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Faculty of Cultural Studies

# **Module Catalog**

## **Digital Games**

Master of Arts (M.A.)

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# Module Catalog | Digital Games, M.A.

## 1 Program Description

This postgraduate program is aimed at graduates of a thematically relevant Bachelor's program in subjects such as Game Arts, Game Design, or Game Programming. Within the framework of this Master, students are given the opportunity to continue their own artistic and scientific work at a postgraduate level through an in-depth study of the development and academic analysis of digital games. The program is characterized by the following curricular components: a) game development project (including a two-semester collaborative project as well as a final research and development project) b) a specialization in one out of the three subject areas "Game Arts", "Game Design", and "Game Programming" (plus Sound Design) c) Media and Game Studies & Economics and Entrepreneurship d) Teaching or Research Practice.

## 2 Graduate Profile

Graduates of the MA Digital Games degree track should have gained specialist knowledge and skills in one out of the three practice fields "Game Arts," "Game Design," and "Game Programming". They should also have further developed a holistic games literacy including knowledge and skills in the above-mentioned fields, and also sound design, project management, economics and entrepreneurship, game studies, player research, and game analysis. Above all, graduates should have acquired various artistic and academic skills required to design and pursue research and development projects at the intersection of theory and practice – including academic, methodological, artistic, technical, and managerial skills. On top of that, depending on their choice, they have either learned how to collaborate in a professional interdisciplinary research and development project (as a research assistant), or gained experience and skills in teaching of undergraduates (as a teaching assistant).

In comparison to graduates of undergraduate Game programs, graduates of the MA Digital Games can be characterized by higher specialist competencies, but and even more so by higher academic competencies and a more pronounced artistic personality. Graduates should have developed comprehensive artistic-academic action and reflection skills, which help to prove themselves long-term in the interdisciplinary, continuously-changing work contexts within and outside the games industry in leading roles, and also as founders.

As artists and researchers, they are able to actively contribute to the interdisciplinary discourse on games, their players, and the cultures around them. They furthermore have the ability to critically judge the cultural and social effects of 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.

Graduates should be employable within the traditional global games industry, including studios of various sizes and focuses (AAA, Indie, Serious Games), in different roles according to their specialization. Those roles include (but are not limited to): game designer, narrative designer, level designer, project manager, character designer, 2D artist, 3D artist, animator, and game-play 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, they should be prepared for self-employment and creating their own business startups.

In view of the dynamic development of audio-visual media in the process of digitization in general and the rapid development of the games industry in particular, graduates have the necessary knowledge of media history and media theory as well as sound artistic knowledge and perspectives to not only serve the status quo of this industry, but also creatively shape it for the future.

Graduates of the MA Digital Games are also trained and suitable (to a far greater extent than graduates of undergraduate Game programs) for management and leadership tasks as well as for the roles 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, Informatics, 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.

### 3 Fields of Activity

**Developing Games:** Graduates shape the defining medium of the 21st century. They create digital games, in different roles according to their specialization: in Game Arts, Game Design, and Game Programming. They work in interdisciplinary and international teams, as employees in development studios of different sizes and foci, as freelancers and entrepreneurs. They work on AAA games, indie games, art games, and educational games. Thereby, our graduates make significant contributions to artistic expression, popular entertainment, knowledge transfer, and opinion-making in digital culture.

**Communicating 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 Arts, Game Design, Game Programming, Sound Design for Games, Game Economics and Entrepreneurship, and Game Studies. This includes 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 at different levels: from industry-based further education to vocational schools, and to higher education. Thereby, 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 telecommunications and automotive, management and software development. Thereby, 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

<b>Module</b>	<b>ECTS Sem. 1</b>	<b>ECTS Sem. 2</b>	<b>ECTS Sem. 3</b>	<b>ECTS per module</b>	<b>ECTS per semester</b>
Collaborative Project: Game Studio 1	17			17	30
Advanced Game Arts 1 (Specialization Game Arts) <i>or</i> Advanced Game Design 1 (Specialization Game Design) <i>or</i> Advanced Game Programming 1 (Specialization Game Programming)	5			5	
Reflection & Community 1	5			5	
Advanced Media & Game Studies	3	3		6	
Collaborative Project: Game Studio 2		17		17	30
Advanced Game Arts 2 (Specialization Game Arts) <i>or</i> Advanced Game Design 2 (Specialization Game Design) <i>or</i> Advanced Game Programming 2 (Specialization Game Programming)		5		5	
Reflection & Community 2		5		5	
Master Thesis and Colloquium			25	25	
Reflection & Community 3			5	5	30

## 5 Alternative Study Plan

Module	ECTS Sem. 1	ECTS Sem. 2	ECTS Sem. 3	ECTS Sem. 4	ECTS Sem. 5	ECTS per module	ECTS per semester
Advanced Game Arts 1 (Specialization Game Arts) <i>or</i> Advanced Game Design 1 (Specialization Game Design) <i>or</i> Advanced Game Programming 1 (Specialization Game Programming)	5					5	13
Reflection & Community 1	5					5	
Advanced Media & Game Studies	3					6	
Advanced Game Arts 2 (Specialization Game Arts) <i>or</i> Advanced Game Design 2 (Specialization Game Design) <i>or</i> Advanced Game Programming 2 (Specialization Game Programming)		3					
Advanced Game Arts 2 (Specialization Game Arts) <i>or</i> Advanced Game Design 2 (Specialization Game Design) <i>or</i> Advanced Game Programming 2 (Specialization Game Programming)		5				5	13
Reflection & Community 2		5				5	
Collaborative Project: Game Studio 1			17			17	22
Reflection & Community 3			5			5	
Collaborative Project: Game Studio 2				17		17	17
Master Thesis and Colloquium					25	25	25

## 6 Modules

### 6.1 Collaborative Project: Game Studio 1

Module Code:	MA.001
Module Title:	Game Studio 1
Type of Module:	Mandatory Module
ECTS Credits:	17 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	1
Frequency:	Annual
Module Coordinator:	Prof. Björn Bartholdy
Lecturers:	Prof. Björn Bartholdy (Media Design), Prof. Dr. Greta Hoffmann (Game Design), Prof. Dr. Sonia Fizek (Media & Game Studies), Prof. Dr. Emmanuel Guardiola (Game Design), Prof. Dr. Jonas Zimmer (Game Informatics), Prof. Nanette Kaulig (3D Animation & CG Art for Games), Prof. Dr. Roland Klemke (Game Informatics), Prof. Odile Limpach (Economics & Entrepreneurship for Games)
Learning Outcome:	<p>Game Studio 1</p> <p>Students are able to develop and iterate functional prototypes that demonstrate key features and experiential goal by</p> <ul style="list-style-type: none"> <li>• Formulating and communicating a feasible and original game concept based on design research</li> <li>• Collaborating effectively within a multidisciplinary team, taking responsibility for specialized contributions</li> <li>• Applying agile development methods, tools, and documentation techniques appropriate for a professional production pipeline</li> <li>• Engaging with external platforms and audiences through early-stage publishing and feedback loops</li> <li>• Reflecting on creative and collaborative processes to identify strengths, areas for improvement, and learning goals for the production phase</li> </ul> <p>in order to lay a solid and user-tested foundation for the following production phase.</p> <p>Economics and Entrepreneurship 1</p> <p>Students can analyze games in an economical context and apply strategies for positioning and marketing, by applying methods of project calculation, creating an economic strategy for their game projects, to be able to professionally market their future game projects.</p>
Module Content:	Overall project description:

