DAE
DIGITAL ARTS & ENTERTAINMENT

3D ANIMATION | VISUAL EFFECTS (VFX) | GAME GRAPHICS PRODUCTION
GAME DEVELOPMENT | INDEPENDENT GAME PRODUCTION | SOUND DESIGN

howest
university of applied sciences

WELCOME

Enter Player 1: _ _ _

Do you often fantasize about 2D or 3D worlds which do not yet exist? Do you consider yourself to be creative, ambitious, resourceful and above all passionate about games, films and special effects? Do you wish to experiment and create content with state-of the art technology and software? Do you want to become a professional game developer, a game or VFX Artist, a 3D animator or a Sound Designer for games, or even start your own game company? If so, then Digital Arts & Entertainment is the educational programme for you!

Before you start your journey at DAE, there are a few things that you should learn about us - and about yourself.

The industry is built on passion, commitment and hard work. You will need all these 3 qualities if you want to succeed. Our programme is more than just a way to acquire certain set of skills. It's about allowing yourself to be shaped into an industry professional with the right work attitude and flexibility to be able to keep up with the growing demands of this field. You shouldn't just study DAE to graduate and get your degree: you should study it in order to get exceedingly good at what you love to do, and to express that through your portfolio. This is what's going to get you a job at your dream company.

Students who choose for DAE become part of an international acclaimed bachelor programme which will prepare you for the wondrous and challenging world of game development and movie design. At DAE, you'll have to make a choice from a menu of 6 study majors*. Depending on the major you pick, you will primarily be taught technical or artistic skills.

- **Visual Effects (VFX)**
- **3D Animation**
- **Game Graphics Production**
- **Game Development**
- **Independent Game Production**
- **Sound Design**

Whichever major you pick, if you enlist in DAE make sure you are comitted to your choice and prepared to put in the time and effort, only dedicated students make it through the programme.

Best regards,

Rik Leenknegt,
Academic Director DAE a.k.a. Masterchief

*The information related to our curriculum contained within this folder is with reservation and is subject to change. Some of the image references may refer to courses which have been renamed or removed from the curriculum.

Cover art by: Dovydas Budrys (Wolfenstein fan art) / Tim Moreels (Gallywix Blizzard Entertainment fan art) / Niels Timmerman (Ekho fan art)

ESSENTIALS

WHAT IS DAE?

