

Academic Guide Exchange 2020-2021

Faculty of IT & Design



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THE HAGUE
UNIVERSITY OF
APPLIED SCIENCES

Academic Guide Exchange 2020-2021

Faculty of IT & Design

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Inhoud

About the Faculty of IT & Design	55
Courses	66
European Project Semester	77
Applied Data Science	99
Game Development	1040
Becoming the next succesfull online start-up (interdisciplinary).....	1114
Reading Objects	1343
Photography in focus.....	1444
International Semester UXD: User Experience Design.....	1515
International Semester CMD: Communication and Multimedia Design	1747

About the Faculty of IT & Design

About the Faculty of IT & Design ICT and digital developments form an important part of our society. Computers are used in every area of everyday life and that starts as soon as you wake up in the morning: you read all your messages on your mobile phone and check what you have to do that day. And when travelling with public transport, you check in using your chipcard. The future of our society is intertwined with the development of ICT technologies and digital design. The Hague University of Applied sciences offers a wide range of opportunities to follow courses which eventually contribute to a bright future. Whether at school or at work, practically everything has become computerised.

In this leaflet you will find information about a variety of courses taught in English at the Faculty of IT & Design. The Faculty offers courses in English in the following fields of interest.

Communication & Multimedia Design (CMD)

CMD is a comprehensive, topical and interesting degree programme in the field of design that offers a unique combination of interaction design, visual design, ICT, media and communication. We focus on the process of Look & Listen, Create Concepts, Design Details and Realise and train our students to become interaction designers. An interaction designer designs an interface that ensures optimum interaction between people and systems.

User Experience Design (UXD)

Whether it's a smart fridge that replenishes itself online, or a watch that tracks our activity, the user experience of digital technology has become a reality for every professional designer. You might already have some ideas of how to improve your daily life with the use of technology, but what UXD teaches you is to funnel your creativity by putting the end users of your product at the forefront of the designing process.

HBO-ICT

What did you do when you woke up? WhatsApp, put a photo on Snapchat? Later you probably did a payment with your bank card and checked the news on your smart-phone? All this is possible thanks to life changing ICT. HBO-ICT combines creativity and functionality to make you develop this fast changing sector. The bachelor programme consists of 5 specialisations: Software Engineering, Business and Management, Information Security Management, Network and Systems Engineering and Information and Media Studies.

The Faculty ITD has three campuses: The Hague, Delft and Zoetermeer. Each location has its own character. The main campus in The Hague is the largest and characterized by a vibrant and international atmosphere. The campus in Zoetermeer is located in the Dutch Innovation Factory: a place where education, research and companies meet and closely collaborate. The campus in Delft is located, together with our technical faculty, on the premises of TU Delft. Please note on which campus your course takes place; if your minor is in Delft or Zoetermeer and you opt for housing in the Hague, additional travel expenses may be applicable.

Courses

Find below an overview of all courses offered in English at the Faculty of IT & Design

Courses	ECTS	Fall Semester 1 Term 1	Fall Semester 1 Term 2	Spring Semester 2 Term 3	Spring Semester 2 Term 4
European Project Semester	30	x		x	
User Experience Design *	30	x			
Communication and Multimedia Design *	30	x			
Game Development	30	x		x	
Photography *	15	x			
Becoming the next successful online startup	30	x		x	
Applied Data Science	30	x			
Reading Objects	15		x		

*When the minor is full we can possible offer you a different choice.

European Project Semester

Interdisciplinary

Climate change, poverty or security, the problems we are facing today are complex. Strong disciplinary knowledge does not suffice to solve these problems; we need professionals who are prepared to look at problems from different perspectives and who have learnt to collaborate with professionals from other disciplines. The European Project Semester (EPS) is crafted to prepare students with all the necessary skills to face the challenges of today's fast changing world.

Students work in international and interdisciplinary Scrum teams of 4–8 students on their projects. Students learn to learn and to take responsibility for their learning and their project work and they develop their intercultural competences, their communication skills and their interpersonal skills.

Students work in an interdisciplinary and international student team on a project provided by an external partner: company, research group or other organisation. Students will apply their disciplinary knowledge and skills and learn from students from other disciplines.