In this two-semester module, students engage in the full lifecycle of a game development project within a simulated industry environment. Organized into multidisciplinary teams, students will conceive, design, develop, publish, and critically evaluate a playable digital game, with the goal of releasing a public version via an established platform (e.g. Steam). This project serves as a capstone experience that consolidates and deepens advanced knowledge and skills in digital game design, production, programming, art, financing, marketing and publishing. Students are expected to work autonomously, take ownership of their roles, and contribute meaningfully to their team while being guided by project supervisors and expert mentors. Throughout the module, teams will navigate all phases of the development cycle—from conceiving and pre-production to production, launch, and postmortem—integrating both academic rigor and industry-standard practices. Emphasis is placed on reflective practice, cross-disciplinary collaboration, peer review, user testing, iterative design, and external dissemination through festivals and competitions.

#### Project phase 1<sup>st</sup> semester:

In the first semester of the Game Studio, students form interdisciplinary development teams to initiate and plan a full-scale digital game project. This phase is focused on establishing a clear and feasible creative and technical vision, grounded in user needs, design research, and market potential.

Students begin by selecting a creative brief, conducting competitive analyses, and collaboratively generating multiple concepts. These are evaluated through structured ideation sessions and iterative prototyping. The selected concept is then developed into a playable proof of concept or vertical slice that demonstrates the game's core mechanics, visual direction, and player experience.

Throughout the semester, students take on specialized roles (e.g., design, programming, art, production) while engaging in shared leadership and decision-making processes. Emphasis is placed on building agile workflows, utilizing version control systems, and documenting decisions in production logs. Each team is expected to develop and maintain a coherent project plan, a stakeholder pitch, and an early community presence via a Steam store page or equivalent.

Faculty supervision is provided in the form of mentoring, milestone reviews, and individual feedback sessions. Students are assessed not only on the technical and creative quality of their output but also on their collaboration, professional conduct, and ability to reflect critically on their contributions.

#### Economics and Entrepreneurship 1

The students learn about structures for analyzing a game project from an economic perspective. They write and present a first iteration of a business and marketing strategy for their game project.

The students will gain insights into the structure of a project calculation, marketing and community plan and implement it to their game development project. The students will improve and strengthen their presentation skills by practicing and getting peers reviews.

#### Teaching and Learning Methods:

This module follows a practice-oriented, project-based learning approach, modeled after professional game development processes. Students work in multidisciplinary teams across two semesters to conceive, develop, and release a digital game.

Key methods include:

- **Project-Based Studio Work**  
Students work in dedicated project teams with guidance from academic mentors. The focus is on self-directed learning, collaboration, and applied problem-solving.
- **Mentoring and Feedback**  
Regular supervision and milestone reviews with staff and peers support reflective practice, quality control, and continuous improvement.
- **Milestone Presentations**  
Teams deliver structured pitches and project updates at key stages (concept, prototype, vertical slice, final release), receiving formative feedback.
- **Workshops and Expert Input**  
Short, targeted workshops (e.g., QA, marketing, publishing) complement project work and respond to the needs of each development phase.
- **Learning Logs and Peer Review**  
Individual reflection and peer assessment strengthen accountability, self-evaluation, and personal growth.

#### Assessment Method:

Game Studio 1: Project work,  
Economics and Entrepreneurship 1: Presentation

Workload (30 h $\triangleq$ 1 ECTS credit):	510h
Contact hours:	60h
Self-study:	450h
Recommended Prerequisites:	None
Recommended Reading:	<p>Bancroft, T. (2006). <i>Creating characters with personality</i>. Watson-Guptill.</p> <p>Barrett, L. F. (2017). <i>How emotions are made: The secret life of the brain</i>. Houghton Mifflin Harcourt.</p> <p>Costikyan, G. (2013). <i>Uncertainty in games</i>. MIT Press.</p> <p>Gamma, E., Helm, R., Johnson, R., &amp; Vlissides, J. (1994). <i>Design patterns: Elements of reusable object-oriented software</i>. Addison-Wesley.</p> <p>Gregory, J. (2018). <i>Game engine architecture</i> (3rd ed.). CRC Press.</p> <p>Gurney, J. (2010). <i>Color and light: A guide for the realist painter</i>. Andrews McMeel.</p> <p>Koster, R. (2013). <i>A theory of fun for game design</i> (2nd ed.). O'Reilly Media.</p> <p>Krug, S. (2014). <i>Don't make me think, revisited: A common sense approach to web usability</i> (3rd ed.). New Riders.</p> <p>Lynch, K. (1960). <i>The image of the city</i>. MIT Press.</p> <p>Murray, J. H. (1997). <i>Hamlet on the holodeck: The future of narrative in cyberspace</i>. MIT Press.</p> <p>Nystrom, R. (2014). <i>Game programming patterns</i>. Genever Benning.</p> <p>Robertson, S., &amp; Bertling, T. (2013). <i>How to draw: Drawing and sketching objects and environments from your imagination</i>. Design Studio Press.</p> <p>Salen, K., &amp; Zimmerman, E. (2003). <i>Rules of play: Game design fundamentals</i>. MIT Press.</p> <p>Schell, J. (2019). <i>The art of game design: A book of lenses</i> (3rd ed.). CRC Press.</p> <p>Sellers, M. (2017). <i>Advanced game design: A systems approach</i>. Addison-Wesley.</p> <p>Shaker, N., Togelius, J., &amp; Nelson, M. J. (2016). <i>Procedural content generation in games</i>. Springer.</p> <p>Williams, R. (2009). <i>The animator's survival kit</i>. Faber &amp; Faber.</p> <p>Yannakakis, G. N., &amp; Togelius, J. (2025). <i>Artificial intelligence and games</i> (2nd ed.). Springer.</p> <p>Akenine-Möller, T., Haines, E., &amp; Hoffman, N. (2018). <i>Real-time rendering</i> (4th ed.). CRC Press.</p>
Use of the Module in Other Degree Programs:	--
Particularities:	--
Last update:	April 2026

## 6.2 Advanced Game Arts 1

Module Code:	MA.002.1
Module Title:	Advanced Game Arts 1
Type of Module:	Elective Module
ECTS Credits:	5 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	1
Frequency:	Annual
Module Coordinator:	Prof. Björn Bartholdy, Prof. Nanette Kaulig
Lecturers:	Prof. Björn Bartholdy (Media Design), Prof. Nanette Kaulig (3D Animation & CG Art for Games)

