Hanze

Programme

Qualification awarded
Bachelor of Science

Length of the programme
48 months

ECTS credits
240

Level of qualification
Bachelor

Mode
Full-time

Language
English

School
Arts, Design & Built Environment

Locations
Groningen

Creative Media & Game Technologies

Profile of the programme

Making games to develop the future! Games are all around us in our daily lives and at the cutting edge of technology. In the Creative Media and Game Technologies programme (CMGT), students will work with new and nascent technologies to learn how to build the future by making games: learning how to explore new technologies and use them to create new worlds. The four-year international programme focuses on students who want to dive into the broad and fast changing field of digital technology.

The Bachelor degree programme Creative Media and Game Technologies comprises a programme of 240 ECTS credits. The main phase programme is composed of projects in which students further develop their game development skills and elective spaces in which they can broaden and/or specialize their skill set. The third year includes a minor and placement, offering the student experiences from outside the programme, both in the professional field and another programme.

With an emphasis on research, innovation, intercultural communication, and entrepreneurship, CMGT graduates young professionals who are generalists and specialists – the T-shaped professional. At CMGT, students are the focus, games are the tool for exploration, HILL is the method for learning, and using technology to create a better future is the goal for us all.

Learning outcomes

A. Contextualising and Framing

1. The CMGT professional synthesises and situates diverse perspectives to develop informed and appropriate solutions to complex problems.
    1. the student identifies own and others' assumptions under guidance to address a simple, structured problem.
    2. the student analyses own and others' assumptions and evaluates the relevance of contexts when developing a solution to a complex but structured problem.
    3. the student integrates own and others' perspectives to develop an informed solution to a complex and ambiguous problem.

2. The CMGT professional assesses the impact of their solution on the wider social context.
    1. the student is aware of the impact their solutions might have and can articulate them in their process.
    2. the student considers contextual factors in the implementation of their solutions.
    3. the student assesses the impact of their solution and its implementation on the context in which it will be deployed or operated.

3. The CMGT professional generates innovative concepts for technical solutions that are appropriate for complex contexts.
    1. the student can ideate a concept relevant to the problem context.
    2. the student can construct concepts and relates these to relevant theory and the needs of the users.
    3. the student can compose innovative concepts and justify these with relevant theories and co-created ideas.

B. Developing and Programming

1. The CMGT professional generates technical solutions by using the relevant knowledge and theories of digital technologies.
    1. the student demonstrates understanding of relevant technological solutions.
    2. the student can construct technical solutions informed by relevant knowledge and theories.
    3. the student synthesises relevant technological knowledge and theories to create complex technological solutions.

2. The CMGT professional iterates with digital technology to improve technical solutions.
    1. the student can reproduce appropriate technical solutions.
    2. the student alters and differentiates technical solutions using identified improvements.
    3. the student combines and compiles digital technologies to improve technical solutions.

3. The CMGT professional analyses and researches technological solutions to serve a wider goal.

1. the student can identify appropriate technical solutions to address a brief or assignment.
2. the student compares and selects appropriate technical solutions to satisfy complex problems.
3. the student can reframe technical solutions based on appropriate research and analysis to serve a wider goal.

C. Visualising and Prototyping

1. The CMGT professional visualizes technological solution by using relevant digital technologies.
    1. the student demonstrates understanding of relevant visualisation techniques.
    2. the student can make use of relevant visualisation techniques.
    3. the student can coherently visualise and produce technological solutions.
2. The CMGT professional develops digital interactive prototypes, using prototype development methods and techniques.
    1. the student knows and can reproduce appropriate prototyping methods.
    2. the student employs appropriate prototyping methods to develop digital interactive prototypes.
    3. the student can modify and transform appropriate prototyping methods to develop digital interactive products.
3. The CMGT professional experiments with digital technologies to elaborate concepts.
    1. the student can elaborate under guidance simple digital prototypes.
    2. the student elaborates digital prototypes using appropriate methods and techniques.
    3. the student independently experiments with digital prototypes to elaborate concepts.