- An internationally-focused, English-taught Bachelor's Degree in Digital Arts and Entertainment;
- A programme where you choose one of the following study majors: Game Development, Game Graphics Production, Independent Game Production, 3D Animation, Visual Effects (VFX) or Sound Design;
- A 3-year full-time study programme, amounting to 180 ECTS credits;
- One of 24 Bachelor programmes, taught at Howest University of Applied Sciences in Flanders, Belgium, Europe.
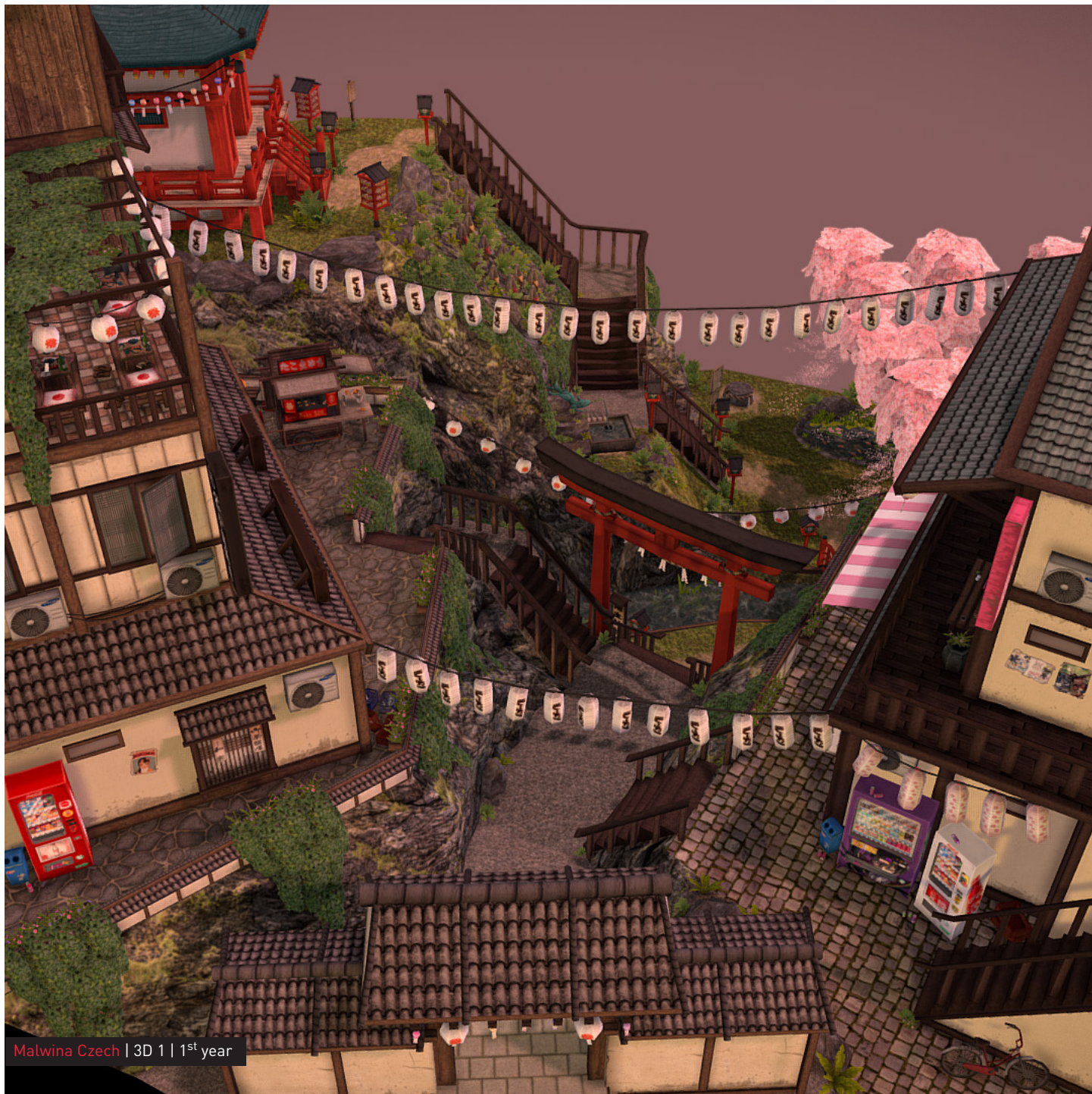
WHY CHOOSE DAE?

- **Internationally acclaimed:** Howest DAE was declared the best game design and development school in the world 2 times in a row (2017-2018).
- **Industry-approved curriculum:** we continue to keep up with the current trends and requirements of the industry. The skillset we nourish in our students is therefore extremely relevant and up-to-date.
- **Low tuition fees:** a high-quality university course in the heart of Western Europe with low study costs.
- **Very broad network:** we maintain connections with some of the most prominent players in the gaming- and movie landscape. We currently have alumni working in almost every AAA-studio in the world.
- **Lots of practical skills:** with the exception of few courses, almost every course consists out of mostly practical hands-on classes.
- **International opportunities:** our lecturers come from all over the world. You'll get the chance to attend our study trips abroad and even apply for an internship at one of our international partners.
- **Extracurricular activities:** students get to participate in game and movie jams, workshops and other fun activities.
- **A unique technical artist profile:** no matter which major you choose, you will have a good grasp of what your colleagues are up to, which makes you highly versatile and employable in the industry.

STUDYING AT DAE

- In an open, inclusive and slightly quirky global community;
- Real-life, team-based and industry-assessed projects and assignments;
- Practice-oriented education and training by qualified experts;
- International guest lectures by key industry speakers from all over the world;
- State-of-the-art equipment and facilities.