Learning Outcome:	<p>Students are able to analyze and reflect upon the creation of game art elements in relation to the overall development process by</p> <ul style="list-style-type: none"> <li>• Students will be able to develop and document a cohesive visual identity for a game by applying graphic design principles and creating a structured design manual (sub-module "Visual Design").</li> <li>• analyzing and presenting specifically focused game art elements, e.g. playable character art and animation (submodule "Advanced Game Arts")</li> <li>• creating particular game elements within an existing game world (submodule "Advanced Game Arts")</li> <li>• experimenting with advanced concepts for game soundtrack (submodule "Sound Design")</li> <li>• applying appropriate research and analytical skills for sound targets in MA projects (submodule "Sound Design")</li> </ul> <p>in order to be prepared for the conceptualization of a research and development project in the area of Game Arts.</p>
Module Content:	<ol style="list-style-type: none"> <li>1. Visual Design 1: Students apply graphic design principles to develop a corporate identity for a game. Through practical work on a game-related brand and a systematic design process, they create a comprehensive design manual as the final outcome.</li> <li>2. Advanced Game Arts 1: Analysis of various specific Game Art elements (e.g. Playable Character or NPC Art and Animation) as well as practice in medium of choice (e.g. concept art/illustration, 2D/3D art and animation, interface)</li> <li>3. Sound Design</li> </ol>
Teaching and Learning Methods:	Lectures, seminars, tutorials, practical exercises
Assessment Method:	Visual Design & Advanced Game Arts: Learning Portfolio (100%), Sound Design: Assignment (pass/fail)
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	150h
Contact hours:	60
Self-study:	90
Recommended Prerequisites:	None
Recommended Reading:	Thon, J.-N., & Schröter, F. (2014). Video game characters: Theory and analysis. <i>Narratological Approaches to Video Games</i> , 3(1).
Use of the Module in Other Degree Programs:	--
Particularities:	--
Last update:	April 2026

### 6.3 Advanced Game Design 1

Module Code:	MA.002.2
Module Title:	Advanced Game Design 1
Type of Module:	Elective Module
ECTS Credits:	5 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	1

Frequency:	Annual
Module Coordinator:	Prof. Dr. Emmanuel Guardiola, Prof. Dr. Greta Hoffmann
Lecturers:	Prof. Dr. Emmanuel Guardiola (Game Design) Prof. Dr. Greta Hoffmann (Game Design)
Learning Outcome:	<p>Students are able to</p> <ul style="list-style-type: none"> <li>• Create complex systems, by applying the theories of complexity for analyzing and creating games</li> <li>• Understand playing behavior (types) and social structures in player groups by <ul style="list-style-type: none"> <li>○ observing and analyzing theories on player types and personas in competitive and cooperative games</li> <li>○ analyzing the motivations and behavior patterns of different player types</li> <li>○ exploring mechanics that enforce or negate certain behaviors</li> <li>○ understanding how game mechanics can influence social standards, structures, interactions and norms.</li> <li>○ exposure to psychological theories on human needs and personality types</li> </ul> </li> <li>• Ethically reflect on game design practices by discussing and applying current theories of ethics in design</li> <li>• Explore the meta-layer and become metanauts by <ul style="list-style-type: none"> <li>○ Detecting meta-patterns through metaphoric analysis</li> <li>○ Applying fundamental meta patterns to concrete game design decisions</li> <li>○ Learning methods to traverse from the concrete to the metaphoric realm and back</li> </ul> </li> </ul>
Module Content:	<ul style="list-style-type: none"> <li>• Social Structures in Player Groups</li> <li>• Introduction to complexity and complicatedness in games</li> <li>• Ethics in game design</li> <li>• Applied philosophy</li> <li>• Metaphors</li> </ul>
Teaching and Learning Methods:	Lecture, seminar, tutorial, practical exercises
Assessment Method:	<p>Students choose one of the offered seminars (Game Design courses) to be graded on (100%), the other are assessed as pass/fail.</p> <p>Assessment Methods (depending on the chosen course):</p> <ul style="list-style-type: none"> <li>• Project work or</li> <li>• Term Paper</li> </ul> <p>Sound Design: Assignment (pass/fail)</p>
Workload (25 - 30 h $\cong$ 1 ECTS credit):	150h
Contact hours:	60
Self-study:	90
Recommended Prerequisites:	None
Recommended Reading:	<p>Barrett, L. F. (2017). <i>How emotions are made: The secret life of the brain</i>. Houghton Mifflin Harcourt.</p> <p>Jung, C. G. (1959). <i>The archetypes and the collective unconscious</i> (R. F. C. Hull, Trans.; 2nd ed.). Princeton University Press.</p> <p>Panksepp, J. (1998). <i>Affective neuroscience: The foundations of human and animal emotions</i>. Oxford University Press.</p>
Use of the Module in Other Degree Programs:	--
Particularities:	--
Last update:	April 2026

## 6.4 Advanced Game Programming 1

Module Code:	MA.002.3
Module Title:	Advanced Game Programming 1
Type of Module:	Elective Module
ECTS Credits:	5 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	1
Frequency:	Annual
Module Coordinator:	Prof. Dr. Roland Klemke, Prof. Dr. Jonas Zimmer
Lecturers:	Prof. Dr. Jonas Zimmer (Game Informatics), Prof. Dr. Roland Klemke (Game Informatics)
Learning Outcome:	Students are able to conceptualize and realize software architectures for complex digital games by developing with advanced (web) technologies and new multimodal interaction forms and technologies; developing with and for advanced computer architectures; designing a virtual sound map, sound characterization; experimenting advanced concepts for game soundtracks (submodule: "Sound Design"); applying appropriate research and analytical skills for sound targets in MA projects (submodule: "Sound Design") in order to be prepared for the conceptualization of a research and development project in the area of Game Programming.
Module Content:	<ol style="list-style-type: none"> <li>1. General Game Programming 1: Multimodal Games: Introduction to multimodality, multimodal input (gestures, speech, motion, objects), multimodal output</li> <li>2. Advanced Game Programming 1: Game Engine Architectures: Game Loop, Parallel Computing, Network Computing, Script Language Development, Error Handling</li> <li>3. Sound Design</li> </ol>
Teaching and Learning Methods:	Lectures, seminars, tutorials, practical exercises
Assessment Method:	Advanced Game Programming: Project work, General Game Programming: Project work, Sound Design: Assignment (pass/fail)
Workload (25 - 30 h $\cong$ 1 ECTS credit):	150h
Contact hours:	60
Self-study:	90
Recommended Prerequisites:	None
Recommended Reading:	<p> Egges, A., Fokker, J. D., &amp; Overmars, M. H. (2013). <i>Learning C# by programming games</i>. Springer.</p> <p> Gregory, J. (2018). <i>Game engine architecture</i>. Taylor &amp; Francis.</p>
Use of the Module in Other Degree Programs:	--
Particularities:	--
Last update:	April 2026

