GRADUATION SEMESTER

CreaTe Modules 11 & 12

2016-2017

Manual

Richard Bults
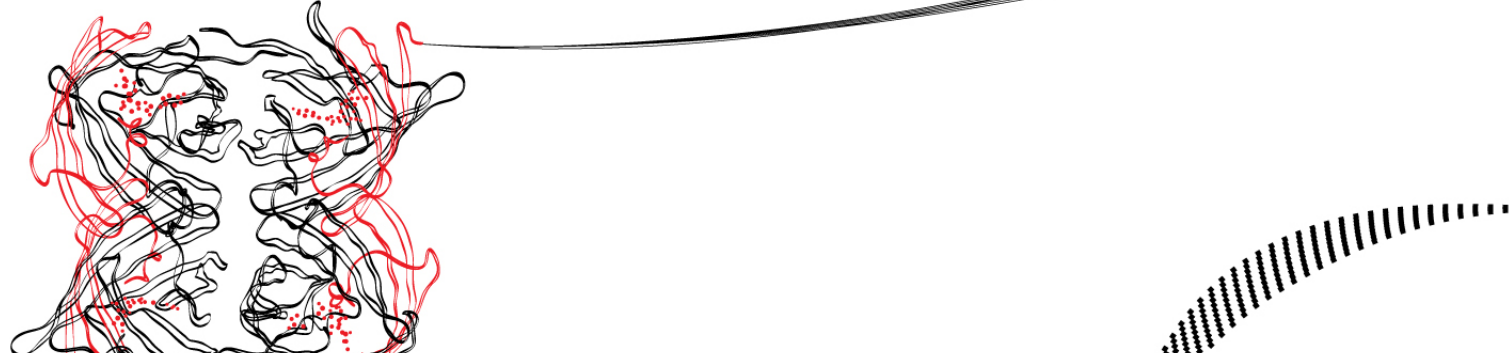(Module 11 & 12 Coordinator)

Module 11 ID: 201600049 ("Real World Perspective")

Module 12 ID: 201600020 ("We Create Impact")

Bachelor Creative Technology

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UNIVERSITY OF TWENTE.

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1   Introduction

The last semester of the Creative Technology (aka CreaTe) programme is dedicated to your graduation. All your acquired knowledge, skills and experience during the previous semesters are now needed to make this graduation a great success.

CreaTe decided to concatenate the last two TEM[1] modules 11 and 12 into one Graduation Semester. Hence, this semester consists of two separate modules of 15 ECTS[2] that are given in sequence with your graduation as the overarching goal. This allows the programme to design a Graduation Semester around the 17 ECTS Graduation Project and (in principle) relate accompanying study units to this project. Consequently, these study units should contribute positively to your Graduation Project and vice versa.

The Graduation Semester's module names are respectively: "Real World Perspective" (module 11) and "We Create Impact" (module 12). In module 11 you will learn to reflect on your work, perform state of the art literature research on the proposed context of your Graduation Project, and be proficient in writing your Graduation Project's thesis. Optionally, you apply your CreaTe knowledge, skills and experience to a challenge existing in a non-CreaTe domain. These learning objectives contribute to a *real world perspective* on your (graduation) work.

The focal point of module 12 is your Graduation Project. You will learn to individually execute a design project with the outcome of the state of the art literature research as the starting point. In an additional reflection study unit, you learn to deal with ethical aspects of involving external people in your research projects. These learning objectives contribute to your ability to *create impact* with your (graduation) work.

This manual is structured as follows. Chapter 2 describes the study units and learning goals of the Graduation Semester. Chapter 3 describes all aspects of the Graduation Project, including a process decomposition and division of deliverables over module 11 and 12. Chapter 4 describes both the mandatory and elective accompanying study units. The grade calculation of each module and resit options for Graduation Semester's modules are described in chapter 5. Chapter 6 concludes this manual with a description of the Graduation Semester's organisational aspects.

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[1] Twente Educational Model - https://www.utwente.nl/tom/en/ (last visited 18-8-2016)
[2] European Credit Transfer System

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2   Graduation Semester

The Graduation Semester is a concatenation of the last two TEM[3] modules 11 and 12 of the CreaTe curriculum. It consists of two separate modules of 15 ECTS that are given in sequence with your graduation as the overarching goal. This allows the programme to design a Graduation Semester around the 17 ECTS Graduation Project and (in principle) relate other semester's study units to this project. Additionally, the Graduation Semester is offered twice per academic year and starts at the beginning of a new semester.

The name of module 11 is "Real World Perspective". In this module you will learn to:

1. reflect on ethical or societal issues of your (graduation) work by means of different expression modalities; e.g. oral, textual or visual (optional)
2. perform state of the art literature research on the proposed context of your Graduation Project, and define the main research question of your Graduation Project
3. be proficient in writing your Graduation Project's thesis including effective use of primary and secondary information sources[4] and application of conventions of source citation and referencing
4. (optional) apply your CreaTe knowledge, skills and experience to a challenge existing in a non-CreaTe domain

These learning objectives contribute to the (further) development of a *real world perspective* on your (graduation) work.

The name of module 12 is "We Create Impact". The focal point of this module is your Graduation Project. In this module you will learn to:

1. use the (previously defined) research question to individually execute a design project; i.e. your Graduation Project
2. deal with ethical aspects of involving external people in your research projects; e.g. avoiding observational or questionnaire bias
3. apply your knowledge, skills and experience to create a truly innovative and high-impact solution for the posed research question
4. deal with a priori defined design constraints or realisation limiting factors

These learning objectives contribute to your ability to *create impact* with your (graduation) work.

2.1   Study Units

The Graduation Semester consists of six mandatory study units. Table 2.1 depicts an alphabetical ordered list of names of all study units, complemented by their commonly used abbreviation, study load indicated by ECTS, to which TEM module the study unit belongs, and a reference to the section of this manual that contains the unit's description.

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[3] Twente Educational Model - https://www.utwente.nl/tom/en/ (last visited 18-8-2016)
[4] http://guides.library.ucsc.edu/primarysecondary (last visited 18-8-2016)

Table 2.1 - Graduation Semester Study Units

Academic Writing	AW	3 ECTS	Module 11	Section 4.1.2
Graduation Project I	GP I	3 ECTS	Module 11	Chapter 3
Graduation Project II	GP II	17 ECTS	Module 12	Chapter 3
Real World Challenge	RWC	5 ECTS	Module 11	Section 4.2
Reflection I	-	3 ECTS	Module 11	Section 4.1.1
Reflection II	-	2 ECTS	Module 12	Section 4.1.1

The Real World Challenge study unit is essentially a 5 ECTS elective space. For semester 2016-1, two electives are available:

Table 2.2 - RWC electives

Design of Persuasive Health Technology	DoPHT	Section 4.2.1
Documentary Practise	DP	Section 4.2.2

Figure 2.1 depicts the EC distribution for each of the Graduation Semester's modules. The scheduling of each study unit is determined by the responsible lecturer(s). Consult the online roster[5] "Creative Technology MOD11" and "Creative Technology MOD12"
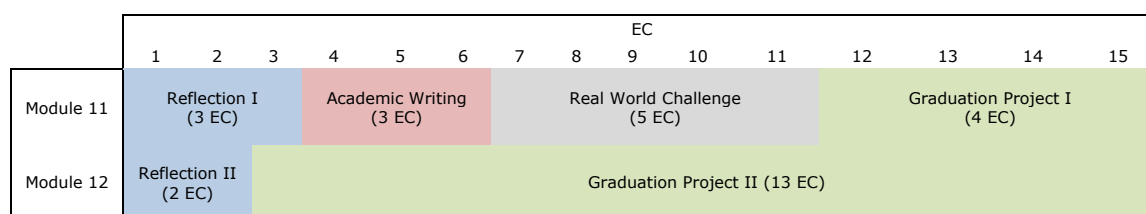
Figure 2 - EC Distribution Graduation Semester

2.2   Learning Goals

At the end of the Graduation Semester students are able to:

- define research questions after design context exploration
- apply knowledge and skills acquired during the Creative Technology programme in an integrated manner
- autonomously develop and refine new knowledge and skills
- work independently and systematically and communicate appropriately
- reflect on designed concept/product and design process
- offer added value to a client[6]
- write a project report that describes the graduation work on an academic level
- summarize graduation work in a concise way
- publically present and defend graduation work
- deal with success factors for the introduction of technology
- look at these success factors from within a specific application domain
- provide tools (i.e. scientific insights) for reasoning about these success factors from the use (and not the technology) viewpoint; i.e. from behavioural and management sciences

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[5] https://rooster.utwente.nl (last visited 18-8-2016)
[6] i.e. internal or external party providing a design challenge

3 Graduation Project

You complete your Creative Technology programme in the third year's Graduation Semester with a Graduation Project (GP): a project to produce an innovative solution for a posed design question that results in a positive effect on people (e.g. end-users, community members). Successful completion of your GP is the proof that you are able to function as a Creative Technologist at an academic bachelor level.