TECHNOLOGIES USED AT DAE

Autodesk 3D Studio Max, Autodesk Maya, Houdini, Unreal Engine 4, Quixel Megascans, Substance Painter, Substance Designer, Adobe Photoshop, Adobe Premiere, Pixologic Zbrush, Adobe After Effects, Adobe CC, C++, .NET Framework (C#), Python, Blackmagic Fusion, Microsoft Visual Studio Enterprise, Perforce, Processing, DirectX SDK, Unity, MySql, Lumonix ShaderFX, Nvidia FX Composer, Nvidia PhysX SDK, fmod, Open GL ES, WebGL, HLSL, GLSL, Audiokinetic Wwise, Steinberg Nuendo, ...

LET THE GAMES BEGIN!

LEVEL 1

Our recent acknowledgments by The Rookies deserve to be mentioned. Our educational programme has been crowned best game design and development school in the world (2017 & 2018). We are among the top international players in game design and art education. We've established a broad international network over the years and continue to have an international focus. Due to this our courses are taught in English as well as in Dutch.

In order to apply for our programme, you don't need to be be a programming or 3D genius. Our mission is to train capable and versatile technical artists whose skills are in line with the current and future demands of the industry. Whichever major you choose, you will acquire a mix of artistic and technical skills. However, depending on the major, the emphasis will lean more towards artistic- (3D modeling, animation, character design, level design, ...) or technical prowess (programming game-engines, scripting, rigging, game logic, artificial intelligence, ...).

This is something to consider, because the choice you make will determine your expertise in the long run: game development, gameplay, level design, special effects, animation, visual architecture, advertising, applied games, sound design, writing VR or AR applications, ...).

ON THE SAME LEVEL?

Of course, gaming is fun, but be advised: students who choose to enroll for DAE should be determined and prepared to work hard! However, the rewards are bountiful: our alumni have managed to conquer job positions in most of the world's AAA studios.

Developing a game or designing a movie is a long and arduous process after all, during which teamwork is essential. Therefore, during your stay at our university, you'll have to invest a lot of time. Luckily, you'll be surrounded by like-minded individuals in a building that not only symbolizes our ambition but was specifically designed to simulate a game environment, aptly named "The Level".

Classes are not the only activities that are organized within these walls, students will get a chance to participate in game jams, movie nights, board game sessions, LAN-parties, study nights, ...
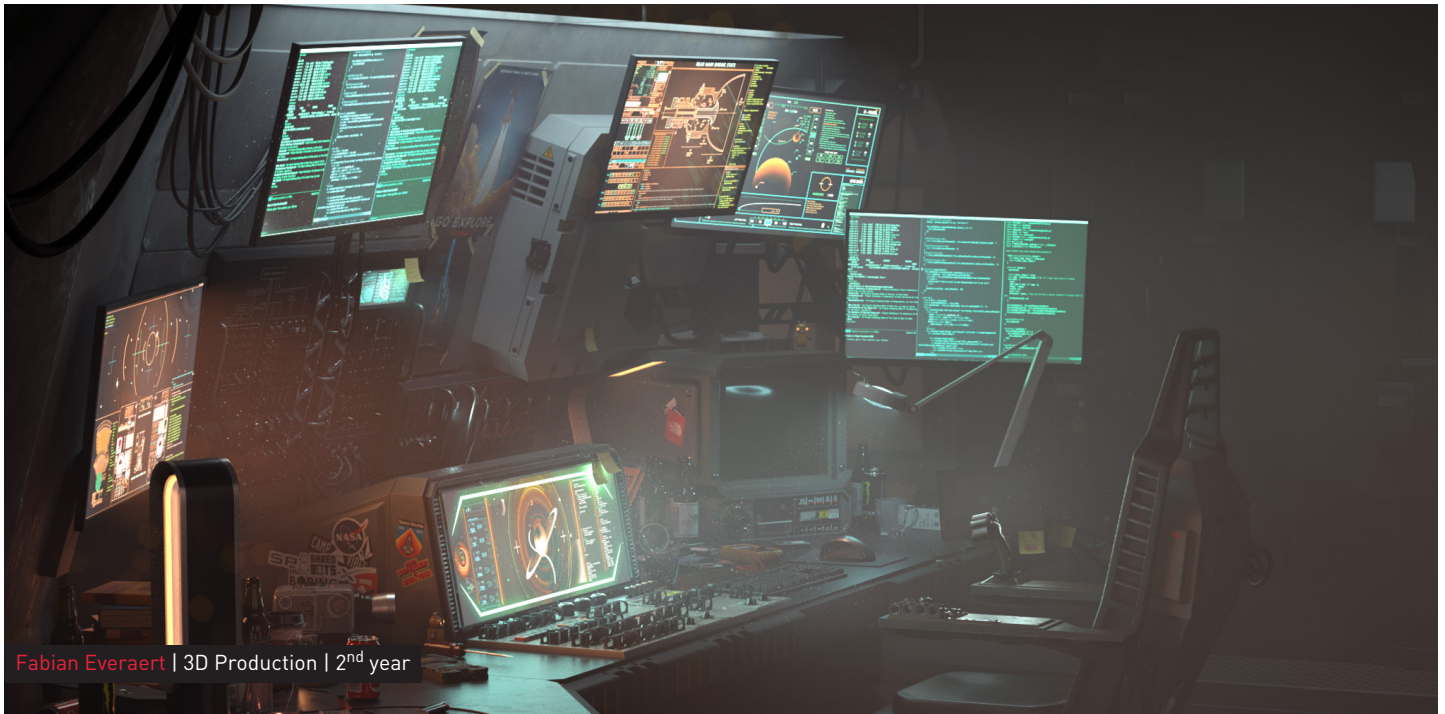
In summary, getting the Bachelor of Digital Arts and Entertainment degree will help you push the boundaries of your skills and knowledge during its 3-year programme. It will also help you get ready for employment in the industry. It will undoubtably be tough at times, but you will eventually reap the fruits of your labor. You will develop unparalleled programming- and design proficiency, you will get to experiment with state-of-the-art technology, you'll be able to function in a team as well as independently and you will learn to feel comfortable managing deadlines.