## 6.5 Reflection & Community 1

Module Code:	MA.003
Module Title:	Reflection and Community 1
Type of Module:	Mandatory Module
ECTS Credits:	5 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	1
Frequency:	Annual
Module Coordinator:	Dr. Laura Frings
Lecturers:	Prof. Björn Bartholdy (Media Design), Prof. Bernd Diemer (Game Design), Prof. Dr. Greta Hoffmann (Game Design), Prof. Dr. Sonia Fizek (Media & Game Studies), Prof. Dr. Emmanuel Guardiola (Game Design), Prof. Dr. Jonas Zimmer (Game Informatics), Prof. Nanette Kaulig (3D Animation & CG Art for Games), Prof. Dr. Roland Klemke (Game Informatics), Prof. Odile Limpach (Economics & Entrepreneurship for Games)
Learning Outcome:	<p>Depending on their personal choice, ...</p> <p>students can apply their skills in design, art, programming, animation, or sound</p> <ul style="list-style-type: none"> <li>with the corresponding tools in development tasks in ongoing CGL research projects</li> <li>to gain hands-on experience in interdisciplinary research and prepare for future academic or industry work.</li> </ul> <p>students can contribute to humanities- or sociology-based inquiries</p> <ul style="list-style-type: none"> <li>with literature reviews, or documentation tasks, etc.</li> <li>to deepen their understanding of research methodologies in game and media studies.</li> </ul> <p>students develop learning materials based on their own skill set</p> <ul style="list-style-type: none"> <li>with the regular support from their advisor</li> <li>to practice translating expert knowledge into accessible educational resources.</li> </ul>
Module Content:	<p>Students can choose between working as research assistants in CGL's research projects or as teaching assistants in CGL's Bachelor program – of course, with individual guidance from their professors. Both options are designed to prepare students for future work in academia or the industry and can be built upon in the following semesters to allow for an individualized and self-determined learning curve per student.</p> <p>Tasks within research projects include but are not limited to: supporting development tasks on research projects in the specializations design, art, programming, animation, sound, or supporting research tasks from a humanities and sociology perspective. The individual arrangement is agreed upon by the advisor and the student.</p> <p>Tasks within teaching practice include but are not limited to the development of a teaching guide, on-site tutorial on a highly specialized topic, digital tutorials, podcasts. The individual arrangement is decided upon by the advisor and the student.</p>
Teaching and Learning Methods:	Lectures, individual and group mentoring
Assessment Method:	Project work or presentation (depending on choice)
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	150h
Contact hours:	48h
Self-study:	102h

Recommended Prerequisites:	--
Recommended Reading:	...
Use of the Module in Other Degree Programs:	
Particularities:	A general introduction to the Reflection & Community-Modules (including information on the procedures of Mentoring and Teaching & Research Practice) will be provided at the beginning of the first semester.
Last update:	August 2025

## 6.6 Advanced Media & Game Studies

Module Code:	MA.004
Module Title:	Advanced Media & Game Studies
Type of Module:	Mandatory Module
ECTS Credits:	5 ECTS
Language:	English
Duration of Module:	12 Weeks
Recommended for Semester:	1 and 2
Frequency:	Annual
Module Coordinator:	Prof. Dr. Sonia Fizek
Lecturers:	Prof. Dr. Sonia Fizek (Media & Game Studies), Dr. André Czauderna, Dr. Laura Frings
Learning Outcome:	<p>The core learning outcome of the Media &amp; Game Studies module is to enable the participants to intellectually enrich their creative and professional work and embed it within a broader academic, creative and historical context. Upon the completion of the module, the students will have been able to formulate their own research questions, write original academic works and make informed decisions about the research methods used in the context of their MA projects by:</p> <ul style="list-style-type: none"> <li>• studying foundational theories and concepts of contemporary Media and Game Studies,</li> <li>• evaluating central research methods within the field of Media and Game Studies,</li> <li>• applying those theories, concepts and methods to their own MA projects,</li> <li>• strengthening their ability to reflect their own creative work within the context of Media &amp; Game Studies.</li> </ul>
Module Content:	<p>Foundational as well as newly emerging thematic fields in contemporary Media and Game Studies, such as:</p> <p>a) Computational play b) games and digital society c) the interpretation of games (ludo-hermeneutics), d) game aesthetics e) production and developer studies, f) eco-critical game studies and critical game design – as well as theoretical contemplation of questions arising in the context of student MA projects.</p> <p>Introduction to research methods within the field of game studies, design and related disciplines, including various interdisciplinary research approaches and methodologies, ranging from artistic research to empirical data collection, qualitative data analysis, hermeneutics and formal design analysis. The focus on methods is to uncover the unique qualities of games as subjects of study and as methodological devices. This approach will prepare students for advanced academic and professional challenges, including the MA projects and theses.</p>

Teaching and Learning Methods:	<p>Lectures</p> <p>During introductory lectures to each of the sessions, the students learn about the core theories, concepts and research methods used within contemporary Media &amp; Game Studies</p> <p>Discussion seminars</p> <p>The students develop academic arguments and lead discussions in dialogue with introduced theories and concepts</p> <p>Group work and exercises</p> <p>The students apply theoretical knowledge in concrete contexts, for instance by applying the method of ludo hermeneutics in the seminar by analysing selected video games in groups</p> <p>Mentoring</p> <p>The students are divided into smaller sub-groups and closely mentored in their early research stage and the subsequent academic writing process</p>
Assessment Methods:	Semester 1: presentation, semester 2: term paper
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	300h
Contact hours:	30h
Self-study:	270
Recommended Prerequisites:	-
Recommended Readings:	<p>Aarjoranta, J. (2022). How are games interpreted? Hermeneutics for game studies. <i>Game Studies</i>, 22(3).</p> <p>Boellstorff, T. (2006). A ludicrous discipline? Ethnography and game studies. <i>Games and Culture</i>, 1(1), 29–35. <a href="https://doi.org/10.1177/1555412005281620">https://doi.org/10.1177/1555412005281620</a></p> <p>Boellstorff, T., Nardi, B. A., Pearce, C., &amp; Taylor, T. L. (2012). Interviews and virtual worlds research. In <i>Ethnography and virtual worlds: A handbook of method</i> (pp. 92–112). Princeton University Press.</p> <p>Bogost, I. (2007). <i>Persuasive games</i> (pp. 28–54). MIT Press.</p> <p>Čizek, S. (2024). Nature playing: On the experience of contemplating technologically mediated nature within the game world of <i>Riders Republic</i>. <i>Games and Culture</i>.</p> <p>Čizek, S., &amp; Eggel, R. D. (2025). Game makers against the climate apocalypse: Corporate sustainability, local action, and planetary care in game development. In <i>FROG – Future and Reality of Gaming</i> (post-conference anthology).</p> <p>Flanagan, M. (2006). Critical computer games. In <i>Critical play: Radical game design</i> (Chap. 7). MIT Press.</p> <p>Łosiński, M. (2022). How to interpret digital games? A hermeneutic guide in ten points. <i>Game Studies</i>, 22(2).</p> <p>Leclivère, E. (2020). Research-creation methodology for game research. <i>HAL</i>.</p> <p>McGranahan, C. (2018). Ethnography beyond method: The importance of an ethnographic sensibility. <i>Sites: A Journal of Social Anthropology and Cultural Studies</i>, 15(1), 1–10.</p> <p>Sicart, M. (2011). Against procedurality. <i>Game Studies</i>, 11(3).</p> <p>Sicart, M. (2023). Playing. In <i>Playing software: Homo ludens in computational culture</i> (pp. 1–28). MIT Press.</p>
Use of the Module in Other Degree Programs:	-
Particularities:	-
Last update:	April 2026