3.1 Characteristics

Article 1.1.7 of the "programme appendix to the Teaching and Examination Regulations of the Bachelor's programme Creative Technology"[7], a.k.a. as the TER/OER 2016-2017, states that a CreaTe GP consists of four parts:

1. design project, where context and goals are set preferably by an external party
2. Graduation Project report, with appendices when necessary, in which the student renders account of the graduation project and the design approach, and describes and documents literature search, surveys and experiments conducted during the project, as well as the prototypes and other deliverables which result from the project
3. abstract within the Graduation Project report
4. public presentation and defence of the graduation work

You and your supervisor (see section 3.4.1) and preferably also an external party collaboratively decide on the context and goal of your graduation project.

The study load of a CreaTe GP is 17 EC. As a consequence of the Twente Educational Model (TEM) the GP is divided in two parts: part 1 in module 11 and part 2 in module 12. The distribution of study points over the two modules is respectively 4 EC and 13 EC (see also section 2.1, Figure 2 - EC Distribution Graduation Semester).

3.2 Learning Objectives

All the intended learning outcomes (ILO) apply to your graduation work. An overview is available at the CreaTe website[8].

The specific learning objectives of your GP are the student's ability to:

• define research questions after design context exploration
• apply knowledge and skills acquired during the Creative Technology programme in an integrated manner
• autonomously develop and refine new knowledge and skills
• work independently and systematically
• communicate with experts and non-experts about all aspects of their GP
• offer added value to a client[9]

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[7] <place holder link CreaTe website TER/OER 2016-2017>
[8] https://www.utwente.nl/create/about/20141106-web-create-the-intended-learning-outcomes/ (last visited 1-9-2016)
[9] i.e. external party

- reflect on the executed design process and the
- designed concept(s) and product (prototypes)
- write a thesis[10] that describes the graduation work on an academic level
- summarize graduation work in a concise way
- publically present and defend graduation work

3.3 Procedure

The organisational aspects of a CreaTe GP are significantly different than projects of the first two years of the CreaTe curriculum. In particular, the logistical and supervision aspects are challenges for both CreaTe students and staff. In this section, these aspects are integrated in a procedure for GP execution. This procedure consists of five sequential phases, each discussed in a separate section:

1. Preparation (section 3.3.1)
2. State of the Art Review (section 3.3.2)
3. Design Project Execution (section 3.3.3)
4. Reporting (section 3.3.4)
5. Presentation and Defence (section 3.3.5)

3.3.1 Preparation

The preparation of your GP is divided in two parts: intake and selection.

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Phase 1a – Intake
- Check admission conditions
- Register your intention to start graduation work
- Define preferences
- Optional – find potential external party
- Attend GP-intake meeting

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Preparation of graduation work starts by performing a check of the admission conditions. You must have completed all 1st and 2nd year modules of the CreaTe programme in order to be eligible to start module 11[11].

If you are eligible, register your intention to start your GP in the Student Mobility System (Assignment form, section 1 and 2 only). You have the possibility to define high-level preferences (e.g. business or university). Registration is permitted 6 weeks (holidays excluded) before the start of module 11. Please note that registration is no longer accepted 2 weeks before the start of module 11.

> Note Delaying registration in SMS has potential negative effects on the progress of your GP preparation phase.

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[10] "a long piece of writing on a particular subject that is done to earn a degree at a university" - http://www.merriam-webster.com/dictionary/thesis (last visit 24-8-2016)
[11] TER/OER 2016-2017 programme appendix Art 1.13.5a

Upon registration, you receive an invitation from the GP coordinator to attend a GP-intake meeting. Prior to this meeting, you contemplate on your GP preferences (e.g. serious game development, virtual reality experience development, art installation, wearable development) and potentially find and contact an external party to discuss your intentions.

The following topics will be addressed in the GP-intake meeting:

- verification of your eligibility to start the Graduation Semester
- discussion of your GP preferences including your own initiated GP proposals
- access provision to the GP Blackboard site containing the catalogue of available GP proposals, plus additional information about graduation work

Phase 1b – Selection
- Orientation
- Preference list
- Introduction
- Selection
- Assignment

To start your orientation for a GP, use the special Blackboard site[12] that provides an overview of advertised GP proposals. Each advertisement includes contact details of the external party (e.g. website), proposal title, contact details of a potential supervisor, status of registration and a supporting document[13] describing the design context of the proposal.

In case of your own initiated GP proposal, the GP coordinator decides if your proposal is feasible as a Creative Technology graduation project[14]. A good proposal for example aims at development of a novel application that incorporates smart technology or new media, or design of an innovative product for a particular user group. At least your GP proposal must have links with several topics of the Creative Technology programme.

You conclude the orientation by sending an email to the GP coordinator: "Subject: <your name> - preference list" with a prioritized preference list of advertised GP proposals in the message body. The GP coordinator uses the timestamp of reception of this email to prioritize the list of students interested in a particular GP proposal.

Next, the GP supervisor starts a negotiation process with the GP proposal contact person(s), which may result in an invitation of the student who is first on the list[15].

> *Note The GP coordinator selects a potential supervisor for your own GP proposal.*

Upon invitation, you prepare yourself for an introduction meeting with the potential supervisor. In this meeting, you get (or provide) more information on the proposal and have the possibility to express your motivation. Additionally, you discuss the feasibility of the proposal and mutual expectancies. Ideally, you and the potential supervisor agree on

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[12] ORG_AA_EWI_FINALPROJECT_CREA: Final Project Creative Technology; https://blackboard.utwente.nl/webapps/blackboard/execute/launcher?type=Course&id=_14663_1&url= (last visited 1-9-2016)
[13] The Creative Technology programme depends for the supporting document on the provider of the advertised GP proposal.
[14] In case you like to do the Graduation Project abroad contact with the international officer is also required.
[15] The GP coordinator uses the Right of First Refusal paradigm in the negotiation process, which is elaborated in the remaining part of this paragraph.

future collaboration; potential supervisor becomes your supervisor (see section 3.4). It may be possible that you and the potential supervisor do not reach an agreement on future collaboration; e.g. due to limited intrinsic interest (by you or the potential supervisor) in the topic of the proposal.

You inform the GP coordinator by email about the conclusion of the introduction meeting. In case of an agreement, the GP coordinator assigns the selected GP proposal to you, which concludes the selection phase. If you decline your interest in a GP proposal, the GP coordinator removes your name from this proposal in the list of advertised GP proposals and starts a new negotiation process with the GP proposal's potential supervisor second on your preference list.

> Note There are only three iterations of the negotiation process possible, after which the GP coordinator assigns a GP proposal to you.

If your GP involves an external party (i.e. client) outside the University of Twente, it is mandatory to fill-out 3 copies of the "Creative Technology Graduation Project Agreement" (see Appendix 1). The University of Twente expects a None Disclosure Agreement (NDA) proposal from the external party if required prior to the start of your GP. This proposal is reviewed by the university's legal department prior to adherence to the conditions defined in the NDA.

3.3.2 State of the Art Review

Phase 2 – State-of-the-Art Review
- Planning
- Literature study
- Research topic
- Research question
- GP description
- GP report chapter 1 and 2
- "My Graduation Project" presentation
- Assessment (see section 3.6.1)

At the beginning of this phase you construct a feasible work plan with your supervisor. This plan must consist of a time estimation of all identified activities (including meetings with your supervisor) and activity dependencies. Additionally, you agree on meeting rules (e.g. agenda, minutes, frequency, absence, sickness) of each meeting.

