elements of digital games – e.g. in the form of “serious games” or as part of “gamification.” These sectors include, among others, education and training, teaching, material design, advertising and marketing, film and television production, press, visual arts, and museums, automotive, telecommunications, aviation, and aerospace. Furthermore, students should be prepared for self-employment and creating their own business start-ups.

Finally, graduates of the MA Game Development and Research are also trained and suitable for management and leadership tasks as well as for the role as founders and entrepreneurs. Finally, the graduates are well-rounded artistic-academic personalities who are not only capable of practical media work in the field of digital games and other gamified applications, both nationally and internationally, but also of further artistic-academic research and teaching, especially doctoral studies, in fields such as Game Design, Game Studies, Media Studies, Fine Arts etc. As a consequence, further professional fields open up, especially in the fields of education, media and cultural administration, in which the demand for digital games experts is continuously growing.

Occupation-related learning goals and competencies:

At the beginning of their studies, students must have at least one year of experience in a profession relevant to the gaming industry. The project-centered program builds on these experiences and deepens them. Continuous industry feedback is an integral part of teaching. Students acquire a rich set of methodological, theoretical, and design-practical skills to independently supervise and manage artistic-academic and artistic-economic projects.

(Inter-) Cultural learning goals and competencies:

Game developers must come to terms with the values and consequences of their productions. The CGL encourages students to take on this responsibility as culture creators by training them in critical judgment. Non-linear audio visions, especially games, are distributed globally as digital products. They, therefore, have an even greater impact than traditional art and entertainment far beyond the boundaries of the culture in which they were created. Increasingly, non-linear audio visions are designed and realized in intercultural teams. The course, therefore, focuses on intercultural and transnational aspects of game development and on dealing with different corporate cultures and hierarchy models.

Academic learning goals and competencies:

The research of non-linear audio visions, especially digital games, is in a dynamic development at the international level. Students familiarize themselves with central aspects of current scholarly and scientific questions concerning the production, use, and impact of non-linear audio visions. In lectures and seminars, methods of theory formation – research, analysis, criticism, synthesis – are imparted. The gained media-historical and media-theoretical insights are experimentally tested and applied in the entire range of courses. The Master's program thus enables students to conduct independent academic and artistic research.

The concluding Master's thesis allows for proving the acquired competencies on a selected topic. It also lays the foundation for an academic career. Graduates of the program can solve complex tasks in the fields of AV design and non-linear narration, as well as work internationally independently or in an intercultural team in a goal-oriented manner. Thanks to their context knowledge, they also have the ability to develop strategic concepts and implement them in practice. Through the combination of complex content production with theoretical-perspective teaching, independent creative personalities are trained who are able to react to technological, aesthetic, and economic changes in the area of non-linear audio visions and particularly in the gaming industry trend-setting.

3 Fields of Activity

The MA Game Development and Research focuses on equipping students with a diverse skill set essential for success in game development and gamification industries as well as in games- and AV-media research. MA GDR graduates will acquire competencies that qualify them to work in the following fields of activity: **Project Management, Game Design, Game Arts, and Media and Game Studies**. These fields of activity are mirrored in the study program's **focus fields** (see section 6. *Modules*).

Developing Games:

Graduates shape the defining medium of the 21st century. They create digital games in different roles related to the focus areas of **Game Design, Game Arts, Game Programming, and**

Media and Game Studies. Graduates work in interdisciplinary and international teams, as employees in development studios of different sizes and foci, and as freelancers and entrepreneurs. Through the program's strong focus on **Project Management**, graduates are able to work on AAA, indie, art, and educational games. MA Game Development and Research graduates contribute significantly to artistic expression, popular entertainment, knowledge transfer, and opinion-making in digital culture.

Communicating and Researching Games:

Graduates are producers and mediators of knowledge about the artistic and technical development as well as societal and cultural functions of games. They research and teach in the fields of **Game Design, Game Arts, Game Programming, and Game and Media Studies**, including various forms of research and its communication and transfer: industry research in development studios, applied and basic research at universities, journalistic communication, consulting, multiplier activities in state and private institutions such as museums, galleries, libraries, and cultural offices.

Teaching takes place on different levels: industry-based further education, vocational schools, and higher education. Our graduates contribute significantly to the social dissemination of media and games literacy.