European Project Semester	
Credits	30 ECTS
Code	ITD-HMVT19-K70
Entry requirements	Passed the first two years of a bachelor programme
Semester	Fall & Spring semester
Method	Workshops and project work
Lecturer(s)	Anneke Wieman, a.wieman@hhs.nl , +31 6 86808911
Learning outcomes	<p>The student evaluates his/her knowledge on different cultures in an international group of students</p> <p>The student can express oneself well in business English during oral presentations</p> <p>The student can write a structured research report in English</p> <p>The student demonstrates a critical and investigative attitude</p> <ul style="list-style-type: none"> - able to formulate relevant research questions - able to apply relevant search strategies - select and apply relevant theories <p>The student clearly describes research results in a research report</p> <p>The student is able to bridge cultural differences in order to carry out a project successfully</p> <p>The student applies one's own disciplinary knowledge to the project and respects and values the input of people from other disciplines</p> <p>The student combines relevant disciplinary knowledge from different group members (including his/her own) to develop an innovative solution for a company's problem.</p> <p>The student demonstrates his/her progress in three selected 21st century skills</p> <p>The student applies Scrum appropriately to develop the final solution</p>
Recommended or required reading/tools	Bring your own laptop. Other tools and literature will be provided
Assessment methods	Group assessment (30%), individual portfolio (30%), group assignments (40%)
Level	Undergraduate: fourth year
Location	The Hague

Course content

Technical know-how will be provided by experts from companies involved and the nature of it is based on the type of project. In each group attention will be paid to

- Intercultural communication (4,5 ECTS)
 - Research (3 ECTS)
 - English (4,5 ECTS)
 - Project (18 ECTS: Scrum, collaboration, personal development and content depending on the type of project)
-

Applied Data Science

HBO-ICT

In the minor Applied Data Science, students will work in a project team that consists of 6-8 students together with an experienced Data Scientist on a challenging Data Science study. For example, In previous runs we have studied mapping the environment with stereo cameras for autonomous driving, analysing and diagnosing shoulder injuries with a Kinect, and optimising climate control of buildings with sensor data. Every run of the minor, we will select research challenges to work on based on suitability for Data Science research, impact (is there really a need for this research?) and feasibility (do we expect to be able to deliver interesting results in 20 weeks, for example, are the required data and resources available?).

Course Content

During the first ten weeks the team will work for approx. 50% of the time on the project and for 50% of the time learning about Data Science, Machine Learning, Python Notebooks, Spark, Applied Research, literature study, Scrum for research, Exploratory Data Analysis, and more. We plan this course partly on an on-demand basis, i.e. we will try to introduce the techniques that apply to the projects. Each team will plan its own course as long as it works in two-weekly sprints to continuously focus on producing deliverables that help reach the research objective. At the end of the week the team will present progress to the other teams and visitors.

Prerequisites

There are no prerequisites for this course but we especially encourage students to take this course when they are at least somewhat familiar with programming languages and/or possess analytical skills (can solve problems). This is a semester course worth 30 EC, it is not possible to take only part of the course.

Level	Undergraduate
Location	The Hague
Length	20 weeks
Blocks in which course is offered	Fall Semester
Language	English
Study Credits	30
Course content	The module has the following tests: Testform Percentage Week Retry <ul style="list-style-type: none">• Written test 25% wk 13-17 Same term, wk 10• Portfolio 50% wk 20 Next term wk 1• Assessment 25% wk 20 Next term wk 1 Requirements: Test 1 must be at least 5,5 the other tests must at least be 4,5

Game Development

You will be part of a (bigger) team working on a (serious/ simulation) game. The aim is to form multidisciplinary teams for getting experienced in collaborating with people from different disciplines. You will be encouraged to enrich your way of thinking in the game development domain.

You are free (within certain constraints) to come with a proposal, a game design document (GGD), for a game. This proposal will be assessed on complexity and feasibility. Your project team consists of members from different disciplines. It is important everybody has the possibility to develop him / herself.

Mainly the Unity (game engine) is used for the development of your game, but for the technical disciplines some parts will be disabled for implementing own versions of engine components, such as the physics engine, the scripting engine or addition of AI

During the development of the game you will be rewarded with achievements by accomplishing milestones (continuous assessment of knowledge and skills). The end of the project will be presented at a mini conference where all interested people and involved companies are invited.

The minor Game Development is suitable for students from different disciplines that have an interest for knowing how to develop games. They like to work together with students from other disciplines on the development of their (simulation / serious) game.