The GP proposal provides a (broad) contextual description (i.e. broad topic) of your design project. You start GP in the form of a state-of-the-art review. The aim is to converge to a design context that you and your supervisor consider feasible as a research topic for your GP.

The state-of-the-art review is a literature study that *describes the level of development (as of a device, procedure, process, technique, or science) reached at any particular time usually as a result of modern methods*[16]. Your supervisor provides guidance by suggesting relevant research papers or books, or people to talk to. However, taking own initiative demonstrates your academic skills and is appreciated by your supervisor.

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[16] http://beta.merriam-webster.com/dictionary/state of the art (last visited 1-9-2016)

The literature study can bring clarity and focus to your research problem and broaden your knowledge base in your research area. In addition, past studies can improve your methodology and help you to contextualize your findings.

You discover your research topic during the literature study and discussions with your supervisor. Moreover, you converge to a focussed design context that discloses challenges for you as a designer. These challenges lead to the main research question[17] (possibly with sub questions) that is defined in collaboration with your supervisor and (optionally) verified with the external party. A good research question needs to:

- make sense
- address and important and relevant issue
- not already have been done
- be "operationalisable"
- be within a reasonable scope

Note that the state-of-the-art review activity is predominantly conducted in module 11; due to new insights the state-of-the-art review may be continued in module 12, however on a much smaller scale.

The first deliverable of this phase is a <u>supervisor approved and signed GP description</u> that includes the contextual description and challenges of your research topic, and concludes with the main research question (possibly with sub questions). The second and third deliverables are chapter 1 "Introduction" and chapter 2 "State of the Art review on …" of your GP report. The <u>first, second and third deliverables are due in the last week of module 11</u>.

Part of the finalisation of part 1 of your GP is a public presentation: "My Graduation Project"[18]. In a 10-minute presentation you introduce the (broad) contextual description of your design project; i.e. the 'situation' and 'challenge' description. Next, describe the state-of-the-art review process, including interesting preliminary findings and the conclusion of this review process. You conclude your presentation with posing the main research question and (optionally) the accompanying sub-questions.

The <u>study load of the state-of-the-art review phase including reporting is 112 hours</u> (4 EC); including 14 hours (0.5 EC) reporting.

3.3.3 Design Project Execution

Phase 3 – Design Project Execution
- Planning
- Ideation
- Specification
- Realization
- Evaluation

At the beginning of this phase you construct a feasible work plan with your supervisor. It consists of a time estimation of all identified activities (including meetings with your supervisor) and activity dependencies.

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[17] Also referred to as "design question"
[18] Venue will be announced by the GP coordinator.

Note that the CreaTe programme provides a time division guideline for execution of the state of the art review and execution of the design project in Appendix 2. However, deviations from this guideline are possible in your personalised work plan. The advised overall time budget for this phase is 350 hours (12.5 EC).

The Ideation, Specification, Realization and Evaluation elements are related to identifiable phases of your design process. The CreaTe programme uses the publication "A Design Process For Creative Technology"[19] as guideline for execution of these phases[20]. Appendix 3 depicts a graphical representation of this design process.

> Note   Study this publication before starting your GP and discuss the possible application with your supervisor.

The identified research question (a.k.a. design question) at the end of the state-of-the-art review is the starting point of your design process. The start of the Ideation phase depends on the origin or type of design question. For example, a user needs analysis or stakeholder requirements analysis may be the starting point for a user (i.e. external party) initiated design question. In the Ideation phase you work within the provided design space using divergence and convergence techniques to come up with one or more creative ideas for the envisioned product, interaction or experience. The deliverable of the Ideation phase are one or more creative ideas (a.k.a. concepts) for the envisioned product.

The Specification phase builds on the output of the Ideation phase. In a cyclic way of working, you develop storyboards and/or user scenarios[21] as the user experience specification. Additionally, you use a number of rapid prototypes to explore the design space and incorporate short evaluation and feedback sessions with the major stakeholder(s) or possibly by yourself as the designer. Note that functionality influences the user experience, and demands on the user experience may require change of the functionality. The goal of this way of working is to further refine and prioritise the user requirements (or needs) and obtain the (best possible) functional specification[22] of the envisioned product prototype. The deliverables of the Specification phase are a narrative user scenario and functional specification of the early prototype of the envisioned product. The advised time budget for the combined Ideation and Specification phases is 140 hours (5 EC)[23].

Given the functional specification you continue with the Realisation phase. In particular the functional architecture is used as the leading design artefact. You translate this architecture to system components (i.e. sub-systems) including interfaces to other components. For each component you explore possible implementation solutions and implement the most feasible solution.

> Note   Implementation of system components may involve purchase of hardware or software products. Long delivery times may cause work plan complications. Start purchase of these products as soon as possible!

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[19] Mader A.H. and Eggink W., "A Design Process For Creative Technology", Proceedings of the 16th International conference on engineering and product design education, Enschede, The Netherlands, 2014, pp. 568-573
[20] This design process advocates an iterative way of working; however, for reasons of brevity the following description in this manual assumes sequential execution (a.k.a. 'waterfall' approach) of the different phases.
[21] Narrative description of a user's (functional) interaction with an envisioned product.
[22] Overview of functional requirements to be implemented by the envisioned product and a functional architecture (collection of block diagrams identifying the main functions and information exchange between these functions) of this product.
[23] Depending on the type of graduation project, Ideation and Specification phase execution may involve frequent iterations between the two phases; hence, the time division guideline specifies a combined time budget. Nevertheless, sequential execution of the two phases is possible and a 50-50 division of the 140 hours over the two phases is advised.

Part of component implementation is functional testing, answering the question: Does the component fulfil the functional requirements? You produced a number of system components that require integration into the envisioned product. All components must be connected and a functional test of the system as a whole is conducted. Important in this test process is not to forget the functional requirements! The deliverable of the Realisation phase is a fully working prototype of the envisioned product. The advised time budget for the Realisation phase is 140 hours (5 EC).

Evaluation is the last phase of the design process and addresses a number of aspects. First, you evaluate to what extend the prioritised functional requirements specified in the Specification phase are matched. At least all the 'must have' requirements must have been realized by the prototype product. Next, you involve the (major) stakeholder(s) and evaluate to what extend their expectations are matched. The user experience specification described in the storyboards and/or user scenario is used here. The level of stakeholder or the envisioned end-user satisfaction predominantly determines their successful acceptation of your product prototype. Note that meticulous and on time preparation makes an effective and efficient evaluation possible. The advised time budget for the Evaluation phase is 28 hours (1 EC).

3.3.4 Reporting

Phase 4 – Reporting
- Graduation Report
- Abstract
- English (UK)
- ~ 80 pages
- Document format
- Figure and picture quality
- Due date

In the graduation report you render account of your graduation project. It consists of at least your problem statement, state-of-the-art review, design approach, surveys and experiments conducted during the project, as well as the prototypes and other deliverables which result from the project. Appendix 4 presents a guideline structure of your graduation report with advice for particular parts. The advised overall time budget to produce your finalized graduation report is 56 hours (2 EC).

> Note *Writing a graduation report is a daunting task that consumes a substantial amount of time. Start writing sections of your graduation report after completing a task in a particular phase and ask for feedback from your supervisor.*

An abstract is a concise and factual summary of your graduation report and likely the first description of your work read by your audience (e.g. external party). The abstract should state briefly the purpose of your research, the principal results and major conclusions. It may be presented separately from your report (e.g. appearance in bibliographic indexes) and therefore it must be able to stand-alone. For this reason, references should be avoided, but if essential, then cite the author(s) and year(s). Abstracts should not contain formulae or abbreviations and is limited to 400 words. Note that it is common practise to write an abstract after the remaining parts of your graduation report are finished.

The graduation report must be written in English (American or British usage is accepted, but not a mixture of these) and consists of approximately 80 pages (appendices included).

The CreaTe programme prescribes the open standard PDF (Portable Document Format)[24] as the format of the final version of your graduation report. The report page is A4 with 1.5 line spacing and 11 pt font. Preferred fonts are Arial (or Helvetica), Times New Roman (or Times), Symbol and Courier. Footnotes should be used sparingly. Number them consecutively throughout the graduation report. Many word processors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of your report.