D. Inquiring and Evaluating

1. The CMGT professional extrapolates improvements for the end user based on iterative evaluations of designs and prototypes.
    1. the student can conduct simple evaluations under guidance.
    2. the student can apply appropriate evaluation methods to identify improvements.
    3. the student can iterate with appropriate evaluation methods to extrapolate improvements for the end user.
2. The CMGT professional masters a range of user experience methods and techniques, including relevant theories, to improve the solution.
    1. the student acquires knowledge of user experience methods and techniques.
    2. the student can analyse the user experience, taking UX practices into account, to improve the solution.
    3. the student can elaborate and adapt UX practices and theories to justify and motivate improvements to solutions.

E. Organising and Implementing

1. The CMGT professional is capable of planning, implementing, monitoring, and managing process-based projects as part of a team and providing information on the progress.
    1. the student can plan, implement, monitor and manage process-based projects in a simple, structured context.
    2. the student can plan, implement, monitor and manage process-based projects in a complex but structured context.
    3. the student can plan, implement, monitor and manage process-based project in complex and ambiguous contexts.
2. The CMGT professional delivers technological solutions through relevant channels and translates them to appropriate business solutions.
    1. the student can identify appropriate channels relevant to their solution.
    2. the student can compare and choose appropriate channels and business models for their solution.
    3. the student can verify the value for and deploy their technological solutions to appropriate channels.
3. The CMGT professional can convincingly communicate the added value and function of a concept or solution amongst clients, team and users.
    1. the student describes and presents a product or concept in a structured context.
    2. the student discusses and justifies the added value of a chosen concept or solution in a complex context utilising appropriate means of communication.
    3. the student exhibits and defends the chosen functionality of a chosen solution in multiple contexts in a clear, convincing and inspiring manner.

F. Futures Innovating

1. The CMGT professional reframes new technological trends and instantiates them into realisable solutions.
    1. the student is aware of new technological trends and can instantiates them under guidance.
    2. the student experiments with new technological trends and models a realisable solution.
    3. the student reframes technological trends and instantiates into realisable solutions.

2. The CMGT professional imagines innovative concepts and solutions to address previously unaddressed problems or situations.
    1. the student infers and indicates concepts and solutions to complex problems.
    2. the student can experiment with innovative concepts to address complex or complicated situations.
    3. the student designs innovative concepts that address ambiguous situations.
3. The CMGT professional can imagine different futures and can take the necessary steps to reach the desired future.
    1. the student is aware of the impact of existing technologies and their consequences.

    2. the student can experiment with different solutions and reflect upon their impacts and consequences.
    3. the student considers the consequences and impact of their solutions and iterates them to achieve desired futures.

G. Self-fashioning

1. The CMGT professional manages their own development, is capable of formulating learning needs, can reflect on and takes responsibility for their own learning process.
    1. the student is able to name their own strengths, can formulate simple learning goals and takes action to fulfil learning goals through an iterative process.
    2. the student knows their own strengths and weaknesses, can formulate complex learning goals, reflects on and takes responsibility for managing their own learning process.

    3. the student manages their own strengths and weaknesses, is capable of independently formulating complex learning goals, meaningfully synthesising relevant experiences to direct their own learning process.

2. The CMGT professional operates and performs within a team, taking ethical and intercultural values into account.
    1. the student operates and performs within a team, using the team's diversity and contributing to team meetings.
    2. the student acts and performs within a team, valuing the team's diversity and facilitating contributions of team members.
    3. the student collaborates and performs within a team, synthesising diverse team perspectives and fostering constructive team climate.

3. The CMGT professional builds connections, brings people together, encourages the exchange of information, and makes use of their own network to obtain specific information or knowledge.

    1. the student starts with building their own network. identifying and meeting relevant people.
    2. The student builds their own network, brings people in contact with each other and stimulates information exchange.
    3. The student has their own network and brings people in contact with each other, stimulates information exchange, and addresses their network if they need specific knowledge or information.