Gamifying Experiences:

Graduates help to adapt the methods, services, and products of older established areas of administration and production to the requirements of digital technology and digital culture. By applying their state-of-the-art game development knowledge and skills, particularly in the areas of motivation and feedback, to other fields, they participate in the ongoing effort to streamline and gamify procedures in public institutions and a variety of trades and industries as diverse as telecommunication and automotive, management, and software development. Our graduates contribute significantly to making the advantages of digital work and workplace culture more accessible to a wider range of economic and social sectors.

4 Study Plan

Semester 0	Semester I	Semester II	Semester III	Semester IV
Experience Assessment 30 ECTS	Equalization & Exchange 12 ECTS	Critical Play & Adaptation 12 ECTS	Professionalization & Experimentation 12 ECTS	Master's Project 24 ECTS
	Media & Games: History & Theory I 10 ECTS	Media & Games: History & Theory II 10 ECTS	Media & Games: History & Theory III 10 ECTS	

5 Alternative Study Plan

All modules in the MA Game Development and Research can be repeated in a one-year rotation. For more information, please contact the study manager of the program.

6 Modules

6.1 [Experience Assessment]

Module Code:	MA.000
Module Title:	Experience Assessment
Type of Module:	Mandatory Module
ECTS Credits:	30 ECTS
Language:	English
Duration of Module:	6 Months
Recommended for Semester:	0 (Semester prior to the Studies)
Frequency:	Annual
Module Coordinator:	Module Directors: Prof. Björn Bartholdy and Prof. Dr. Gundolf S. Freyermuth
Lecturers:	Evaluation Committee: Prof. Björn Bartholdy, Prof. Dr. Gundolf S. Freyermuth, and various CGL faculty and staff
Learning Outcome:	<p>Students have to pass the “Experience Assessment” to get accepted into the MA GDR program. Consequently, the “Experience Assessment” module enables students to:</p> <ul style="list-style-type: none"> • provide the CGL with official documentation of their highest academic certificate/degree. • demonstrate their professional-practical experience (equivalent to at least one year in total) that is relevant to the production of nonlinear audiovisions. • demonstrate their skills and experience in, as well as their knowledge of, media production. • prove their sincere interest in, and personal ambition toward, the exploratory production of nonlinear audiovisions, as well as the theoretical interrogation of, and reflection upon, audiovisual media generally and their own creations specifically. • demonstrate their capacity to self-manage individual efforts as well as their ability to effectively work with a team. • demonstrate their ability to actively participate in academic discourse concerning media theoretical concepts, methodologies, and inquiries.
Module Content:	<p>1) Online Application</p> <ul style="list-style-type: none"> • Applicants provide the necessary personal, professional (1 year of work experience relevant to the production of nonlinear audio visions; this experience must be completed before students enroll. However, the twelve months may be the cumulative total of various positions/projects) and academic documentation (B.A. or M.A.) for the successful completion of the application. <p>2) Application Assignment</p> <ul style="list-style-type: none"> • A unique assignment to be completed within four weeks is sent to applicants who advance beyond the “Online Application” stage. • Application assignments call for students to submit an extensive outline for an audiovisual project. • Along with their project outline, applicants are asked to submit an essay in which they address an issue pertaining to media theory. <p>3) Interview</p> <ul style="list-style-type: none"> • Applicants who have advanced beyond the “Application Assignment” phase are invited for an online interview with CGL faculty.
Teaching and Learning Methods:	Discussion, evaluation of application materials and application assignment
Assessment Method:	Online application, application assignment, online interview
Workload	900 h

(25 - 30 h $\hat{=}$ 1 ECTS credit):	
Contact hours:	
Self-study:	
Recommended Prerequisites:	
Required Prerequisites:	Successful completion of all aspects of the application process
Recommended Reading:	
Use of the Module in Other Degree Programs:	This module must be successfully completed to study in the M.A. Game Development and Research
Particularities:	
Last update:	01.09.2023

6.2 [Equalization & Exchange]