While playing games, did you always wonder how they actually do that? How do they build it? We offer you a cool project in which you build you own game as part of a group of students. But We do ask an enormous amount of effort (also in time) in return.

This minor could interest students from different programs within The Hague University. By offering you to apply for different roles (profiles) the course is especially suitable for HBO-ICT and CMD. Also, students of other programs can join, but are maybe limited to the role they can choose (see admission requirements).

Level	Undergraduate
Location	Zoetermeer
Length	20 weeks
Blocks in which course is offered	Fall & spring semester
Language	English
Study Credits	30
Entry requirements	Concrete, qualitative entry requirements with regard to the required basic competencies. The entry requirements must follow logically from (the level of) the intended final objectives/ competencies. Also indicate how and when it will be determined whether a student meets the requirements.

Becoming the next successful online start-up (interdisciplinary)

Everyone can be an entrepreneur, as long as you have long-lasting idea and??? will to transfer your idea into a success! This course is the ultimate experience for students who want to find out whether they fit the role of entrepreneur, and whether they have the ability to start a successful (profitable) online start-up.

In this course you will realise your idea. It is not 'just a school assignment'. You will speak with real life customers or businesses, you will figure out what their problems are and you will build a website, app, tool or product which actually solves the problem of that customer or company. Sounds simple, doesn't it? Well, in reality it is hard work. But it is fun too.

Online Start-Up is a real 'hands-on' course and a great chance to work on your innovative idea. You can work on it by yourself, or in a small team. You will be supported by teachers, as well as company speakers that give you the insights on what they have learned and experienced in their companies.

Course Content

In 'Becoming the Next Successful Online Start-Up' we will guide you through the early phases of entrepreneurship. Therefore we will use the Lean Start-Up – Methodology by Eric Ries.

Lean Start-Up by Eric Ries

Where traditional companies mainly focus on creating an extensive business plan, Lean Start-Up thinks of building your own company in a completely different way. The main idea of Lean Start-Up is that you improve your idea or product continuously.

This thought is executed by a Build-Measure-Learn strategy. Only within weeks you will create your first minimal viable product (MVP) and start measuring whether this product actually adds value from the perspective of your primary target group.

Basics of entrepreneurship

Besides transferring your idea into an online product, this course teaches you several necessary basics of entrepreneurship, such as:

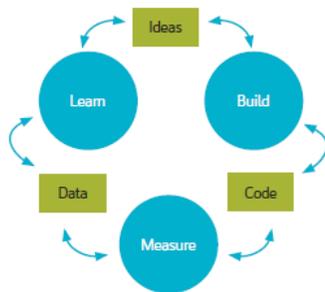
Founders shares: who owns and earns what within your company-team?

Customer Segments: what is your main target group and what are their pains and problems?

Business Model Canvas: we'll use the BMC-model to give you a solid basis as entrepreneur

Competitors: what is your position in the market, compared to other parties?

Pitching: what makes your pitch successful in gaining investor capital



Learning Goals

This course is an extensive introduction in the many aspects of entrepreneurship. If you already have a business idea, the course gives you a chance to discover if your primary idea is life worthy. If you are 'just' interested in the concept of entrepreneurship, this course forms an excellent experience of 'feeling like an entrepreneur' for ten weeks.

Entry Requirements

This is a hands-on course. One of the goals is to make a success of your idea. You have to contact customers and arrange appointments with companies. If you are not sincerely willing to invest time and effort in this, this might not be the right course for you.

Level	Undergraduate
Location	Zoetermeer
Length	10 weeks
Blocks in which course is offered	Fall & Spring Semester
Language	English
Study Credits	30
Entry requirements	Completed the first two years of major

Reading Objects

Meet our characters: the mirror, the ring, the dice, the key, the drinking glass, the book, the cuddly toy, the glasses, the football, the apple, the guitar, and the trophy.

By in-depth study of an object, and by redesigning this object in playful and provocative ways, we try to shed new light on the value and future of the object. In the minor Reading Objects, we move away from user-centred design and explore object-centred design.

The minor Reading Objects is likely to appeal to all programs with a creative character. The explorations in the minor build understanding for various interpretations of objects, and as a consequence lead to more effective cooperation in multidisciplinary contexts.