## 6.8 Collaborative Project: Game Studio 2

Module Code:	MA.005
Module Title:	Game Studio 2
Type of Module:	Mandatory Module
ECTS Credits:	15 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	2
Frequency:	Annual
Module Coordinator:	Prof. Dr. Jonas Zimmer
Lecturers:	Prof. Björn Bartholdy (Media Design), Prof. Dr. Greta Hoffmann (Game Design), Prof. Dr. Sonia Fizek (Media & Game Studies), Prof. Dr. Emmanuel Guardiola (Game Design), Prof. Dr. Jonas Zimmer (Game Informatics), Prof. Nanette Kaulig (3D Animation & CG Art for Games), Prof. Dr. Roland Klemke (Game Informatics), Prof. Odile Limpach (Economics & Entrepreneurship for Games)
Learning Outcome:	<p>Game Studio 2: Students are able to deliver a technically and artistically polished digital game product aligned with user expectations and industry norms by...</p> <ul style="list-style-type: none"> <li>• Collaborating within a production pipeline that meets real-world expectations for quality, deadlines, and team accountability</li> <li>• Demonstrating advanced skills in project management, QA, and stakeholder communication under time and resource constraints</li> <li>• Implementing community management and user feedback integration as part of a live product cycle</li> <li>• Analysing the creative direction and development process through academically sound reflection and postmortem documentation</li> <li>• Communicating their work through professional documentation and visual media suitable for public presentation and career promotion</li> </ul> <p>in order to ensure a successful market launch and sustainment of a high-quality, player-focused game within a simulated industry environment.</p> <p>Economics &amp; Entrepreneurship 2 The students can analyze and evaluate financial possibilities of a game project and complex business models of companies by applying business analysis frameworks, in order to position their future projects within the production value chain, also strengthening presentation skills by practicing and receiving peer reviews to be able to effectively pitch and market their future game project.</p>
Module Content:	<p>Overall project description: In this two-semester module, students engage in the full lifecycle of a game development project within a simulated industry environment. Organized into multidisciplinary teams, students will conceive, design, develop, publish, and critically evaluate a playable digital game, with the goal of releasing a public version via an established platform (e.g. Steam). This project serves as a capstone experience that consolidates and deepens advanced knowledge and skills in digital game design, production, programming, art, and marketing. Students are expected to work autonomously, take ownership of their roles, and contribute meaningfully to their team while being guided by project supervisors and expert mentors. Throughout the module, teams will navigate all phases of the development cycle—from concepting and pre-production to production, launch, and postmortem—integrating both academic rigor and industry-standard practices. Emphasis is placed on reflective practice, cross-disciplinary collaboration, peer review, user testing, iterative design, and external dissemination through festivals and competitions.</p>

	<p>Project phase 2<sup>nd</sup> semester:          In the second semester of the Game Studio, student teams enter the production and release phase of their digital game. Building upon the pre-production foundation, this phase is dedicated to implementing, polishing, and publishing the game while managing quality, scope, and player feedback in a live environment.          The semester begins with a shift from agile experimentation to milestone-driven development. Teams are expected to achieve a vertical slice, progress toward feature and content completeness, and ultimately release a public build on a platform such as Steam. This release must meet professional quality standards and incorporate essential user experience design, bug fixing, and performance optimization.          Marketing, community engagement, and external communication are integrated into the project workflow. Teams must manage feedback channels, coordinate announcements, and actively promote their game. Simultaneously, students are expected to document their development journey and gather analytics, user responses, and reviews for evaluation.          The module culminates in a final release presentation and a structured postmortem. Students critically reflect on both the product and the collaborative process, integrating feedback into personal learning goals and professional positioning.</p> <p>Economics &amp; Entrepreneurship 2          Students discuss the definition of publishing for games and the related activities. They reflect on the necessity of publishing partnerships and the best approach to finance their game projects. Students are introduced to the structure of financing for projects and companies in the gaming market. Students apply business analysis framework to critically analyze the sustainability of existing companies.</p>
Teaching and Learning Methods:	<p>This module follows a practice-oriented, project-based learning approach, modeled after professional game development processes. Students work in multidisciplinary teams across two semesters to conceive, develop, and release a digital game.          Key methods include:</p> <ul style="list-style-type: none"> <li>• Project-Based Studio Work              Students work in dedicated project teams with guidance from academic mentors. The focus is on self-directed learning, collaboration, and applied problem-solving.</li> <li>• Mentoring and Feedback              Weekly supervision and milestone reviews with staff and peers support reflective practice, quality control, and continuous improvement.</li> <li>• Milestone Presentations              Teams deliver structured pitches and project updates at key stages (concept, prototype, vertical slice, final release), receiving formative feedback.</li> <li>• Workshops and Expert Input              Short, targeted workshops (e.g., QA, marketing, publishing) complement project work and respond to the needs of each development phase.</li> <li>• Learning Logs and Peer Review              Individual reflection and peer assessment strengthen accountability, self-evaluation, and personal growth.</li> </ul>
Assessment Method:	<p>Game Studio 2: Project work          Economics &amp; Entrepreneurship 2: Presentation</p>
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	510h
Contact hours:	60h
Self-study:	450
Recommended Prerequisites:	Game Studio 1 (1st Semester)
Recommended Reading:	<p>Aulet, B. (2017). <i>Disciplined entrepreneurship</i> (2nd ed.). Wiley.          Berger, J. (2013). <i>Contagious: Why things catch on</i>. Simon &amp; Schuster.          Crowell, T. (2020). <i>The pocket lawyer for filmmakers</i>. Routledge.          Donovan, T. (Ed.). (2023). <i>Indie games: From dream to delivery</i>. CRC Press.          Eyal, N. (2014). <i>Hooked: How to build habit-forming products</i>. Portfolio.          Feld, B., &amp; Mendelson, J. (2019). <i>Venture deals</i> (4th ed.). Wiley.          Fitzpatrick, R. (2013). <i>The mom test: How to talk to customers and learn if your business is a good idea when everyone is lying to you</i>. Robfitz Ltd.          Godin, S. (2018). <i>This is marketing</i>. Portfolio.</p>

	<p>Gothelf, J., &amp; Seiden, J. (2021). <i>Lean UX</i> (3rd ed.). O'Reilly Media.</p> <p>Keith, C. (2010). <i>Agile game development with Scrum</i>. Addison-Wesley.</p> <p>Lipson, A. S., &amp; Brain, R. D. (2009). <i>Game development business and legal guide</i>. Premier Press.</p> <p>Moore, G. A. (2014). <i>Crossing the chasm</i> (3rd ed.). HarperBusiness.</p> <p>Nystrom, R. (2014). <i>Game programming patterns</i>. Genever Benning.</p> <p>Osterwalder, A., &amp; Pigneur, Y. (2010). <i>Business model generation</i>. Wiley.</p> <p>Ries, E. (2011). <i>The lean startup</i>. Crown Business.</p> <p>Schell, J. (2019). <i>The art of game design: A book of lenses</i> (3rd ed.). CRC Press.</p> <p>Schreier, J. (2017). <i>Blood, sweat, and pixels</i>. Harper Paperbacks.</p> <p>Schreier, J. (2021). <i>Press reset</i>. Grand Central Publishing.</p>
Use of the Module in Other Degree Programs:	--
Particularities:	--
Last update:	April 2026