The figures and/or pictures in your report must be of publication-quality resolution of at least 300 dpi, however, 600 dpi is preferred.

A draft version of your complete graduation report must be delivered by email to your supervisor and critical observer 2 weeks before the end of the Graduation Semester. You incorporate feedback and produce the graduation report's final version in PDF format in the last two weeks of the Graduation Semester.

It is not mandatory to deliver a printed version of the final version of your graduation report to your supervisor. However, you must send an email ("Subject: <your name> - GP report") to both your supervisor and GP coordinator including either your report or instructions to download the final version of your report if the document size is larger then 5 MByte. The due date of the GP report is the last day of the Graduation Semester.

3.3.5 Presentation and Defence

Phase 5 – Presentation and Defence
- Evaluation
- Public presentation
- Defence
- Assessment (see section 3.6.2)

The CreaTe programme organises a one-day graduation colloquium at the end of each graduation semester[25]. All graduate students that started their GP at the beginning of the Graduation Semester must present their graduation work at this colloquium. However, you need permission of your supervisor to present.

Two weeks before the end of the Graduation Semester, your supervisor will evaluate the status qua of your graduation work to decide if you are eligible to present at the Creative Technology Graduation Project Colloquium. The evaluation criteria used are similar to the assessment criteria at the end of your graduation project (see Appendix 6), except for the public presentation and defence. Basically, your supervisor answers the following question:

> *"Will this graduate student be able to finish his/her graduation project within 2 weeks, with a satisfactory quality of both the graduation report and work, and with a satisfactory level of process execution?"*

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[24] https://acrobat.adobe.com/in/en/products/about-adobe-pdf.html (last visited 1-9-2016)
[25] The GP coordinator will announce the final date with a minimum of 8 weeks before the colloquium day.

If the answer is:

"Yes", you receive permission to present at the graduation colloquium,
"No", you will be kindly requested to stop your graduation project, or

However, a third answer could be:

"Yes, but…", you receive a conditional permission to present at the graduation
colloquium and an extension to finish your GP report after the end of the
graduation semester.

Note that the third answer is only possible iff the draft version of your graduation report is:
a) 50% ready (reviewed by your supervisor and feedback processed), and
b) 50% draft with the permission to write the Abstract, Conclusions and Future Work
in the extension period

You must finalise your GP report within a maximum period of 6 weeks after the end of the graduation semester. However, you need to reach an agreement with your supervisor on the time plan to finish your report. With the supervisor's (conditional) permission, you are able to present at the graduation colloquium. See also section 3.6.2 for Graduation Project part 2 assessment.

The GP coordinator receives the outcome of all graduate student evaluations from the supervisors and constructs a draft programme of the Creative Technology Graduation Colloquium. This version of the programme will be made available on blackboard a minimum of one week before the colloquium. The final version of the programme is available 2 days before the colloquium.

At the graduation colloquium you perform a public presentation and defence. The duration of the presentation and defence are respectively 15 minutes and 5 minutes. During the defence a session chair coordinates the defence (questions and answering session). Note that there will be other supervisors in the audience that provide their findings of your presentation and defence to your supervisor. Your supervisor uses these findings only for indicative purposes.

3.4   Supervisor

A staff member of the University of Twente will supervise your graduation work. This staff member is appointed by the Creative Technology programme and acts not only as the (daily) supervisor but also as the examiner of your graduation work.

> *Note The Creative Technology examination board mandates University of Twente
> staff members to be an examiner.*

If an external party is involved in your graduation project, this party may appoint an external 'supervisor'. The external supervisor does not have an examiner role but acts as a consultant for the GP supervisor during the assessment of your graduation work.

3.5   Critical Observer

A GP supervisor is responsible for appointing a 'critical observer'. This person may be a research colleague or PhD student of the supervisor, or a person that has complementary knowledge useful for (partial) guidance of the graduation work.

The critical observer is actively involved in two occasions of your graduation work:

1. assessment of GP part 1 (module 11)
2. assessment of GP part 2 (module 12)

During both occasions the critical observer reviews the GP deliverables of module 11 (see section 3.3.2) and module 12 (see section 3.3.5), and provides feedback to the supervisor on the quality and contents of these deliverables.

Optionally, the critical observer is present during the two obligatory presentations of GP part 1 ("My Graduation Project") at the end of module 11 and GP part 2 (public presentation and defence at graduation colloquium) at the end of module 12.

During these presentations the critical observer may ask questions about your work conducted during the first and second part of your GP with the aim to investigate if you are knowledgeable on the topic of your GP. Your answers determine the critical observer's impression of the quality of your work and therefore his/her feedback to your GP supervisor.

The supervisor aims to reach a consensus with the critical observer on the assessment of the first part of your GP. The supervisor and critical observer both sign the filled out assessment form.

3.6   Assessment

During the Graduation Semester there are two assessments of your GP:

1. assessment of GP part 1 (module 11)
2. assessment of GP part 2 (module 12)

3.6.1 Graduation Project part 1

Your supervisor will assess part 1 of your GP at the end of module 11, with a focus on:

1. state-of-the-art review and conclusion(s)
2. "My Graduation Project" presentation

The supervisor assesses the process of the state-of-the-art review and the accompanying deliverables; i.e. chapter 1 and 2 of your GP report (see section 3.3.2). Additionally, he/she will assess your "My Graduation Project" presentation[26].

> *Note Chapter 1 and 2 may be subject to change in part 2 of your GP due to new insights.*

The critical observer reviews chapter 1 and 2 of your GP report and provides feedback to your supervisor. Optionally, the critical observer is present at your "My Graduation Project" presentation to ask questions about your graduation work.

Your supervisor uses the feedback of the critical observer and the Graduation Project I Assessment Form (see Appendix 5) to complete your assessment. Both your supervisor and critical observer sign the Graduation Project I Assessment Form.

Assessment of part 1 of your GP results in a PASS or FAIL.

---

[26] Venue will be announced by the GP coordinator.

3.6.2 Graduation Project part 2

Assessment of part 2 of your GP is basically an integral assessment of your graduation work. Hence, both part 1 and part 2 of your GP are combined and considered as your complete GP.

> Note Your supervisor only starts an integral assessment of your GP iff a preliminary evaluation scheduled two weeks before the public presentation and defence resulted in a "GO"; i.e. you are on schedule to complete graduation work before the end of the Graduation Semester.
>
> If the result is a "NO GO", the grade for GP part 2 in module 12 will be NVD (Dutch: "Niet VolDaan", English "insufficient"); i.e. you are unable to complete graduation work before the end of the Graduation Semester.
>
> If the result is a "Conditional GO" because improvement on the quality of the report requires more than two weeks, your supervisor allows you to continue your GP with extra time to finish your report (see section 3.3.5).

The integral assessment will focus on:

1. quality of report
2. structure of report
3. quality of work
4. process graduation project
5. public presentation and defence

At the end of module 12, your supervisor conducts the integral assessment with the support of the critical observer. The supervisor askes the critical observer to review your GP report and to provide feedback on the quality and structure of this report. Additionally, the supervisor and critical observer (optionally) attend your public presentation and defence and ask questions about your graduation work. Note that it is not mandatory that the critical observer attends this presentation and defence.

Your supervisor uses the Graduation Project Assessment Form (see Appendix 6) and an indicative grading system (--, -, +/-, +, ++) accompanied by brief comments to establish the basis for the final grade. The critical observer's feedback plays an important role in this process.

The supervisor and the critical observer discuss the motivation for the final grade of your GP. Conclusively, both sign the Graduation Project Assessment Form.

<u>Assessment of your GP results in a grade with one decimal</u>.

3.7 GP Repair

For all graduate students, the following applies:

- repair of module 11 GP part 1 outside module 11 is <u>not possible</u>
- repair of module 12 GP part 2 outside module 12 is <u>possible</u>

Repair of module 12 GP part 2 is possible under the following conditions:

- you must have a GO for the oral presentation and defence
- you must finish your GP report within 6 weeks after the end of module 12[27]

Only in case of *special circumstances*, and on an individual basis, the Examination Board may allow graduate students the opportunity to repair an insufficient grade for module 11 GP part 1 or module 12 GP part 2 (in a way to be determined by the GP supervisor). If you think this applies to you, send a request to the Examination Board within <u>four weeks</u> after the module 11 or module 12 grade has been announced. In their decision, the Examination Board may take into account whether you have used the regular supervisor guidance opportunities within module 11 or module 12 as much as you could.