Via Research through Design, we invite you to reflect on your future profession and your responsibilities in inspiring and creative ways. With a basis in philosophy the minor takes great thinkers and philosophical approaches as a starting point. But we also borrow from as wide a field of disciplines as possible, ranging from archaeology to photography, from creative writing to ethnography.

Be prepared: you will be out of your comfort zone at times. We aim at a demanding yet fulfilling experience. Most of the work will be done at school in a small-scale studio setting.

Learning objectives:

- 1 The student is able to **analyse and describe an object** borrowing from a variety of perspectives (e.g. ideas from philosophical approaches*, artefact analysis, history, etymology, archaeology, photography, technology, semantics/semiology, arts). The emphasis is on multi-facetedness.
- 2 The student is able to **build a shared language** in multidisciplinary cooperation by understanding various professional interpretations of objects.
- 3 The student is able to **write a vision on what the object is**. The emphasis is on distilling a focus from the variety of object descriptions.
- 4 The student is able to **redesign an object** (functional, playful, provocative) to communicate the vision. The deliverable is an **experiential prototype** (an actual physical object, a documentary, a storyboard, ...).
- 5 The student **demonstrates 21st century skills** (critical thinking, creativity and innovation, information literacy, et cetera.)

* Selected philosophical approaches include: Hermeneutics, Post-phenomenology, and work by Latour, Heidegger, Wittgenstein, Akrich, and Verbeek.

Level	Undergraduate
Location	The Hague
Length	10 weeks
Blocks in which course is offered	Term 2 semester 1 (Fall semester)
Language	English
Study Credits	15
Course contents	<p>In the first part of the minor you will fill a portfolio with analyses and descriptions of an object. Grading criteria focus on the variety of approaches, the thoroughness of the analyses, and the quality of the presentation. (50% of final grade, minimum partial grade 5,5, learning objectives 1, and 5)</p> <p>A vision document builds a bridge from research to design. The document is a concise textual/visual statement about the object under study. Grading criteria include originality, foundation (links with theory), and quality of expression. (20% of final grade, minimum partial grade 5,5, learning objective 3 and 5)</p> <p>The second part of the minor results in an experiential prototype. The prototype is presented by means by a one minute video clip. This prototype and presentation will be graded in design quality, newness and fit with the vision. (30% of final grade, minimum partial grade 5,5, learning objective 4 and 5)</p>

Photography in focus

Photography in Focus is an introduction to the world of photography. The main focus is 'learning to see'. Seeing leads to meaningful images; images that shape the ideas of the maker. In order to achieve this, knowledge of photography techniques is essential and these techniques will be dealt with extensively. Attention will also be paid to photography from a historical and theoretical perspective. Maintaining 'a dummy' forms a large part of the learning process. All your ideas, plans, sketches and sources of inspiration (e.g. from magazines) are collected here. The dummy gives an impression of the process involved in the development and execution of the assignments.

Course content

Photography in Focus involves five practical assignments. In the Texture and Rhythm assignment, students study the specific photographic qualities of materials. For the Styling assignment, the focus lies on learning how good styling can contribute to the persuasive power of the photographic image. In the Light assignment, students study form while using the human body as their subject. In the Time assignment, students record the process of change in form and in the final assignment the students are free to choose a subject of their choice.



Level	Undergraduate
Location	The Hague
Length	10 weeks
Blocks in which course is offered	Term 1, semester 1 (Fall semester)
Language	English
Study Credits	15
Entry requirements	First year of bachelor's degree.

International Semester UXD: User Experience Design

This international 20-week semester covers the foundations of user experience design (UXD) and consists of several courses (see below). The semester allows a maximum of five exchange students (in order of registration). Please find below an overview of courses in the semester.

Introduction to User Experience

You will gain insight into what User Experience is and what factors to take into account when creating a great User Experience. When defining User Experience, people tend to talk about three aspects: what experience is, the quality of the experience and the design of experience. We find it important to define and teach all three. On this course, you will create a frame of reference on UX and its terminology.

Research for Design

UX designers are investigative designers. To have your curiosity effectively spark your inspiration and to make founded choices in your design processes you need to build an understanding of research and to develop your research skills. On this course, you learn basics of research into user interactions with a system as well as ethnographic observation and interview methods that aim at gaining empathy towards the people you are designing for.