Module Code:	MA.001
Module Title:	Equalization & Exchange
Type of Module:	Mandatory Module
ECTS Credits:	12 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	1
Frequency:	Annual
Module Coordinator:	Module Directors: Prof. Björn Bartholdy and Prof. Dr. Gundolf S. Freyermuth
Lecturers:	Module Instructors: Prof. Björn Bartholdy (Playing with Cinema), Guest Instructors (Playing with Theater, Playing with Video Games)
Learning Outcome:	<p>"Equalization & Exchange" aims to level up students' game production knowledge and skills across various (professional and academic) backgrounds through project work. It covers game design, game arts, game programming, and project management. In order to achieve the module's goal, students learn to:</p> <p>Focus: Project Management</p> <ul style="list-style-type: none"> familiarize themselves with the organizational, technological, and social structures of the Cologne Game Lab to enhance their effectiveness in artistic, academic, and entrepreneurial projects throughout their studies. engage in active media production and exchange of professional experiences with others, in order to form connections and to gain a deeper understanding of the concepts covered. collaborate closely with their peers on project work to develop artistic and technological competencies and cultivate teamwork skills essential for their academic and professional endeavors. establish and organize efficient work groups, enabling them to collaborate effectively in artistic, academic, and entrepreneurial projects during their studies and professional careers. structure and implement fully developed multimedia concepts in order to successfully plan and realize new projects. demonstrate a high proficiency in multimedia presentation skills, as well as effective facilitation of team work.

Focus: **Game Design**

- develop game designs for digital, analog, and hybrid prototypes in order to improve their audiovisual design skills and understanding of interactive rhetoric and dramaturgy.
- perform effective user-testing.
- understand and implement the notation and jargon of dynamic game methods and systems.

Focus: **Game Arts**

- develop the game art for digital, analog, and hybrid prototypes .
- analyze audiovisual materials from the perspective of art history.
- understand and implement basic methods of audiovisual design in the context of digital games.
- gain essential competencies in the field of 3D asset generation and animation.

Focus: **Game Programming**

- understand basic concepts of scripting and programming of digital games.
- program digital, analog, and hybrid prototypes.
- establish essential competencies with game development software.

Module Content:

1) Project: **Playing with Theater**

- Students create games using the means and methods of theater and performance art, relying on bodily representation, props, and analog environments.
- Seminar activities will focus on Live Games, from so-called Alternate Reality Games (ARG), Urban Games, and Pervasive Games to Live Action Role Playing (LARP) and performance installations and theater pieces that create game-like experiences.
- Similarities and differences between Live Gaming and digital gaming will be explored so that students understand that Live Gaming is a meaningful way to prototype and develop video games.

2) Project: **Playing with Cinema**

- Students explore the cinematic process as well as the history of cinema by creating their own digital narrative “shorts” using CGL’s motion capture system.
- Students gain practical knowledge in creating narrative structures, developing and manipulating 3D content, and virtual camera control in a 3D game design engine while reflecting artistically on space and format.

3) Project: **Playing with Video Games**

- Students plan and enact an iterative, documented design and development process.
- Students discuss and develop individual perspectives as game designers concerning topics such as player-centric vs. designer-centric game design.
- Through making their own video games, students are compelled to develop unique perspectives regarding the functions, capabilities, and challenges of emotional (self-) expression in game design.

All projects are flanked by hands-on sessions, such as the introduction to game engines, programming, working with 3D software, and game economics.

Teaching and Learning Methods: Lecture, seminar, presentation, project work, individual and group mentoring

Assessment Method: Documentation, evaluation, and discussion of projects

Workload
(25 - 30 h $\hat{=}$ 1 ECTS credit): 360h

Contact hours: 105h

Self-study: 255h

Recommended Prerequisites:	
Required Prerequisites:	MA.000 Experience Assessment
Recommended Reading:	
Use of the Module in Other Degree Programs:	
Particularities:	
Last update:	01.09.2023

6.3 [Media & Games: History & Theory - I]