## 6.9 Advanced Game Arts 2

Module Code:	MA.006.1
Module Title:	Advanced Game Arts 2
Type of Module:	Elective Module
ECTS Credits:	5 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	2
Frequency:	Annual
Module Coordinator:	Prof. Björn Bartholdy, Prof. Nanette Kaulig
Lecturers:	Prof. Björn Bartholdy (Media Design), Prof. Nanette Kaulig (3D Animation & CG Art for Games)
Learning Outcome:	<p>Students are able to analyze and reflect upon the creation of game art elements in relation to the overall development process by ...</p> <ul style="list-style-type: none"> <li>• Creating visual assets for game marketing and advertising (sub-module "Visual Design").</li> <li>• Developing a cohesive visual communication strategy (sub-module "Visual Design").</li> <li>• Evaluating design choices based on audience and campaign goals (sub-module "Visual Design").</li> <li>• Analyzing and presenting specifically focused game art elements, e.g. cinematic and interactive cutscenes (submodule "Advanced Game Arts")</li> <li>• Creating particular game elements within an existing game world, e.g. cutscene pre-production package (submodule "Advanced Game Arts")</li> <li>• Discussing sound design of contemporary game projects and research in relation to students MA projects (submodule "Music in Games")</li> <li>• Analyzing and choosing appropriate methods and tools for sound design in relation to students MA development projects (submodule " Music in Games ")</li> </ul> <p>in order to be prepared for the realization of a research and development project in the area of Game Arts.</p>

Module Content:	<ol style="list-style-type: none"> <li>1. Visual Design 2 (Focus: Communication, Marketing &amp; Advertising): Students apply graphic design principles to develop visual communication strategies for games, focusing on marketing and advertising contexts. Through practical work, they create branded assets and campaign materials aligned with a game's identity, culminating in a cohesive visual communication package</li> <li>2. Advanced Game Arts 2: Analysis of various specific Game Art elements (e.g. cinematic and interactive cutscenes) as well as practice in medium of choice (e.g. concept art/illustration, 2D/3D art and animation, interface)</li> <li>3. Music in Games</li> </ol>
Teaching and Learning Methods:	Lectures, seminars, tutorials, practical exercises
Assessment Method:	Visual Design & Advanced Game Arts: Learning Portfolio (100%), Music in Games: Assignment (pass/fail)
Workload (25 - 30 h $\triangleq$ 1 ECTS credit):	150h
Contact hours:	60
Self-study:	90
Recommended Prerequisites:	--
Recommended Reading:	Chen, P. (2007). Waiting for something to happen: Narratives, interactivity, and agency in video game cut-scenes.
Use of the Module in Other Degree Programs:	--
Particularities:	--
Last update:	April 2026

## 6.10 Advanced Game Design 2

Module Code:	MA.006.2
Module Title:	Advanced Game Design 2
Type of Module:	Elective Module
ECTS Credits:	5 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	2
Frequency:	Annual
Module Coordinator:	Prof. Dr. Emmanuel Guardiola, Prof. Dr. Greta Hoffmann
Lecturers:	Prof. Dr. Emmanuel Guardiola (Game Design), Prof. Dr. Greta Hoffmann (Game Design)
Learning Outcome:	<p>Students are able to</p> <ul style="list-style-type: none"> <li>• Write a screenplay/script – by using frameworks and methodologies from narrative design</li> <li>• Adapt the pace of the play experience - by using perspectives on time management in game design</li> </ul>

	<ul style="list-style-type: none"> <li>• Adapt their creative competencies to new or rare video game genres – by challenging their capability to analyze and to create a concept in the framework of this new genre</li> <li>• Apply designs based on new trends in the industry to increase the scope of their game design creative tools – by analyzing and creating game concepts</li> <li>• Keep up with changing player expectations and spot opportunities to innovate within their games by... <ul style="list-style-type: none"> <li>○ Researching macro and micro trends and their impact on player motivations</li> <li>○ Investigating patterns in consumer culture driving shifts in player sentiment, behavior, and expectation</li> <li>○ Researching trends by observing signals across culture</li> <li>○ Using a selected trend to imagine a new variation of a game</li> <li>○ Sharing and discussing initial analyses on how best to leverage this trend</li> <li>○ Creating a game that helps or hinders a certain sentiment, behavior, and expectation</li> <li>○ Understand object coherences on an ontological level in order to be prepared for the realization of a research and development project in the area of Game Design.</li> </ul> </li> </ul>
Module Content:	<ul style="list-style-type: none"> <li>• Screenplay practice: Step by step writing of a script, experiencing different writing methods and models.</li> <li>• Analyse time management in media and creating concepts challenging time as game mechanic</li> <li>• Explore mechanics that enforce or negate a certain sentiment, behavior, or expectation</li> <li>• Create a game that helps or hinders a certain sentiment, behavior, and expectation</li> <li>• Observe and analyze different player types and personas in competitive and cooperative games.</li> <li>• Understand the motivations and behavior patterns of different player types</li> <li>• Explore mechanics that enforce or negate a certain sentiment, behavior, and expectation</li> <li>• Create a game that helps or hinders a certain sentiment, behavior, and expectation.</li> <li>• Ontological exploration of game design elements</li> <li>• Deep Dive into cognitive psychology, neurology and language patterns</li> <li>• Extract, analyze and discuss game design principles, patterns and mechanics from real examples and example collections on an abstract layer</li> </ul>
Teaching and Learning Methods:	Lecture, seminar, tutorial, practical exercises
Assessment Method:	<p>Students choose one of the offered seminars (courses) to be graded on (100%), the other are assessed as pass/fail.</p> <p>Assessment Methods (depending on the chosen course):</p> <ul style="list-style-type: none"> <li>• Project Work</li> <li>• Term Paper</li> </ul> <p>Music in Games: Assignment (pass/fail)</p>
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	150h
Contact hours:	60
Self-study:	90
Recommended Prerequisites:	--
Recommended Reading:	<p>DeBellis, M. (1995). <i>Music as thought: The listener's freedom and academic expertise</i>. Oxford University Press.</p> <p>Huron, D. (2006). <i>Sweet anticipation: Music and the psychology of expectation</i>. MIT Press. <a href="https://doi.org/10.7551/mitpress/6575.001.0001">https://doi.org/10.7551/mitpress/6575.001.0001</a></p> <p>Zbikowski, L. M. (2002). <i>Conceptualizing music: Cognitive structure, theory, and analysis</i>. Oxford University Press.</p>

Use of the Module in Other Degree Programs:	--
Particularities:	--
Last update:	April 2026