Design and Creativity

Creativity is a crucial ingredient of design. On this course, you learn about your own creativity and you are trained to further develop your creativity. Sketching is an important skill to enhance creativity and to cooperate with others in design processes. In this course you familiarize yourself with design skills such as exploring solution spaces and generating ideas in visual ways. You learn about design processes (iteration, diverge/converge), and you practice various related skills for ideation. You will try out different creative techniques and you will experiment with different visual techniques.



Values in Design

Computing, information technology, and digital media are part of and shape many aspects of our everyday lives, from education to entertainment to finance to identity to politics to social life and beyond. These technologies offer new possibilities for human action, which lead to questions about whether and how to deal with the possibilities. As designers, we make decisions that shape these technologies and the possibilities for human action that they offer. We are responsible for what we design. On this course, we will study the relationship between these technologies and society through the lens of (moral) values, examining whether and how technologies can support or hinder values and how we can take a position on the ethical implications of technologies and account for values in design.

Programming Class

On this course, you will learn the fundamentals of programming and making digital prototypes. After an introductory assignment in prototyping, a 1-week intensive bootcamp focuses on stimulating creativity and validating solutions with programming. The aim is to teach knowledge and understanding of the logic and structure required in programming. It does not aim to teach programming for any single production environment or specific object (e.g. front or backend development, smartphone), but more broadly look at the creative potential of code.

Online Presence

On this course, you will get introduced to HTML/CSS, the essential elements of web development. You will also work on your (online) representation as a future design professional in order to obtain an internship or a design job during or after this study. You will be stimulated to have a curious, creative, experimental and playful attitude, and learn what you can gain if you engage others in or with your projects.

Project Bespoke Design

As with a lot of concepts used in a rapidly developing field there isn't a set definition of what 'bespoke' means within the UX industry. But ongoing development of technologies in three-dimensional scanning, rapid prototyping and advanced manufacturing will have a major impact on the potential ability to fulfil the individual consumer's needs directly and instantly. In this project, we will use bespoke design in the sense of fitting the needs, personality & lifestyle and context of a user, and using empathy to really understand what this user wants and needs. Designing for one particular user will give you an understanding of how people experience things and how technology can play a role in people's daily lives. In the project, you will go through all the stages of a design process to arrive at a meaningful and engaging design.

International Semester UXD	
Credits	30 ECTS
Duration	20 weeks
Semester	Fall semester
Entry requirements	English level C1 (recommended)
Language	English
Remarks	Max. 5 exchange students (in order of registration)
Location	The Hague
Level	Undergraduate

International Semester CMD: Communication and Multimedia Design

The International Semester of Communication & Multimedia Design consists of several courses, which are offered during one semester. **The semester is suited for advanced students, who are already familiar with interaction design or a related field and are in their final years of studies.** The semester allows a maximum of eight exchange students (in order of registration). The following courses are offered during this 20-week semester.

Autonomous Design Project (12 ECTS)

In the Autonomous Design Project, you are free to choose the subject. It will help you bring out the specialist in you. You will address a relevant problem with a designer's approach, make a project plan, and then manage the design process and develop your solution both creatively and technically. The result: a major contribution to your portfolio that will help to exhibit your skills and visions.

Service Design Project (9 ECTS)

This is an interdisciplinary project that aims to address design problems from a broad perspective. Service Design is very much a process of discovery, exploration, experimentation and creative thinking. You will learn to work with a variety of techniques to identify customer needs and find opportunities for innovation in services. Through co-creation, working with both the customers and service providers, you will develop concepts for new services and service experiences.





Design Elective (3 ECTS)

Every semester offers a selection of elective courses that aim at deepening your understanding of a topical design-related theme. The available themes vary per semester. Some examples from past years: trends and forecasting, design ethics, and cultural design.

Personal Development (3 ECTS)

As a designer, but also as a human being, you learn by increasing consciousness about your behavior. The question: “what do I do and what is the effect of what I do?” is important to understand your behavior and how you communicate. In this course, you create insights into where your own strength lies and where you still have much to learn.

Young Professional (3 ECTS)

This course offers coaching to prepare for your upcoming graduation project. Attendance is mandatory.

International Semester CMD	
Credits	30 ECTS
Duration	20 weeks
Semester	Fall Semester
Entry requirements	English level B2 or higher (mandatory)
Language	English
Remarks	Max. 8 exchange students (in order of registration)
Location	The Hague
Level	Undergraduate