---

[27] TER/OER 2015-2016 programme appendix Art 1.11.4. Note that the module coordinator reduced the maximum 10 weeks period specified in this article to 6 weeks to prevent interference with follow-up (master) programmes.

4 Accompanying Study Units

The accompanying study units are all meant to broaden the scope of the Graduation Project. Therefore, at the end of the Graduation Semester you are able to position your GP in the context of all kind of challenges within the real world perspective. More specific, you are able to:

- deal with success factors for the introduction of technology
- look at these success factors from within a specific application domain
- provide tools (i.e. scientific insights) for reasoning about these success factors from the use (and not the technology) viewpoint, i.e. from behavioural and management sciences

4.1 Mandatory study units

4.1.1 Reflection

Lecturer

Dr. J.H. Søraker

Description

For Creative Technology (CreaTe), Computer Science (TI) and Business and Information Technology (BIT), this study unit will offer one joint reflection module component, with assignments tailored for each program. The reflection component will be carried out by the Department of Philosophy and the Department of Science, Technology and Policy Studies, both from the BMS faculty. The reflection team will consist of at least five teachers who will be responsible for the joint lectures, electives lectures, and supervision. The reflection component, will also have one shared blackboard environment which will host all literature, schedules, assessment requirements, report templates, discussion forums etc. This will be complete before the quartile begins, so that students can start working on their reports from day one.

General lectures will be given on topics expected to be relevant to most reflections. Although the exact topics will be determined in accordance with the graduation projects and available teacher resources each year, some likely topics are:

- privacy and surveillance (including big data, profiling, personalization)
- professional responsibility (incl. research integrity and responsible innovation)
- creative commons and digital public goods
- politics of search engines
- user impact assessment (incl. interface design)
- accessibility and equality (incl. intellectual property)
- value-sensitive design (incl. design for well-being, user inclusion)

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Learning goals

Students are able to:

- apply critical reasoning and ethical deliberation in creative technology design
- understand how technologies may affect core moral values, user well-being, and societal change
- know the most fundamental discussions, theories and controversies in ethics of technology and science and technology studies, in particular related to ICT
- know professional codes of ethics and Dutch/European legislation related to ICT

Working methods

Lectures and personal supervision.
Assignments: reflection and elective reports.

Test

Students will write three reports:

1. Graduation project preparation (1EC, Q1 or Q3): Short individual document that outlines the ethical and societal issues that may be raised by the graduation project. This document further outlines a plan for the graduation project reflection to be carried out in the subsequent quartile.
2. Elective part of Reflection (2 EC, Q1 or Q3): In addition to the graduation project preparation, students also produce an individual 6-8 page report on one of the elective topics. The elective topics will be centred on more narrow topics where students can pursue more particular interests, in collaboration with a reflection-supervisor who is an expert on the topic. Students choose an elective in the first week and, together with the reflection-supervisor, determine a corresponding research question. There will be one lecture dedicated to each elective, and students will be given guidance for themselves finding and making use of relevant literature and empirical research. Creative technology students are strongly encouraged to choose the 'user inclusion' elective.
3. Graduation project reflection (2 EC, Q2 or Q4): On the basis of the graduation project preparation, students identify a series of ethical and societal aspects of their research projects and produce a corresponding 6-8 page individual report on the basis of reflection-supervisor recommendations, recommended literature, and a series of lectures on relevant topics. For students whose graduation projects do not raise any significant issues to address, students can choose an 'open topic' report instead, to be determined in cooperation with reflection-supervisor.

Resit

Retrial of reports.

Material

Will be announced on the Blackboard site of Reflection.

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4.1.2 Academic Writing

Lecturers

Drs. W.B. Tollenaar

T.R. Haaksma MSc

Learning goals

For the duration of the course, participants are expected to do the following:

- search for relevant scientific articles that would be used for the writing of academic articles/manuscripts;
- prepare a literature matrix to effectively work with different information from various sources (e.g. articles published in peer-reviewed journals, books, government reports, professional journals);
- effectively use information from scientific articles for the writing of academic articles/manuscripts;
- apply the conventions of source citation and referencing into their own academic articles/manuscripts;
- apply the principles of academic writing in order to write a coherent and concise text; and
- prepare a literature review using various academic, scientific, and professional sources.

Moreover, after a successful completion of the course, participants are expected to be proficient in writing academic papers (e.g. literature reviews, conceptual papers, research proposals, theses).

Working methods

The course provides participants with the necessary skills for the preparation of academic articles/manuscripts in English. Participants will be expected to perform skill-building exercises during the different sessions. Writing tasks will also be given to provide participants the opportunity to practice and/or improve their writing skills. A total of 8 sessions are scheduled and each session will be a combination of workshops and short lectures.

Test

Attendance to all the sessions is obligatory. The basis for student assessment is a comprehensive literature review.

Resit

Revision and reassessment of the documents.

Material

Tutorials and hand-outs.

4.2   Real World Challenge

Inside module 11 of the Graduation Semester there is a 5 EC elective space. The Creative Technology programme selects courses from other UT programmes that either offer its students to apply their knowledge, skills and experience to a challenge existing in a non-CreaTe domain, or further develop reflection skills on their (graduation) work. Note that course availability depends on the roster of other programmes; i.e. not every course is available in both semesters of an academic year.

The available elective courses for semester 2016-1 are:

- Design of Persuasive Health Technology (DoPHT)
- Documentary Practise (DP)

The descriptions of these electives follow in the next paragraphs.

4.2.1 Design of Persuasive Health Technology
UT-course code: 201400584

Lecturers

dr. L.M.A. Braakman-Jansen
dr. M.E. Pieterse
dr. O.A. Kulyk
H. Kip MSc
M. Altena MSc
prof.dr. J.E.W.C. van Gemert-Pijnen

Description

In this course you will learn how to design engaging technology for real health problems in a multidisciplinary team. You will apply persuasive design theory and entertainment education strategies to support health and well-being.
During this course you will gain insights into possibilities of newest technologies for health, such as personal mobile sensors, virtual coaching applications, serious games, smart glasses and wearables. Special attention will be given how to reach 'hard-to-reach' populations such as low SES[28] groups, adolescents, and illiterates by applying the strategies of Entertainment-Education (EE). Furthermore, principles of diffusion of innovation will be applied.

Learning goals

The student is able to:

- Apply the principles of Persuasive Design and Iterative User-Centred Design to design engaging health technology interventions
- Apply psychological theories and principles of entertainment education (EE) to design interactive persuasive technology for health promotion and care
- Apply formative and summative evaluation methods
- Understand and apply how health monitoring-data can be used to design personalized feedback
- Apply the principles of innovation diffusion for the implementation of persuasive health technology interventions

---

[28] SES means 'socio-economic status'

- Reflect critically on ethical, and societal issues with respect to the collection and use of health monitoring-data
- Develop, apply and reflect on skills to work and communicate effectively in a multidisciplinary team

Working Methods

The project assignments are linked to the research projects from our Centre for eHealth & Wellbeing. You will work on your project in a multidisciplinary team. In this assignment your team will design a persuasive interactive health technology. Your team will create and evaluate a prototype which is substantiated by relevant literature for design of persuasive system design and strategies for entertainment education in a written (group)paper. The course will be finished by a Demo Pitch.

Besides this you will learn to reflect critically on the relevant (ethical) issues with respect to the collection and use of health monitoring-data to design persuasive applications and personalized feedback.

Test Method and Weights

In this course you will finish 3 assignments, each with a grade. You will receive one final grade based on the sum of the 3 grades that will be weighted differently. The course is completed successfully if the final grade is 5.5 or higher.

Table 4.1 - Assessment Design of Persuasive Health Technology

Test		Type of test	Weight
Assignment 1	Group	1.1 Group paper on design prototype 1.2 Prototype	60%
Assignment 2	Group	2 Pitch of prototype	15%
Assignment 3	Individual	3.1 Individual reflection on professional skills 3.2 Individual discussion about further personalization, implementation & evaluation of your prototype	25%

Resit

Retrial of paper and/or individual reflection with a max of mark 6.

Material

No required study materials. Recommended material will be made available.