Module Code:	MA.002
Module Title:	Media & Games: History & Theory - I
Type of Module:	Man dato ry Mod ule
ECTS Credits:	10 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	1
Frequency:	Annual
Module Coordinator:	Module Directors: Prof. Björn Bartholdy and Prof. Dr. Gundolf S. Freyermuth
Lecturers:	Module Instructors: Prof. Björn Bartholdy (Visual Design 101), Prof. Dr. Gundolf S. Freyermuth (Media & Game Studies 101), Prof. Dr. Emmanuel Guardiola (Game Design Theory 101), Various Guest Lecturers (Lecture Series)
Learning Outcome:	<p>"Media & Games: History & Theory - I" aims to provide students with a strong theoretical foundation in the history and theory of AV media. This knowledge enables them to write original academic works, engage critically with their own creations, enrich their creative and professional work, and prepare them for their upcoming MA theses. Through discussions and presentations in the respective lectures and seminars, students learn to:</p> <p>Focus: Media and Game Studies</p> <ul style="list-style-type: none"> • accumulate and critically reflect on essential knowledge in the fields of Visual Design, Media & Game Studies, and Game Design Theory, including the relevant matrix of social, cultural, and academic contexts. • accumulate and critically reflect on the aesthetic and socio-cultural repercussions of (audio)visual, (non)linear art and communication. • develop the ability to transfer and reappropriate knowledge from theory into practice and vice versa.

- actualize and amplify their proficiency in academic work, especially analysis, critique, and providing feedback.
- engage in academic discourse and apply theoretical fundamentals to their own research concerning audiovisual creations.
- establish a basis for (self)reflection on their own artistic output.
- develop the ability to reflect on their own artistic identity in relation to the cultural meaning and social impact of nonlinear audiovisions in general and digital games in particular.

Module Content:

1) Visual Design 101

- This seminar guides students through the history of visual art and design, highlighting compelling examples from both analog and digital media, such as photography, film, television, and digital games.
- Students sharpen their practical, critical, and theoretical understanding of the field through discussions of, and assignments concerning, the techniques and aesthetics of visual art and design, including design critique of (non)linear media products.

2) Media and Game Studies 101

- This seminar explores core elements of modern media history and game studies, focusing on digital media and culture, providing students with the theoretical and analytical tools necessary for critically interrogating (non)linear audiovisuality.
- Through in-class discussion as well as collaborative work and presentations, students establish a common ground of knowledge, including the fundamentals of game studies, the history of modern media, and the aesthetics of digital media.

3) Game Design Theory 101

- This seminar introduces the students to general gameplay principles and the gameplay loop concept. It also familiarizes them with the different intentions of video games, such as conveying emotions, messages, and experiences.
- The foundations to identify and formalize the core gameplay elements are established.
- Students explore the variety of games regarding intention, purpose, and structure.

4) Perspectives on Games and Gaming – The CGL Lecture Series

- This campus-wide lecture series presents a diverse group of renowned guests, including, among others, theorists, artists, and industry experts.
- Lecture topics are relevant for student projects and/or the academic, cultural, and socio-economic interrogation of nonlinear audiovisions, especially digital games.

Teaching and Learning Methods:	Seminar, lecture series, self-study
Assessment Method:	Documentation, essay, presentation, discussion
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	300h
Contact hours:	85h
Self-study:	215h
Recommended Prerequisites:	

Required Prerequisites:	MA.000 Experience Assessment
Recommended Reading:	
Use of the Module in Other Degree Programs:	"Perspectives on Games and Gaming – The CGL Lecture Series" is open to the entire CGL student body
Particularities:	
Last update:	

6.4 [Critical Play & Adaptation]

Module Code:	MA.003
Module Title:	Research & Experimentation
Type of Module:	Mandatory Module
ECTS Credits:	12 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	2
Frequency:	Annual
Module Coordinator:	Module Directors: Prof. Dr. Björn Bartholdy and Prof. Dr. Gundolf S. Freyermuth
Lecturers:	Module Instructors: n.n., Guest Instructors (Board Games, Serious Games, Nonlinear Adaptation, Mentoring)
Learning Outcome:	<p>The "Critical Play & Adaptation" module aims to enhance the students' ability to analyze trends in the game industry, including their own work, and learn to apply the rules and systems of adaptation in game design to both digital and analogue games. Through project work, students learn to:</p> <p>Focus: Project Management</p> <ul style="list-style-type: none"> harness the tension and synergy between linear and nonlinear content in the development of the content of their own. analyze and evaluate nonlinear solutions concerning their media, social, and ethical elements. conceptualize and develop interactive systems and structures. actively participate in Game Industry discourse, including topics such as cutting-edge technological developments and innovative design strategies. develop long-term strategies for work in the field of nonlinear media. reflect on the medial, social and ethical aspects of their own work. <p>Focus: Game Design</p> <ul style="list-style-type: none"> transfer and adapt linear content into nonlinear systems and structures, as well as further develop already established nonlinear solutions. analyze iterative scenarios and structures. develop the necessary knowledge of rhetoric and dramaturgy for the effective analysis and creation of interactive scenarios. <p>Focus: Game Arts</p> <ul style="list-style-type: none"> develop visual adaptations based on existing aesthetic concepts. implement game elements such as characters, levels, and interfaces. understand the basic conception and implementation of brand models in digital games.