## 6.11 Advanced Game Programming 2

Module Code:	MA.006.3
Module Title:	Advanced Game Programming 2
Type of Module:	Elective Module
ECTS Credits:	5 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	2
Frequency:	Annual
Module Coordinator:	Prof. Dr. Roland Klemke, Prof. Dr. Jonas Zimmer
Lecturers:	Prof. Dr. Jonas Zimmer (Game Informatics), Prof. Dr. Roland Klemke (Game Informatics)
Learning Outcome:	<p>Students are able to conceptualize and realize software architectures for complex digital games by</p> <ul style="list-style-type: none"> <li>• understanding and using generative idea with its capabilities and limitations</li> <li>• integrating various generative AI systems in the game design and development process</li> <li>• understanding and applying state-of-the-art principles of artificial intelligence in and for games</li> <li>• discussing music of contemporary game projects and research in relation to students' projects (submodule "Music in Games")</li> <li>• analyzing and choosing appropriate methods and tools for music in games in relation to students' projects (submodule "Music in Games")</li> </ul> <p>in order to be prepared for the realization of a research and development project in the area of Game Programming.</p>
Module Content:	<ol style="list-style-type: none"> <li>1. General Game Programming: New Technologies</li> <li>2. Advanced Game Programming: Advanced Artificial Intelligence for Games (Player Modelling, Procedural Generation, Automatic Gameplay, Neural Networks, Machine Learning, Deep Learning, Sequence Modelling)</li> <li>3. Music in Games</li> </ol>
Teaching and Learning Methods:	Lectures, Seminars, Tutorials, Practical Exercises
Assessment Method:	Advanced Game Programming: Project work, General Game Programming: Project work, Music in Games: Assignment (pass/fail)
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	150h
Contact hours:	60
Self-study:	90
Recommended Prerequisites:	--

Recommended Reading:	Georgios N.. Yannakakis, & Togelius, J. (2025). Artificial intelligence and games. Springer International Publishing AG. Stuart Russell and Peter Norvig (2022). Artificial Intelligence: A Modern Approach. ISBN: 978-0-13-604259-4
Use of the Module in Other Degree Programs:	--
Particularities:	--
Last update:	April 2026

## 6.12 Reflection & Community 2

Module Code:	MA.008
Module Title:	Reflection & Community 2
Type of Module:	Mandatory Module
ECTS Credits:	5 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	2
Frequency:	Annual
Module Coordinator:	Dr. Laura Frings
Lecturers:	Prof. Björn Bartholdy (Media Design), Prof. Dr. Greta Hoffmann (Game Design), Prof. Dr. Sonia Fizek (Media & Game Studies), Prof. Dr. Emmanuel Guardiola (Game Design), Prof. Dr. Jonas Zimmer (Game Informatics), Prof. Nanette Kaulig (3D Animation & CG Art for Games), Prof. Dr. Roland Klemke (Game Informatics), Prof. Odile Limpach (Economics & Entrepreneurship for Games)
Learning Outcome:	<p>Depending on their personal choice, ...</p> <p>students can apply their skills in design, art, programming, animation, or sound</p> <ul style="list-style-type: none"> <li>• with the corresponding tools in development tasks in ongoing CGL research projects</li> <li>• to gain more hands-on experience in interdisciplinary research and prepare for future academic or industry work.</li> </ul> <p>students can contribute to humanities- or sociology-based inquiries</p> <ul style="list-style-type: none"> <li>• with literature reviews, or documentation tasks, etc.</li> <li>• to further deepen their understanding of research methodologies in game and media studies.</li> </ul> <p>students develop learning materials based on their own skill set</p> <ul style="list-style-type: none"> <li>• with the regular support from their advisor</li> <li>• to further practice translating expert knowledge into accessible educational resources.</li> </ul>
Module Content:	Students can again choose between working as research assistants in CGL's research projects or as teaching assistants in CGL's Bachelor program – with continued guidance from their advisors. Building on the experiences and skills gained in the first semester, students are encouraged to pursue a deeper engagement with their chosen field. Both options remain designed to prepare students for future work in academia or the industry and contribute to an individualized and self-determined learning curve across semesters.

	Tasks within research projects include but are not limited to: taking on development tasks in the specializations design, art, programming, animation, or sound, or engaging more independently with research tasks from a humanities and sociology perspective. The specific scope of work is agreed upon by the advisor and the student.
	Tasks within teaching practice include but are not limited to: refining and expanding teaching guides, preparing and delivering tutorials on specialized topics, or producing digital tutorials and podcasts. The individual arrangement is, as before, decided upon by the advisor and the student.
Teaching and Learning Methods:	Lectures, individual and group mentoring
Assessment Method:	Project work or presentation (depending on choice)
Workload (25 - 30 h $\cong$ 1 ECTS credit):	150h
Contact hours:	48h
Self-study:	102h
Recommended Prerequisites:	--
Recommended Reading:	...
Use of the Module in Other Degree Programs:	
Particularities:	
Last update:	April 2026

### 6.13 MA Thesis

Module Code:	MA.009
Module Title:	MA Thesis
Type of Module:	Mandatory Module
ECTS Credits:	25 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	3
Frequency:	Every Semester
Module Coordinator:	Prof. Björn Bartholdy
Lecturers:	Prof. Björn Bartholdy (Media Design), Prof. Dr. Greta Hoffmann (Game Design), Prof. Dr. Sonia Fizek (Media & Game Studies), Prof. Dr. Emmanuel Guardiola (Game Design), Prof. Dr. Jonas Zimmer (Game Informatics), Prof. Nanette Kaulig (3D Animation & CG Art for Games), Prof. Dr. Roland Klemke (Game Informatics), Prof. Odile Limpach (Economics & Entrepreneurship for Games)
Learning Outcome:	Students are able to create a game as well as a thesis at postgraduate level, by <ul style="list-style-type: none"> <li>• conceptualizing and realizing a comprehensive development and research project – individually and/or collaboratively;</li> <li>• applying advanced methods of project management;</li> <li>• discussing artistic artifacts and/or academic research;</li> <li>• defending as well as critically evaluating their own work;</li> <li>• criticizing the creative and academic work of others,</li> </ul>

	in order to develop the ability to later conceptualize, analyze, and realize further self-initiated multi-month endeavors at the intersection of professional and academic practice.
Module Content:	<ol style="list-style-type: none"> <li>1. Individually and/or collaboratively, students realize their Master projects, i.e., they create prototypes of digital games or other nonlinear audiovisual works as well as they pursue empirical or theoretical research, i.e. write their individual MA theses. The weight of both parts is suggested by the student (and confirmed by the supervisor and examination board). The smaller part must be at least 20 % of the overall workload. The ratio students decide upon will dictate how the project &amp; thesis is graded.</li> <li>2. The MA Colloquium offers the students a platform to discuss their work in a group of peers as well as to get constant feedback from their supervisors.</li> <li>3. The module is concluded by a presentation (in front of the whole CGL community) as well as a Thesis defense with CGL faculty.</li> </ol>
Teaching and Learning Methods:	Mentoring, discussion, presentation
Assessment Method:	Term paper, project work, presentation, oral exam
Workload (25 - 30 h $\hat{=}$ 1 ECTS credit):	750h
Contact hours:	30h
Self-study:	720h
Required Prerequisites:	
Recommended Reading:	...
Use of the Module in Other Degree Programs:	--
Particularities:	--
Last update:	August 2025