4.2.2 Documentary Practise
UT-course code: 20160141

Lecturers

Ir. M. Ruiz van Hattem

Description

During the first phase of the Graduation Project scientific literature search will be done. In DP you will search and analyse documentaries and other media manifestations on the Internet to research on different scopes and perspectives related to the technology of your GP. You will analyse documentaries, do research online, make a digital and an analogue folder, study on genres of documentaries, develop a scenario for your own

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documentary, select experts to be interviewed, and compose a documentary about the real world perspective of your own graduation project.

You will get a rough idea about opportunities and threats for technological innovations within their scopes (social, economic, political, ethical, philosophical, psychological). Visual reflection and a changed perspective through storytelling within your documentary will generate a broad view on the problem you are going to solve, instead of the product you are going to make.

Learning goals

Students are able to reflect on and visualise the real world perspective of their graduation projects by means of a documentary. This implies that they:

- can analyse the different formats of documentaries
- can analyse the real world perspective (power, money, ethics, societal implications, sustainability etc) of technological innovations within existing documentaries
- can analyse threats and opportunities for the introduction of their innovations
- can choose the relevant sources and experts to gather information about the real world perspective of their graduation project
- can develop a personal visual concept for the real world perspective of their graduation projects
- can design a documentary about the real world perspective of their own graduation projects
- have insight in conditions that promote their own working process and are able to influence these conditions

The learning objectives of this study unit are mostly related to:
- ILO 6.b - they have knowledge and skills in storytelling, story worlds, and messaging
- ILO 7.c - are aware of human factors, and of social patterns and societal structures
- ILO 11.g - they are capable of critical reflection and can adapt their behaviour on the basis of that reflection

Working Methods

You will work individually and discuss weekly your progress in the group. These weekly meetings for group discussions and feedback on documentary design processes are scheduled (see Appendix 7).

Test Method and Weights

During the project meantime deliverables will be formatively assessed on a weekly basis. The lecturer performs a summative assessment of your documentary about technology of your graduation project at the end of this course. This assessment results in a final grade. The course is completed successfully if the final grade is 5.5 or higher.

Resit

Within 10 days after the summative assessment the latest version of the documentary has to be delivered.

Material

- "Introduction to Documentary" Bill Nichols (online)
- It might happen that you need to pay for some documentaries (low risk)

- 50 Gb space on laptop or external HD
- Access to Dropbox (Dropbox space provided by UT)

5   Graduation Semester Grades

5.1   Module 11 Grade

Table 5.1 depicts the contribution (i.e. weight) of each accompanying study unit to the final grade of module 11. The grade of the first part of your Graduation Project is a PASS or FAIL. A PASS or FAIL should be interpreted respectively as a positive or negative assessment on the quality of the first deliverables of your Graduation Project as well as the quality process of your graduation work. The grade of Graduation Project I is not included in the final grade calculations of module 11.

Table 5.1 – Module 11 final grade calculation

Component	Weight	Minimum
Reflection I (3 EC)	25%	5.5
Academic Writing (3 EC)	25%	5.5
Real World Challenge (5 EC)	50%	5.5
Graduation Project I (4 EC)	-	PASS

In order to pass module 11, CreaTe students must meet the following requirements:

- You must have achieved a grade of 5.5 or higher for Reflection, Academic Writing and the selected Real World Challenge (Design of Persuasive Health Technology or Documentary Practise)
- You must have received a PASS for Graduation Project I

5.2   Module 12 Grade

Table 5.2 depicts the contribution (i.e. weight) of each accompanying study unit to the final grade of module 12.

Table 5.2 – Module 12 final grade calculation

Component	Weight	Minimum
Reflection II (2 EC)	10%	5.5
Graduation Project II (13 EC)	90%	5.5

In order to pass module 12, CreaTe students must meet the following requirement:

- You must have achieved a grade of 5.5 or higher for Reflection and Graduation Project II.

5.3   Module Failure

In the unfortunate situation that you were not able to pass module 11 or module 12, you must resit the failed module. Different resit options are applicable depending on the reason for not passing a module. Tabel 5.3 and table 5.4 respectively depict the resit options for module 11 and module 12.

> *Note You must pass Module 11 in order to start Module 12.*

Table 5.3 – Module 11 resit options

Reflection I	Academic Writing	Real World Challenge	Graduation Project I	Action
0	0	0	0	Resit entire module
1	0	0	0	Resit entire module
0	1	0	0	Resit entire module
1	1	0	0	Resit entire module
0	0	1	0	Resit module with option A
1	0	1	0	Resit module with option A
0	1	1	0	Resit module with option A
1	1	1	0	Resit module with option A
0	0	0	1	Resit module with option B
1	0	0	1	Resit module with option B
0	1	0	1	Resit module with option B
1	1	0	1	Resit module with option B
0	0	1	1	Resit module with option C
1	0	1	1	Resit module with option C
0	1	1	1	Resit module with option C
1	1	1	1	None
Legend				
0	not fulfilled criteria			
1	fulfilled criteria			
Options				
A	resit Real World Challenge **OR** alternative Real World Challenge			
B	extended literature research Graduation Project I			
C	option A **AND** option B			

Table 5.4 – Module 12 resit options

Reflection II	Graduation Project II	Action
0	0	Resit entire module
1	0	Resit entire module
0	1	Resit module with option A
1	1	None
Legend		
0	not fulfilled criteria	
1	fulfilled criteria	
Options		
A	assistantship graduate student Graduation Project II	

6   Organisation

6.1   Graduation Semester Coordination

The coordinator of the graduation semester's Module 11 and Module 12 is:

Name:	Richard Bults
Office:	Zilverling 1028
Phone:	053-4896098
Email:	r.g.a.bults@utwente.nl

6.2   Time Schedule

For the most recent time schedule of the Graduation Semester look at:
https://rooster.utwente.nl/

Login with your student account and choose:

Creative Technology MOD11 201600049 Real World Perspective

Creative Technology MOD12 201600050 We CreaTe Impact (available 2nd half October 2016)

Consult https://www.utwente.nl/ces/planning-roosters/jaarplanning/jaarcirkels/ut-jaarcirkel-2016-2017-voor-bsc-tom-onderwijs.pdf for the actual "jaarcircles".

Deadlines for tests and deliverables can be found at the Blackboard organisation of the Graduation Semester ("Course Materials") or accompanying study units (see section 6.3).

6.3   Blackboard

The Blackboard site of this module is called: "Create graduation semester". Here you will find all recent, relevant and more detailed information of the Graduation Semester including its study units:

- Graduation Project site (Graduation Semester org.)
- Reflection site (own org.)
- Academic Writing site (Graduation Semester org.)
- DoPHT site (own org.)
- DP site (Graduation Semester org.)

The Graduation Semester coordinator is responsible for your enrolment in the Graduation Semester organisation. The lecturers of accompanying study units with their won organisation decide on the enrolment policy of their study unit.

> *Note The Graduation Semester coordinator is responsible for your enrolment of both modules of the Graduation Semester in OSIRIS.*

6.3   Study facilities

Vrijhof

For those students, who work a lot with wood and metal or other "large" materials in their interactive installations, we have agreements with the Vrijhof Culture Centre (where also the UT library is based). CreaTe students can make use of their workshops/studios during the lecture hours. There are 3 workshops/studios: one for wood, one for metal

and one for non-dust generating materials. If you want to make use of these facilities you should contact the workshop supervisor Han Davina. See also the regulations in Appendix 7.

Smart XP and Design Lab

CreaTe students are allowed to make use of the facilities of SMART XP and the Design Lab, taken into account that they keep up to regulations.

6.4   Module evaluation

In the former paragraphs we explained the organization of the "Graduation Semester". To be sure that everything will develop smoothly, we will monitor the process carefully by asking students and teachers about their experiences and suggestions for improvement. The module coordinator will also report on the actions that will be initiated, based on the feedback of students and teachers.