	<p>Focus: Game Programming</p> <ul style="list-style-type: none"> analyze iterative scenarios and structures. understand game design structures with the goal of implementing them in game engines. grasp the process of the active implementation of game artifacts such as characters (animation), environment, interface etc..
Module Content:	<p>1) Project: Board Games</p> <ul style="list-style-type: none"> Creating their own board game, students initiate functional tests/playing rounds and receive critical feedback from peers and the course instructor throughout the many stages of the iterative development process. <p>2) Project: Serious Games</p> <ul style="list-style-type: none"> Students plan and put to practice an iterative and documented design and development process. Students participate in ongoing, in-class discussions of essential terminology such as serious, persuasive, fun, educational, responsible, and ethical to reinforce or question the individual perspectives of students as game designers. <p>3) Project: Nonlinear Adaptation</p> <ul style="list-style-type: none"> Students analyze and adapt linear narratives into nonlinear structures to bolster their understanding of the specifics of nonlinear storytelling Working in groups, students plan and execute an interactive project which they develop through several stages of practice prototyping in interactive engines and scripting systems. <p>All projects are flanked by hands-on sessions, such as the introduction to game engines, programming, working with 3D software and game economics.</p>
Teaching and Learning Methods:	Lecture, seminar, presentation, project work, individual and group mentoring
Assessment Method:	Documentation, evaluation, and discussion of projects
Workload (25 - 30 h \cong 1 ECTS credit):	360h
Contact hours:	105h
Self-study:	255h
Recommended Prerequisites:	
Required Prerequisites:	MA. 001 Equalization & Exchange
Recommended Reading:	
Use of the Module in Other Degree Programs:	
Particularities:	
Last update:	01.09.2023

6.5[Media & Games: History & Theory - II]

Module Code:	MA.004
Module Title:	Media & Games: History & Theory - II

Type of Module:	Mandatory Module
ECTS Credits:	10 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	2
Frequency:	Annual
Module Coordinator:	Module Directors: Prof. Dr. Björn Bartholdy and Prof. Dr. Gundolf S. Freyermuth
Lecturers:	Module Instructors: Prof. Björn Bartholdy (Visual Design 102), Prof. Dr. Gundolf S. Freyermuth (Media & Game Studies 102), Prof. Dr. Emmanuel Guardiola (Game Design Theory 102), Various Guest Lecturers (Lecture Series)
Learning Outcome:	<p>The "Media & Games: History & Theory - II" module complements "Critical Play & Adaptation" by aiming to broaden students' understanding of contemporary game research and production, including serious games, nonlinear adaptation, media, narratology, genre theory, cultural studies, sociology, and economics. Through seminars, lectures, and discussions, it enables students to:</p> <p>Focus: Media and Game Studies</p> <ul style="list-style-type: none"> • fuse academic and artistic perspectives to demonstrate how comparative historical knowledge and theoretical concepts can influence and expand creative praxis, especially the development of critical-analytical reflection and the creative utilization of one's own artistic potential – particularly in regard to the production of Serious Games and Nonlinear Adaptations. • accumulate and critically analyze orientational knowledge in the fields of contemporary media and art. • accumulate knowledge about the history of both Serious Games and Nonlinear Adaptation. • theorize and critically analyze the dynamics and development of digital media and digital art in general, and Serious Games and Nonlinear Adaptation specifically. • further develop their ability to transfer and reappropriate knowledge and theories from analog and digital forms of media. • expand their knowledge of the social, cultural and academic contexts of game development, specifically in conjunction with Serious Games and the adaptation of linear content into nonlinear formats. • further develop their proficiency in academic work, especially analysis, critique and providing feedback. • further develop their abilities to engage in academic discourse as well as apply theoretical fundamentals to their own research concerning Serious Games and Nonlinear Adaptations. • further develop their proficiency to reflect on their own artistic output. • further develop the ability to reflect on their own artistic identity in relation to the cultural meaning and social impact of nonlinear audiovisions. • establish an understanding of story and narration in adaptation for games • develop knowledge of impact-game design and its specificities in the game design process. • understand the role of signals and feedback systems. • reflect camera work in games and the "mise en scène".
Module Content:	<p>1) Visual Design 102</p> <ul style="list-style-type: none"> • Students further develop their practical, critical and theoretical understanding of visual art and design through discussions of, and assignments concerning, the techniques and aesthetics of Serious Games and Nonlinear Adaptation. <p>2) Media and Game Studies 102</p> <ul style="list-style-type: none"> • This seminar provides students with the theoretical and analytical tools necessary to interrogate Serious Games and Nonlinear Adaptation critically.