Programme

Creative Media & Game Technologies	**credits**
Year 1	60
Analog Orientation	*15*
GTVP21PDP - Project Design & Prototyping	*10*
GTVP21FUP - Futureproof	*5*
Digital Orientation	*15*
GTVP21P2D - Project 2D Game Development	*10*
GTVP21PPF - Playful Pasts & Futures	*5*
3D Prototyping & Production	*30*

- GTVP24PPP - Project 3D Prototyping and Production *20*
- GTVP21VOU - Vision on UX/UI *5*
- GTVP21FUS - Future Showcase *5*

Year 2 50

- Year 2 Courses *45*
  - GTVB22NTE - New Technology Exploration *10*
  - GTVB22NTA - New Technology Adaptation *10*
  - GTVB26GPR - Game Production *5*
  - GTVB22GL - Game Lab *20*
- Year 2 Focus Tracks *5*

  selection of following courses
  - GTVB23FTGP - Game Programming *5*
  - GTVB23FTCD - Character Design *5*
  - GTVB23FTGD - Game Design *5*
  - GTVB25FTUR - Unreal *5*

Electives Year 2 and 4 30

selection of following courses

- GTVB24ELAN - Animation *5*
- GTVB26ELDF - Digital Fashion *5*
- GTVB22ELAI - AI *5*
- GTVB22ELSG - Applied Game Design *5*
- GTVB22ELCD - Creature Design *5*
- GTVB22ELUR - Unreal *5*
- GTVB22ELND - Narrative Design *5*
- GTVB23ELPA - Procedural Assets *5*
- GTVB23ELRO - Robots *5*
- GTVB23ELRP - Rapid Prototyping *5*
- GTVB23ELGA - Game Audio *5*
- GTVB23ELMM - Monetization & Marketing *5*
- GTVB25ELEN - Elective Entrepreneurship *5*
- GTVB22ELEY - Elective Y *5*
- GTVB25ELEZ - Elective Z *5*
- GTVB23ELND2 - Narrative Design level 2 *5*
- GTVB23ELSG2 - Applied Game Design level 2 *5*
- GTVB23ELUR2 - Unreal level 2 *5*
- GTVB23ELAI2 - AI level 2 *5*
- GTVB26ELDF2 - Digital Fashion level 2 *5*
- GTVB23ELCD2 - Creature Design level 2 *5*
- GTVB24ELAN2 - Animation level 2 *5*
- GTVB24ELGA2 - Game Audio level 2 *5*
- GTVB24ELMM2 - Monetization & Marketing level 2 *5*
- GTVB24ELPA2 - Procedural Assets level 2 *5*
- GTVB24ELRO2 - Robots level 2 *5*
- GTVB24ELRP2 - Rapid Prototyping level 2 *5*
- GTVB25ELEN2 - Elective Entrepreneurship level 2 *5*
- GTVB23ELEY2 - Elective Y level 2 *5*
- GTVB25ELEZ2 - Elective Z level 2 *5*
- GTVB24ELAI3 - AI level 3 *5*
- GTVB26ELDF3 - Digital Fashion level 3 *5*
- GTVB24ELAN3 - Animation level 3 *5*
- GTVB24ELCD3 - Creature Design level 3 *5*
- GTVB24ELGA3 - Game Audio level 3 *5*
- GTVB24ELMM3 - Monetization & Marketing level 3 *5*
- GTVB24ELND3 - Narrative Design level 3 *5*
- GTVB24ELPA3 - Procedural Assets level 3 *5*
- GTVB24ELRO3 - Robots level 3 *5*
- GTVB24ELRP3 - Rapid Prototyping level 3 *5*
- GTVB24ELSG3 - Applied Game Design level 3 *5*
- GTVB24ELUR3 - Unreal level 3 *5*
- GTVB25ELEN3 - Elective Entrepreneurship level 3 *5*

Year 3 60

- Minor *30*

  electives
- Internship *30*
  - GTVB23INT - Internship *30*

Year 4 40

- Innovation WorkPlace Project *10*
  - GTVB24IWP - Innovation WorkPlace Project *10*
- Graduation Project *30*
  - GTVB24GRA - Graduation Project *30*

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