Education is a mutual responsibility of teachers and students. Therefore we ask teachers and students to participate actively in the evaluation. If they have questions on which they like to know if colleagues and/or fellow students agree or don't agree, they are invited to ask the module coordinator to present these questions to the whole group. Evaluation methods that will be used are:

- Weekly informal evaluation by asking the participants of RWP about the Graduation Semester
- Mid term evaluation questionnaire in week 4 of module 11 and module 12
- CREEC- panel talks
- Standard Evaluation Questionnaire by the Educational Centre

Appendix 1   Graduation Project Agreement

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Creative Technology Graduation Project Agreement (v3-2015)

…………………………………………………………… (name company)
established at …………………………………………………… (city, country)
represented by … …………………………….……………… (name and function)
hereinafter referred to as "Client Organization",

and

…………………………………………………………….. (name student)
residing at ………………………………………………….. (address)
born on ....at…..
student at the Faculty …………………………………………..of the University of Twente
hereinafter referred to as "Student",

and

University of Twente
Drienerlolaan 5,
7522 NB Enschede
The Netherlands
hereinafter referred to as "University of Twente"

Have agreed as follows:

Article 1
The Client Organization enables the Student to execute a graduation project assignment within the framework of his/her education starting on ....…………… until....……………… at the organization division………………

Article 2
The Client Organization shall charge the Student exclusively with duties that fit in the purpose of the graduation project assignment, as described in an assignment attached to this document.

Article 3
The Client Organization shall appoint a supervisor charged with the attention and supervision on the Student and also with the contacts with the University of Twente.
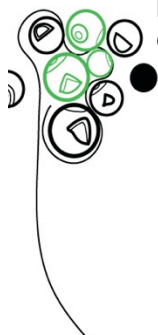
Article 4
The University of Twente shall appoint a supervisor charged with the attention and supervision on the Student and also with the contacts with the Client Organization.

Article 5
The graduation project assignment period for the Student shall be in conformity with the daily working hours that apply for the Client Organization or for the division at which he/she has got a placement, unless agreed otherwise.

Article 6
The Student shall be obliged to keep secret all information that has come to his/her notice during his/her graduation project assignment period and of which he/she should reasonably recognize the confidential nature.

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Article 7

The Student shall report his/her absence due to illness or other reasons as soon as possible to his/her supervisor of the Client Organization or to the employee charged with illness reports and also to his/her supervisor of the University of Twente.

Article 8

The Student will receive a gross/net* allowance of………………..per month.   Furthermore the arrangements for the costs of travel will/will not* be applicable and/or the costs of subsistence will/will* not be applicable.

Article 9

The Client Organization shall be entitled to terminate the graduation project assignment upon consultation with the supervisor of the University of Twente, if the Student, to the opinion of the supervisor of the Client Organization, does not sufficiently take the organization's rules into account or does not follow the instructions given by or on behalf of the organization.

The Student shall be entitled to terminate the graduation project assignment upon consultation with the supervisor of the University of Twente, if the Student reasonably cannot be asked to continue the graduation project assignment at the Client Organization.

Article 10

The Student of the University of Twente is insured for Third Party Liability (bodily injury and/or property damage and all losses resulting therefrom) at the ABN-AMRO (policy number 6442.6086) during the stay of her/his graduation project assignment.

Article 11

The Client Organization covers accidents in the workplace in accordance with national law, and shall be responsible and liable with regard to the student as to accidents on its premises as if the student were one of its employees.

Article 12

This agreement can be amended upon consultation between the Client Organization, the Student and the supervisor of the University of Twente.

Drawn up in triplicate and signed at

City
…………………………………

Date
…………………………………

Signatures

Representative Client Organization	Student	Managing Director faculty EEMCS-UT
……………………………….	…………………………………	…………………………………

* delete as applicable

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Appendix 2   Guideline Time Division Graduation Project

week number	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5

Module 11 (4 EC)   Module 12 (13 EC)

State-Of-The-Art	3.5 EC	
Ideation	3 EC	
Specification	2 EC	
Realization	5 EC	Vacation
Evaluation		1 EC
Report	0.5 EC 2 EC	1st semester
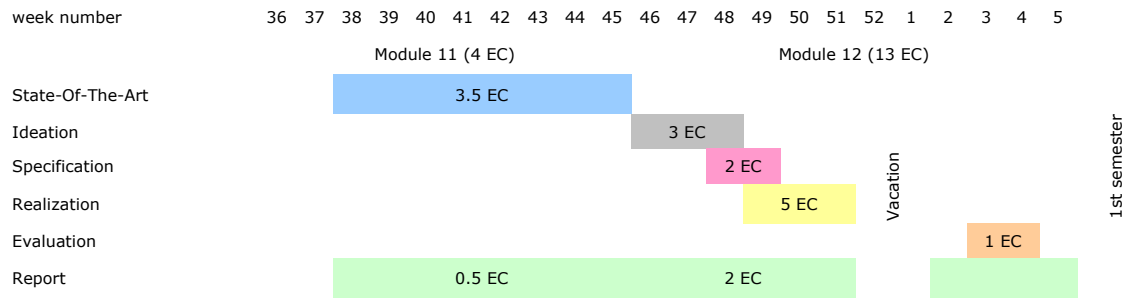
See link below for specific "jaarcirkel 2016-2017" related information:

https://www.utwente.nl/ces/planning-roosters/jaarplanning/jaarcirkels/ut-jaarcirkel-2016-2017-voor-bsc-tom-onderwijs.pdf

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Appendix 3   Creative Technology Design Process

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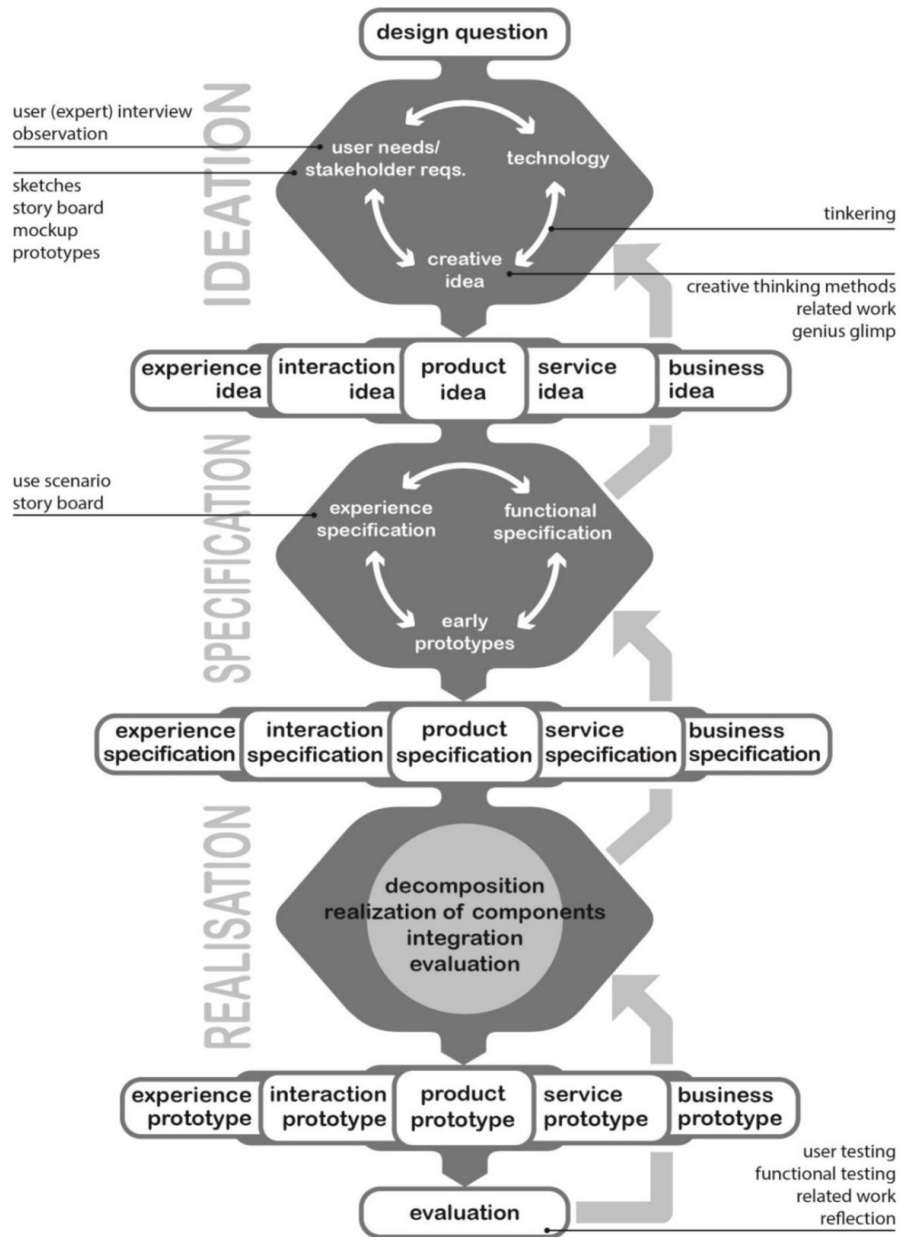
Appendix 4   Guideline Structure Graduation Report