	<p>3) Game Design Theory 102</p> <ul style="list-style-type: none"> This seminar introduces students to impact game design and the topics of camera, signs, and game feedback. <p>4) Perspectives on Games and Gaming – The CGL Lecture Series</p> <ul style="list-style-type: none"> This campus-wide lecture series presents a diverse group of renowned guests, including, among others, theorists, artists, and industry experts. Lecture topics are relevant for student projects and/or the academic, cultural, and socio-economic interrogation of nonlinear audiovisions, especially digital games.
Teaching and Learning Methods:	Seminars, lecture series, self-study
Assessment Method:	Documentation, presentation, discussion
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	300h
Contact hours:	85h
Self-study:	215h
Recommended Prerequisites:	
Required Prerequisites:	MA.002 Media & Games: History & Theory I
Recommended Reading:	
Use of the Module in Other Degree Programs:	
Particularities:	
Last update:	01.09.2023

6.6 [Professionalization & Experimentation]

Module Code:	MA.005
Module Title:	Professionalization & Experimentation
Type of Module:	Mandatory Module
ECTS Credits:	12 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	3
Frequency:	Annual
Module Coordinator:	Module Directors: Prof. Dr. Björn Bartholdy and Prof. Dr. Gundolf S. Freyermuth
Lecturers:	Module Instructors: Prof. Björn Bartholdy (Professionalization Project, Experimental Games, Mentoring), Prof. Dr. Gundolf S. Freyermuth (Professionalization Project, Experimental Games, Mentoring), Prof. Odile Limpach (Professionalization Project)

Learning Outcome:	<p>The "Professionalization & Experimentation" module teaches students to navigate the commercial games market through financing options, self-publishing vs partnering with a publisher, and development and marketing strategies. The module emphasizes experimental game design to help students refine their skills as developers and cultivate their ability to innovate and lead creatively. This builds on the knowledge gained from the "Research & Experimentation" module. Through pitches and project work, students learn to:</p> <p>Focus: Project Management (Game Economics & Entrepreneurship)</p> <ul style="list-style-type: none"> ● establish a structure for pitching and documentation ● understand and implement a complete business strategy ● develop and present the documentation of a game to market it ● understand business planning for digital games and the framework of professional publishing ● accumulate the principles of game marketing and gain the ability to apply those to game projects under professional standards <p>Focus: Game Design</p> <ul style="list-style-type: none"> ● transfer and adapt principles of game design into commercial and experimental contexts ● understand the conception and concrete implementation of digital games, up to the game design document and its impact on the budgeting of a project ● conceptualize a game as a brand while also grasping the commercial dimension of the product ● accumulate existing knowledge of game design to turn it into independent, experimental directions <p>Focus: Game Design (Experimental Games)</p> <ul style="list-style-type: none"> ● fuse the acquired knowledge from the fields of Game Design, Game Arts, and Game Programming in one project ● expand students' creative and technical knowledge through close integration with the knowledge acquired in Media and Game Studies ● reflect and merge experimental and research-oriented approaches to create innovation <p>Focus: Game Arts</p> <ul style="list-style-type: none"> ● develop original aesthetic concepts ● reflect on design parameters in the competitive market environment ● evaluate the economic effects of the art pipeline in game production ● further develop their visual design repertoire and to expand their artistic bandwidth <p>Focus: Game Programming</p> <ul style="list-style-type: none"> ● assess technical implementation criteria in the field of professional game production ● implement new innovative approaches based on learned technical structures ● implement experimental programmatic approaches to achieve novel solutions
Module Content:	<ol style="list-style-type: none"> 1) Project: Professionalization <ul style="list-style-type: none"> ● The class covers project management, publishing, marketing, and financial modules on all the topics that impact the success of producing and publishing a game. The students will improve their presentation skills by practicing and getting peer reviews. 2) Project: Experimental Games <ul style="list-style-type: none"> ● This project combines the learning outcomes of the first two semesters in one project. Students are free to work in groups or to develop individual approaches. The supervisors suggest topics that support the experimental process of the project. Students can also bring in their ideas after consultation or potentially work towards their master's thesis.

