Vak: New Technology Exploration — credits: 10

Vakcode	GTVB22NTE
Naam	New Technology Exploration
Studiejaar	2023-2024
ECTS credits	10
Taal	Engels
Coördinator	I. Plutschouw
Werkvormen	Projectonderwijs
Toetsen	New Technology Exploration - Overige toetsing

Leeruitkomsten

Learning Outcomes

This course has 16 Programme Learning Outcomes, synthesised into seven Course Learning Outcomes that are assessed. The related BoKS are listed in brackets after each Course Learning Outcome.

Program Learning Outcomes

A1. The CMGT professional synthesises and situates diverse perspectives to develop informed and appropriate solutions to complex problems (the student analyses own and others' assumptions and evaluates the relevance of contexts when developing a solution to a complex but structured problem).
A2. The CMGT professional assesses the impact of their solution on the wider social context (the student considers contextual factors in the implementation of their solutions).
A3. The CMGT professional generates innovative concepts for technical solutions that are appropriate for complex contexts (the student can construct concepts and relates these to relevant theory and the needs of the users).
B1. The CMGT professional generates technical solutions by using the relevant knowledge and theories of digital technologies (the student can construct technical solutions informed by relevant knowledge and theories).
B2. The CMGT professional iterates with digital technology to improve technical solutions (the student alters and differentiates technical solutions using identified improvements).
B3. The CMGT professional analyses and researches technological solutions to serve a wider goal (the student compares and selects appropriate technical solutions to satisfy complex problems).
C1. The CMGT professional visualizes technological solution by using relevant digital technologies (the student can make use of relevant visualisation techniques).
C2. The CMGT professional develops digital interactive prototypes, using prototype development methods and technique (the student employs appropriate prototyping methods to develop digital interactive prototypes).
C3. The CMGT professional experiments with digital technologies to elaborate concepts (the student elaborates digital prototypes using appropriate methods and techniques).
D1. The CMGT professional extrapolates improvements for the end user based on iterative evaluations of designs and prototypes (the student can apply appropriate evaluation methods to identify improvements).
E1. 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 (the student can plan, implement, monitor and manage process-based projects in a complex but structured context).
F1. The CMGT professional reframes new technological trends and instantiates them into realisable solutions (the student experiments with new technological trends and models a realisable solution).
F2. The CMGT professional imagines innovative concepts and solutions to address previously unaddressed problems or situations. (the student can experiment with innovative concepts to address complex or complicated situations).

Inhoud

Students will work in groups to create a game using a chosen technology from a selection provided. Students will explore that technology through the development of their game, uncovering the ethical, technical and artistic limits of their chosen technology. Building on Playful Pasts and Futures in Year 1, students will use games as a tool to map the contours and possibilities of their chosen technology, discovering and creating new uses for their technology. Students will engage with game engines, 3D modelling tools, theories of technology and ethical questions in their project.

Students work individually to create a development portfolio in which they submit evidence of their attainment of the competencies of the course, using as evidence the work they have done during the time of the project, including process, prototype and work done outside the project.

Design Brief

One of the main uses of games is as a tool to explore the possible uses of new technologies. In this course, students are challenged to make a game for 30 years in the future: what will that game look like, how will it play, who will play it? What is the next hit game for VR? What is the next technology to be mainstream in gaming? In attempting to address this design brief, students will address the question of ‘what is a game’ and will attempt to position themselves in this future.

Design Constraints

• The game must be made in Unity.

• The game must use one of the selected technologies.

• The game must have a visual style appropriate to the technology.

• The game must be playable at the demonstration.

• The game cannot have shooting.

In solving the design brief, student teams are supported by project coaches, and a series of workshops and learning streams, including Technology; Creative Media; and 21st Century Skills;

Students are expected to put in the necessary hours and effort to have a tested concept and a working prototype of their game.

The course is assessed via a demonstration, in which the working prototype is shown to teachers and fellow students; by a development portfolio, assembled over the duration of the course, in which the student provides evidence of what they have done and what they have learned; and a CBI were students are interviewed about the contents of the development portfolio.

The entry requirement to this project is having passed project 1.3.1 and 1.4.1 of the CMGT first year programme.

F3. The CMGT professional can imagine different futures and can take the necessary steps to reach the desired future (the student can experiment with different solutions and reflect upon their impacts and consequences).
G1. The CMGT professional manages their own development, is capable of formulating learning needs, can reflect on and takes responsibility for their own learning process (the student knows their own strengths and weaknesses, can formulate complex learning goals, reflects on and takes responsibility for managing their own learning process).
G2. The CMGT professional operates and performs within a team, taking ethical and intercultural values into account (the student acts and performs within a team, valuing the team's diversity and facilitating contributions of team members).

Course Learning Outcomes

1. The student analyses their own and others' assumptions when developing a solution to the design brief, evaluating performance within a team, valuing the team's diversity and facilitating contributions of team members. (A1, G2) (Self-Development)

2. The student knows their own strengths and weaknesses and experiments with innovative solutions to outline a blueprint for their career development. (F3, G1) (Career Development)

3. The student demonstrates appropriate technical solutions, employing relevant prototyping methods to address the design brief. (B2, C2, E1) (Demonstration)

4. The student compares, experiments with and selects appropriate technical solutions to construct an innovative product, informed by relevant knowledge and theories that address the design challenge. (B1, B3, F2) (Game Technologies)

5. The student experiments with relevant visualisation techniques to address the design brief and extrapolates improvements based on iterations. (C1, C3, D1) (Creative Media)

6. The student experiments with relevant visualisation techniques to address the design brief and extrapolates improvements based on iterations. (C1, C3, D1) (Creative Media)

7. The student experiments with new technological trends and models by considering contextual factors and constructing concepts that relate to the relevant theories and user needs, integrating them into a realizable solution. (A2, A3, F1) (21st Century Skills)

Opgenomen in opleiding(en)

Creative Media & Game Technologies

School(s)

Instituut voor Communicatie, Media & IT

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