

Game Engineering

Faculty of Engineering, Design and Computing, Department of Information Technology

When

1 February 2021 – 30 June 2021
Class days: 4 days full days (1 day off)

General Information

Audience: Bachelor ICT 3rd year with experience in ICT
30 European Credits (20 weeks)
Where: Haarlem, the Netherlands

Teachers

Teachers from the Information Technology program in Haarlem and various guest lectures and workshops by specialists from the field.

About the course

Games are an integral part of our daily life. This form of entertainment has become a lifestyle and is consumed in every place at every moment of our existence.

Developing Games is a complex process. In the elective program “Game Engineering” you learn to program a multiplayer game from idea until it is in the (online) store. Within the Project, you will investigate in groups how your idea can be developed into a game concept.

When the concept is presented it will be judged on creativity and whether it is commercially feasible. After the concept has been written down, you will learn to control the 3D engine in C # and make the game available to the online community.

Via Scrum® project management framework you learn to deal with a development group with a dynamic and rapidly changing world called games.

After this choice of education part, you will be able to work for an international multinational or a game developer from SMEs as Jr. Game Engineer in the broadest sense.

Work methods

In this theme we will use different working methods:

- Working in project groups
- Various lectures and guest lectures
- Seminars
- Practical visits
- Research

Details of assessments

- Project (group grade + individual)
- Individual exams
- Individual assignments • Research

All parts must be completed sufficiently (minimum 5.5)



Topics covered

- Game Concept development
- Game Design document
- Game Mechanics [Rules of Play]
- Game Business models
- Game Analyst
- C # in Unity 3D game engine [Project]
- Multiplayer games
- Game Mathematics
- Scrum project management
- Game Development management [SourceSave and Asset servers]
- Submissions [Microsoft, Sony & Nintendo]
- Research & Research trends
- Game testing

Competences:

- The student is able to work via the Scrum® method.
- The student is able to develop a commercial idea.
- The student can design a game.
- The student can realize a game.
- The student is able to develop in a 3D game engine.
- The student knows how a game should offer for the platforms from Sony (PSN), Microsoft (XBLA), Nintendo (NOE).
- The student is able to conduct an investigation.

Goals

The student is able to:

- analyze target group, objective, context, information and communication needs, visualization, usability and use, and relate this to trends in ICT
- Advising on new opportunities for the organization based on developments in ICT
- Designing ICT and / or digital media products based on self-designed functionality, interaction form, style and / or service, including user experience, usability testing and innovative technology.
- Determining the quality of the design, for example by testing or prototyping
- Realization and testing of dynamic ICT and / or digital media products with the application of innovative technologies

Contact

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