	<p>3) Master Thesis Mentoring</p> <ul style="list-style-type: none"> Students may present ideas for their Master Thesis and receive feedback on the theoretical and practical parts from the lecturers and their peers. The discussion will cover the topic, structural questions, and academic, artistic, and technical aspects. <p>All projects are flanked by hands-on sessions, such as the introduction to game engines, programming, working with 3D software and game economics.</p>
Teaching and Learning Methods:	Lecture, seminar, presentation, project work, individual and group mentoring
Assessment Method:	Documentation, presentation, discussion
Workload (25 - 30 h \cong 1 ECTS credit):	360h
Contact hours:	105h
Self-study:	255h
Recommended Prerequisites:	
Required Prerequisites:	MA.003 Research & Experimentation
Recommended Reading:	
Use of the Module in Other Degree Programs:	
Particularities:	
Last update:	01.09.2023

6.7 [Media & Games: History & Theory - III]

Module Code:	MA.006
Module Title:	Media & Games: History & Theory- III
Type of Module:	Mandatory Module
ECTS Credits:	10 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	3
Frequency:	Annual
Module Coordinator:	Module Directors: Prof. Dr. Björn Bartholdy and Prof. Dr. Gundolf S. Freyermuth
Lecturers:	Module Instructors: Prof. Björn Bartholdy (Visual Design 103), Prof. Dr. Gundolf S. Freyermuth (Media & Game Studies 103), Prof. Dr. Emmanuel Guardiola (Game Design Theory 103), Various Guest Lecturers (Lecture Series)
Learning Outcome:	"Media & Games: History & Theory III" builds on the previous modules ("Media & Games: History & Theory I + II") to enhance students' critical reflection skills regarding their academic and artistic output. In order to further develop their understanding of contemporary game research, production, marketing, and economics to create marketable game products, student learn to:

<p>Focus: Media and Game Studies</p> <ul style="list-style-type: none"> • integrate academic and artistic perspectives to expand creative practice in developing their Professionalization Project and preparing for their Master Thesis. They also acquire and analyze orientational knowledge in contemporary media and art history relevant to their projects. • establish knowledge of marketing tools and market-relevant analysis. • advance their presentation skills to meet industry standards. • strengthen their ability to transfer and reappropriate knowledge and theories from analog and digital forms of media. • expand their understanding and appreciation of the social, cultural, and academic contexts of game development. • strengthen their proficiency in academic work, especially analysis, critique, and providing feedback. • further develop the ability to reflect on their technology-related issues, enabling students to overcome any technical obstacles they might encounter in the development phase. • further develop their ability to engage in academic discourse and apply theoretical fundamentals to their own research concerning their Professionalization Project and Master Thesis Preparation. • understand the principles and implementation of level design. • establish knowledge in the field of rational level design methodology. • expand the game development process with the help of playtesting. 	
Module Content:	<p>1) Visual Design 103</p> <ul style="list-style-type: none"> • Students further develop their practical, critical, and theoretical understanding of visual art and design through discussions of, and assignments concerning, the techniques and aesthetics of digital media with special emphasis placed on industry best practices. <p>2) Media & Game Studies 103</p> <ul style="list-style-type: none"> • This seminar provides students with the theoretical and analytical tools to interrogate cutting-edge Game Studies scholarship critically. <p>3) Game Design Theory 103</p> <ul style="list-style-type: none"> • This seminar centers around level design and the creative tools required for the design process. Students learn how to create meaning through level design and are introduced to rational level design methodology, playtesting, and working with player data. <p>4) Perspectives on Games and Gaming – The CGL Lecture Series</p> <ul style="list-style-type: none"> • This campus-wide lecture series presents a diverse group of renowned guests, including, among others, theorists, artists, and industry experts. • Lecture topics are relevant for student projects and/or the academic, cultural, and socio-economic interrogation of nonlinear audiovisions, especially digital games.
Teaching and Learning Methods:	Seminar, lecture series, self-study
Assessment Method:	Documentation, presentation, discussion
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	300h
Contact hours:	85h
Self-study:	215h
Recommended Prerequisites:	
Required Prerequisites:	MA.004 Media & Games: History & Theory – II
Recommended Reading:	

