Course Specifications
Valid in the academic year 2018-2019

Course
Design Studio and Innovation (E630070)

Course size
Credits 6.0
Study time 180 h
Contact hrs 72.0 h

Course offerings and teaching methods in academic year 2018-2019
A (semester 2) Dutch, English demonstration 24.0 h
guided self-study 24.0 h

Lecturers in academic year 2018-2019
Carton, Bram TW18 staff member
De Vos, Ellen TW18 staff member
Emmanouil, Marina TW18 lecturer-in-charge

Offered in the following programmes in 2018-2019
Bachelor of Science in Industrial Design Engineering Technology 6 A
Linking Course Master of Science in Industrial Design Engineering Technology 6 A
Preparatory Course Master of Science in Industrial Design Engineering Technology 6 A

Teaching languages
Dutch, English

Keywords
Creativity; design thinking; failure; future thinking; futures; improvisation; imagination; risk-taking

Position of the course
This course introduces students to innovative design thinking by putting curiosity, critical inquiry (questioning; defining challenges), and experimentation outside of one’s comfort zone at its core. Risk-taking is encouraged and failure is embraced as a valuable path of knowledge. Resilience and perseverance are developed through cognitive and skill challenges. Through a cycle of self-initiation inquiry, feedback (peer critiques; consultations; presentations) and revision, students learn to become self-reflective, resilient critical thinkers/doers. Key contemporary theoretical and historical perspectives on innovation design (e.g., incremental, breakthrough and discursive innovation, design methodologies, future thinking) are introduced to support studio-based assignments and hands-on activities.

Contents
The course includes two modules: the ‘Design Studio’ (practice) in which students learn to communicate visually their work through practical training in advanced design elements and digital rendering. It is designed to provide technical support in mastering visual and storytelling skills; and ‘Innovation’ (theory+practice) in which students are introduced to the concept and practice of innovation and creative thinking. The latter module seeks to present innovation through a multitude of perspectives, not just high-tech innovation. Key methods include: experimentation with different media, scenario development, storytelling, creative ideation and pseudo-documentaries. Narrative inquiry is explored as a vehicle for observing and studying innovation.

Initial competences
‘Industrial Design, Usability and Form’ (E620043), or prove they can:
• Express their ideas and forms through (analogue and digital) sketches in a clear and attractive way
• Show basic knowledge of Adobe Illustrator
• Apply creativity techniques to generate a number of ideas

(Approved)
• Design methodically and record the process using a physical (sketchbook) and digital medium (blog, etc.)
• Create basic prototypes in different materials.

Final competences
Upon course completion (and for the respective course modules), students should be able to:

**Design Studio**
1. Apply advanced graphic design/typographic principles
2. Implement text & basic animation into a movie
3. Demonstrate a professional designer identity
4. Produce digital 2-D rendering for the idea (screen/digital work)
5. Communicate the idea/concept and design process in a clear, concise and effective way

**Innovation**
1. Identify and define design problems/challenges (short or/and long-term)
2. Identify sources of information
3. Generate ideas and make decisions
4. Experiment with media and make variations of an idea
5. Test and refine work

Conditions for credit contract
Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract
This course unit cannot be taken via an exam contract

Teaching methods
Guided self-study, demonstration, group work, lecture, project, self-reliant study activities, lecture: plenary exercises

Extra information on the teaching methods
The course uses a combination of:
1. Lectures, readings and audiovisual material
2. Group and individual assignments
3. Students’ participation
4. In-class ‘Tasks’ and homework (flipped classroom)
5. Company / museum visits.

Students receive assignment brief(s) and several homework exercises (with detailed information about requirements, specifications and submission deadlines) for both modules. Consultation is scheduled regularly throughout the course.

Learning materials and price
All course material can be downloaded from Minerva.

References
Selected bibliography (extended list is given in class)

Course content-related study coaching
Consultation is given during class hours.

Evaluation methods
end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period
Oral examination, portfolio, assignment

Examination methods in case of periodic evaluation during the second examination period

Examination methods in case of permanent evaluation

(Approved)
Possibilities of retake in case of permanent evaluation

eexamination during the second examination period is possible in modified form

**Extra information on the examination methods**

Students are evaluated on assignments and relevant deliverables. A rubric for the scoring procedure is applied as noted in the detailed syllabus and announced in class.

**Calculation of the examination mark**

**First examination period**

*Periodic evaluation (60%) / ‘Professional skills’*

1. Design Studio exercises + Assignment 1 + Presentation: 25%
2. Design Studio exercises + Assignment 2 + Presentation: 35%

*Continuous evaluation (40%) / ‘Design attitude and active participation’*

1. Consultations: 5%
2. Peer Critiques (1+2): 5%
3. In-class Participation: 10%
4. Sketchbook: 10%
5. Reflection notes (individual note for Assignment 1 + individual note for Assignment 2): 10%
6. Attendance (is mandatory)

To pass this course a grade of 10/20 or more must be achieved for the ‘professional skills’ and for ‘design attitude and active participation’. If this is not the case, there will be a deviation from the calculated grade if this is 10 or more and the grade of the course will be adjusted to 9.

Following the course (during course hours) is mandatory. A minimum attendance policy (80%) applies for the ‘design attitude & active participation’ grade. In case of illness, justified absences should be supported by a Doctor’s report, which needs to be submitted to the official administration, and also to be shown to the course instructors.

**Note for non-engineering / non-industrial design students:** Students (e.g., schakel students), who do not typically have an engineering or/and industrial design background face certain challenges/difficulties in following on the class standards, routines and requirements. For this reason, these students are highly advised to evaluate carefully their skills and background knowledge (initial competencies) before subscribing to this course. And when enrolled to the course, it is expected these students show an extra effort to follow on the course standards, and most importantly, they display the necessary curiosity to discover and inquire what they are missing, positive attitude and self-initiating research to bridge possible gaps. It is recommended to initiate/seek advice and guidance from instructors (and course peers) at an early stage.

**Second examination period**

80% permanent evaluation in modified form.

The grade for ‘active participation & design attitude’ and passed parts of the course is carried over from the first examination period. For the other failed parts, the distribution percentages of the first examination period remain valid.

20% Periodic assessment.
Score of the second chance exam (written examination).

(Approved)