Front page - Title, Author, Supervisor(s), Date

Abstract[29]

Acknowledgement[30]

Table of Contents

List of Figures[31]

Chapter 1 - Introduction

Chapter 2 – State of the Art on …[32]

Chapter 3 - Methods and Techniques

Chapter 4 through N-1 (e.g. Ideation, Specification, Realisation, Evaluation Phase)

Chapter N – Conclusion

Chapter N+1 – Future Work

Appendix 1 through N[33]

References

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[29] approximately 400 words; hint: http://www.sfu.ca/~jcnesbit/HowToWriteAbstract.htm
[30] ~ 200 words; hint: http://academia.stackexchange.com/questions/15992/whom-do-i-have-to-thank-in-the-acknowledgements-section-of-a-bachelor-thesis
[31] Figure with incremental numbering and description
[32] topic of your research
[33] incremental numbering

Appendix 5   Graduation Project I Assessment Form

Creative Technology
Graduation Project I Assessment Form

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Student Name :
Student Number :
Period :
Organization :
Project Title :

Assessment criteria	--	-	+/-	+	++	Remarks (optional)
Quality of report	☐	☐	☐	☐	☐	
• Statement of research/design question • Context and existing work • Discussion and argumentation • Results and conclusions						
Structure of report	☐	☐	☐	☐	☐	
• Organization and structure • Clarity • References • Language						
Quality of work	☐	☐	☐	☐	☐	
• Relevance • Originality • Complexity • Volume of work						
Process graduation project	☐	☐	☐	☐	☐	
• Independence • Creativity • Problem solving • Planning • Critical attitude • Incorporating feedback						
"My Graduation Project" presentation	☐	☐	☐	☐	☐	
• Clarity • Use of media • Answering questions						
				FINAL GRADE:		

Final grade motivation:

Report delivery date (DD/MM/YY) : -- / -- / --

Graduation Project evaluation date (DD/MM/YY) : -- / -- / --

Supervisor & critical observer signature : ....

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Appendix 6 Graduation Project Assessment Form

Creative Technology
Graduation Project Assessment Form

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Student Name :
Student Number :
Period :
Organization :
Project Title :

Assessment criteria	- -	-	+/-	+	+ +	Remarks (optional)
Quality of report	☐	☐	☐	☐	☐	
• Statement of research/design question • Context and existing work • Statements of product ideation, specification, realization • Discussion and argumentation • Results and conclusions • Recommendations						
Structure of report	☐	☐	☐	☐	☐	
• Organization and structure • Clarity • References • Language						
Quality of work	☐	☐	☐	☐	☐	
• Relevance • Originality • Complexity • Volume of work • Evaluation of design/product						
Process graduation project	☐	☐	☐	☐	☐	
• Independence • Creativity • Problem solving • Planning • Critical attitude • Incorporating feedback • Intermediate presentations						
Public presentation and defence	☐	☐	☐	☐	☐	
• Clarity • Use of media • Answering questions						
					FINAL GRADE:	

Final grade motivation:

Report delivery date (DD/MM/YY) : -- / -- / --

Graduation Project evaluation date (DD/MM/YY) : -- / -- / --

Supervisor & critical observer signature : ....

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Appendix 7 Documentary Practise schedule for group discussions and feedback

date	meeting theme	
	13:45-15:30	15:45-17:30
7 sept	Importance of perspective and the power of images. Screening of documentary excerpts. Literature study on genres of documentaries	Working with video cameras and editing software.
14 sept	Introducing 'scope' and 'perspective' as tools for filling out a theme. Brainstorm session on scopes. Analyse formats of documentaries.	Defining the scopes and perspectives within the theme of a GP. Search, select and attach content (footage, literature, experts) to formulated scopes and perspectives within your theme. Practice with video-capture software.
21 sept	Interview training. Practice interview skills (roleplaying game) .	Selecting experts and preparing for interview. Interview experts.
28 sept	Pro and cons of using different forms of information: verbal (data, text) and visual (imagery). Visualization game. How to use documentary strategies to awaken an associative power. How to bring harmony in eclectic images.	Continue to search, select and attach content (footage, literature, experts) to the formulated scopes and perspectives within your theme, with extra attention to imagery footage
5 oct	Storylines and formats of journalistic/ scientific documentaries.	Create a strong vision on the theme. Make a clear selection in content. Assemble content in different structures. Start creating a storyline.
12 oct	How to visualize a storyline. Mood board and storyboard, atmosphere and cinematographic forms.	Making and presenting mood boards. Starting storyboard.
19 oct	Technics: graphics, leaders, animation, sound. Editing technic.	Develop a production plan for the final content. Generate final content. Make a leader or animation, and start editing.
26 oct	How to use and cut sound, movements and other editing tips. Different formats of editing within documentaries.	Start final editing.
2 nov	Presentations and feedback	Presentation

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Appendix 8   Instructions Vrijhof Studios

Instructions for Students CreaTe for the usage of the workshops / studios in the Vrijhof Culture Centre:

Before the projects groups start in the Vrijhof they must have an intake interview with the workshop supervisor (Han Davina*). He will assess if the project can be realized in the Vrijhof. Additionally, during this intake instructions will be given on the workshops and the tools herein.

Due to safety issues it is NEVER allowed to work with only 1 person in the workshops. At least 2 or more people have to be present all times.

For each project group working in the Vrijhof 1 contact person will be appointed. This person can reserve the workshops and is the principal person for communication with the workshop supervisor.

The workshops/studio scan be reserved from Monday – Fridays 09.00-17.00 with supervision present. After 17.00 and in the weekends no supervision is present. If project groups want to work at these times strict agreements have to be made with the supervisor.

Workshops have to be in a clean state at the end of the day. On the days when courses have been scheduled in the evening the workshop has to be clean and orderly at 17.00.

Materials like screws, nails, tape etcetera are not present in the workshops and should be bought by the groups themselves.

Project groups can make usage of the hand tools present (saws, hammers, screw driver etc.). After consulting the workshop supervisor also automated machines like drilling equipment can be used.

Storage of set-ups and group equipment should be discussed with the workshop supervisor.

* Workshop Supervisor:

> Han Davina
> Mon – Fri 09.00-17.00 room 131, Vrijhof
> Phone: 053-4895961
> E-mail: j.h.m.davina@utwente.nl

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Document History

Document History and Version Control			Version 2.0
Contact Person			R.G.A. Bults

Version	Date	Contributors	Description
1.0	19-1-2016	Module team	Public version available at Blackboard
1.1	10-3-2016	J.H. Søraker, R.G.A. Bults	Deliverable references added to Graduation Project (3.3) and Reflection (4.1.1); updated Graduation Project and Reflection deliverables Appendix 9
1.2	6-4-2016	R.G.A. Bults	Section 3.5 elaborated oral assessment part 1 GP and added GP part 1 assessment form in appendix 5. Chapter 5 restructured, weight factors all M11 options changed and elaboration of build-up M11 and M12 grades.
2.0	2-9-2016 (pending OLC approval)	R.G.A. Bults, W.B. Tollenaar, L.M.A. Braakman-Jansen, M. Ruiz van Hattem, J.H. Søraker,	Chapter 1, 2 rewritten. Chapter 3 updated to 2016-1 milestones, section 3.4, 3.5 and 3.6 rewritten. Chapter 4 updated to new study units content. Chapter 5 rewritten. Chapter 6 updated to 2016-1 organisational aspects. Appendix 2, 4, 7 updated according to references. Appendix 9 removed.
2.1	6-9-2016 (work in progress)	R.G.A. Bults	Section 3.3.5 reformatted and "Yes, but…" conditions changed.