### 6.14 Reflection & Community 3

Module Code:	MA.010
Module Title:	Reflection & Community 3
Type of Module:	Mandatory Module
ECTS Credits:	5 ECTS
Language:	English
Duration of Module:	16 Weeks
Recommended for Semester:	3
Frequency:	Annual
Module Coordinator:	Dr. Laura Frings
Lecturers:	Prof. Björn Bartholdy (Media Design), Prof. Dr. Greta Hoffmann (Game Design), Prof. Dr. Sonia Fizek (Media & Game Studies), Prof. Dr. Emmanuel Guardiola (Game Design), Prof. Dr. Jonas Zimmer (Game Informatics), Prof. Nanette Kaulig (3D Animation & CG Art for Games), Prof. Dr. Roland Klemke (Game Informatics), Prof. Odile Limpach (Economics & Entrepreneurship for Games)
Learning Outcome:	Depending on their personal choice, ...  students can apply their skills in design, art, programming, animation, or sound

	<ul style="list-style-type: none"> <li>with the corresponding tools in development tasks in ongoing CGL research projects</li> <li>to gain more hands-on experience in interdisciplinary research and prepare for future academic or industry work.</li> </ul> <p>students can contribute to humanities- or sociology-based inquiries</p> <ul style="list-style-type: none"> <li>with literature reviews, or documentation tasks, etc.</li> <li>to further deepen their understanding of research methodologies in game and media studies.</li> </ul> <p>students develop learning materials based on their own skill set</p> <ul style="list-style-type: none"> <li>with the regular support from their advisor</li> <li>to further practice translating expert knowledge into accessible educational resources.</li> </ul>
Module Content:	<p>Students may once more choose between working as research assistants in CGL's research projects or as teaching assistants in CGL's Bachelor program – still with guidance from their professors, but with an increased focus on more independent contributions. By the third semester, students are expected to build on their accumulated experience and take a more proactive role in shaping their tasks. Both options serve as preparation for future careers in academia or the industry and allow students to further develop their individualized and self-determined learning trajectory.</p> <p>Tasks within research projects include but are not limited to: taking responsibility for clearly defined work packages in the specializations design, art, programming, animation, or sound, or advancing research activities from a humanities and sociology perspective. The scope and focus of these tasks are jointly agreed upon by the advisor and the student, with room for students' own initiative.</p> <p>Tasks within teaching practice include but are not limited to: designing and leading tutorials or workshops, curating or expanding digital teaching formats such as tutorials and podcasts, and contributing to the evaluation and refinement of teaching materials. As before, the individual arrangement is decided upon by the advisor and the student.</p>
Teaching and Learning Methods:	Lectures, Individual and Group Mentoring
Assessment Method:	Project work or presentation (depending on choice)
Workload (25 - 30 h $\cong$ 1 ECTS credit):	150h
Contact hours:	48h
Self-study:	102h
Recommended Prerequisites:	--
Recommended Reading:	
Use of the Module in Other Degree Programs:	
Particularities:	
Last update:	August 2025

# 7 Module Matrix

Modulmatrix Teil 1: Profil				Studiengang: MA Digital Games				Fakultät für Kulturwissenschaften															
Letzte Aktualisierung: (Datum eintragen)				14.01.2024																			
Module		ECTS - Punkte	Zuordnung Handlungsfelder				Zuordnung Kompetenzen Absolvent*innenprofil					Zuordnung Studiengangskriterien											
Hinweise zum Ausfüllen (Zahlen mit Hinweisfeld bitte vor Übermittlung eintragen)				Die Modulmatrix dient der Zuordnung aller Module (bzw. Teilmodule) eines Studiengangs zu den Handlungsfeldern, für die der Studiengang qualifizieren will, sowie zu den Kompetenzmerkmalen, die das Absolvent*innenprofil kennzeichnen. Darüber hinaus erfolgt eine Zuordnung zu ausgewählten Studiengangskriterien. Über diese definieren die TH Köln ihr Selbstverständnis in Lehre und Studium. Damit die Matrix das Qualifikationsprofil abbilden kann, ist es erforderlich zu differenzieren, auf welche Handlungsfelder und Kompetenzmerkmale die Module jeweils primär einzahlen. Eine durchgängige Zuordnung der Module eines Studiengangs zu (mehr oder weniger) allen Feldern und Merkmalen lässt kein Profil mehr erkennen. Spalten können bei Bedarf herausgelagert (z. B. Studierphasen) bzw. gekürzt (z. B. wenn keine Teilmodule) werden.																			
Semester	Modul	ggf. Modulnummer	Teilmodule	ECTS	Gesamt	Developing Games	Communicating Games	Gamifying Experiences	[D Handlungsfeld hier eintragen]	General Game Literacy	Special Game Literacy	Academic Competencies	Managerial Competencies	Collaborative Competencies	Communicative Competencies	Personality Development	Global Citizenship	Internationalisierung	Interdisziplinarität	Transfer			
1	Collaborative Project: Game Studio 1		Game Studio 1	15	17	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x		
			Economics and Entrepreneurship 1	2		x	x		x		x		x		x		x		x		x		x
	Advanced Game Arts 1		Visual Design 1	2		5	x	x	x		x	x	x				x		x		x		
			Advanced Game Arts 1	2			x	x	x		x	x	x			x		x		x			
	Advanced Game Design 1		Sound Design	1		5	x	x	x		x	x	x				x		x		x		
			Advanced Game Design 1	4			x	x	x		x	x	x			x		x		x			
	Advanced Game Programming 1		Sound Design	1		5	x	x	x		x	x	x				x		x		x		
			Advanced Game Programming 1	2			x	x	x		x	x	x			x		x		x			
	Reflection & Community 1		General Game Programming 1	2		5	x	x	x		x	x	x				x		x		x		
			Sound Design	1			x	x	x		x	x				x		x		x			
Advanced Media & Game Studies		Teaching and Research Practice 1	5	6	x	x	x		x	x	x			x		x		x		x			
		Media & Game Studies 1	3			x			x		x			x		x		x					
2	Collaborative Project: Game Studio 2		Media & Game Studies 2	3	17	x				x		x			x		x		x				
			Game Studio 2	15		x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	
	Advanced Game Arts 2		Economics and Entrepreneurship 2	2		5	x	x	x		x		x			x		x		x			
			Visual Design 2	2			x	x	x		x	x	x			x		x		x			
	Advanced Game Design 2		Advanced Game Arts 2	2		5	x	x	x		x	x	x			x		x		x			
			Music in Games	1			x	x	x		x	x			x		x		x				
	Advanced Game Programming 2		Advanced Game Design 2	4		5	x	x	x		x	x	x			x		x		x			
			Music in Games	1			x	x	x		x	x				x		x		x			
	Reflection & Community 2		Advanced Game Programming 2	2		5	x	x	x		x	x	x			x		x		x			
			General Game Programming 2	2			x	x	x		x	x	x			x		x		x			
MA Thesis		Music in Games	1	25	x	x	x		x	x				x		x		x		x			
		Teaching and Research Practice 2	5		x	x	x		x	x	x			x		x		x		x			
Reflection & Community 3		MA Thesis	25	25	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x			
		Teaching and Research Practice 3	5	5	x	x	x		x	x	x			x		x		x		x			

Imprint:

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MDH-Template-Version: 2020-02-10\_V3