Use of the Module in Other Degree Programs:	
Particularities:	
Last update:	01.09.2023

6.8 [Master's Project]

Module Code:	MA.007
Module Title:	Master's Project
Type of Module:	Mandatory Module
ECTS Credits:	24 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	4
Frequency:	Once
Module Coordinator:	Module Directors: Prof. Dr. Björn Bartholdy and Prof. Dr. Gundolf S. Freyermuth
Lecturers:	Evaluation Committee: Prof. Björn Bartholdy, Prof. Dr. Gundolf S. Freyermuth, and various CGL faculty and staff
Learning Outcome:	<p>The "Master's Project" module enables students to develop the ability to later conceptualize, analyze, and realize further self-initiated nonlinear AV development endeavors at the intersection of professional and academic practice. By completing their MA theses (and the accompanying game project), students learn to:</p> <p>Focus: Project Management, Game Design, Game Arts, Game Programming</p> <ul style="list-style-type: none"> • cultivate distinctive problem-solving approaches through the creation of nonlinear content. • apply meta-concepts and meta-strategies to their own development process • accumulate differentiated experience in generating, developing, refining, and evaluating innovative ideas and concepts. • expand and strengthen their proficiency in technological conceptualization and development of nonlinear projects. • sharpen their understanding of the processes and economics of dynamic management. • strengthen their capacity to realize nonlinear media concepts. • apply usability data and user feedback to the betterment of the development process. • gain experience in planning and leading their own development project. • strengthen their multimedia-professional skills, including public speaking, pitching, moderating, networking and management. • produce publishable project documentation.
Module Content:	<p>1) Master Thesis</p> <ul style="list-style-type: none"> • Students produce an artistic-academic media project that demonstrates their ability to conceptualize and realize a worthwhile, marketable product with due regard to technological and economic standards, as well as aesthetic, cultural, and social considerations. • The master's thesis project provides students with professional experiences that meet and exceed the requirements of careers in nonlinear media in general and the game industry in particular. • Students (individually or in groups of 2 – 5) receive consultation from professors throughout the development of the Master Thesis project.

<p>2) Thesis Presentation and Defense</p> <ul style="list-style-type: none"> Students share their projects with the Module Directors as well as various CGL faculty and staff. <p>3) Master's Project Mentoring</p> <ul style="list-style-type: none"> Students present ideas for their Master's Project and receive (individual) feedback on the theoretical and practical parts from their supervisors. 	
Teaching and Learning Methods:	Thesis project, individual mentoring, feedback via thesis defense (Colloquium)
Assessment Method:	Thesis Presentation and Defense
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	720h
Contact hours:	11h
Self-study:	709h
Recommended Prerequisites:	
Required Prerequisites:	96 ECTS (Successful completion of the first three semesters of instruction)
Recommended Reading:	
Use of the Module in Other Degree Programs:	
Particularities:	
Last update:	01.09.2023

7 Module Matrix

Link to Module Matrix:

<https://docs.google.com/spreadsheets/d/1GzhcVyRnyUxMU8GLv6GsKgQrLMadRhaX/edit#gid=1350558244>

As outlined in the criteria for programs at TH Köln, programs distinguish themselves mainly through four criteria: a) Internationalization b) Interdisciplinarity c) Digitalization and d) Transfer.

The module matrix shows which modules contribute to which of the four distinguishing criteria.