Digital Arts and Entertainment is not for the faint of heart. Are you up to the challenge?

EXPLORE

STUDY WITH A GLOBAL FOCUS

- Close proximity to the UK, France, The Netherlands and Germany – discover Europe while you're here;
- Join our study trips to the UK, USA, Canada or Japan;
- Spend a study semester at one of our partner universities in another country;
- Go on an end-of-studies internship in Belgium or abroad to explore the industry and kickstart your career;
- Start building your international network by meeting students from all over the world.

VISUAL EFFECTS (VFX)

The secrets of VFX blockbusters finally revealed! From the start of this study programme, we're going to take a look "behind the scenes" to discover what goes into the creation of all those visual effects.

The process of film magic starts with rotoscoping, tracking, matchmoving and compositing. We dive into the greenkey studio or we film on location with a green screen. You will be given a solid technical foundation at the start in the math and programming courses, after which we pull open all registers of SideFx Houdini to show you how all the visual effects are made and what's needed to bring them all to life.

In addition, we see all possible scenarios in terms of simulations: explosions, smoke, particles, fluids, cloth, muscles, hair, … You literally become *the* CGI creator of a hyperrealistic 3D scene, or you combine recorded material, 2.5D matte paintings and set extensions. Techniques such as compositing and color grading are the final steps in this production process.

The trajectory of this curriculum is based on to the current needs of the film industry. Whether it's London, Montreal or closer to home, the possibilities for hard-working VFX Artists are unlimited!

STUDY ABROAD OPPORTUNITIES

Semester 5 is our so-called 'mobility window'. This means it can be substituted by a study semester abroad at one of our international partner universities in Europe or worldwide. These partner universities have all been extensively screened, to ensure that the quality of your study programme abroad meets the DAE standards, and that the experience has an added value on all accounts.

INTERNSHIP

In their final semester, just before graduation, DAE students go on an 18-week internship. The internships take place in a wide range of companies and organisations all over the world, from AAA game, 3D and VFX studios to young and dynamic indie companies. Finding and securing the best possible internship is an important part of your senior year – the majority of DAE students get offered their first job at the company where they started as an intern.

FUTURE JOBS

- Rotoscoper
- Technical Artist
- Compositor
- 3D Artist
- Render supervisor
- FX artist, lighting artist
- …

VISUAL EFFECTS (VFX): CURRICULUM

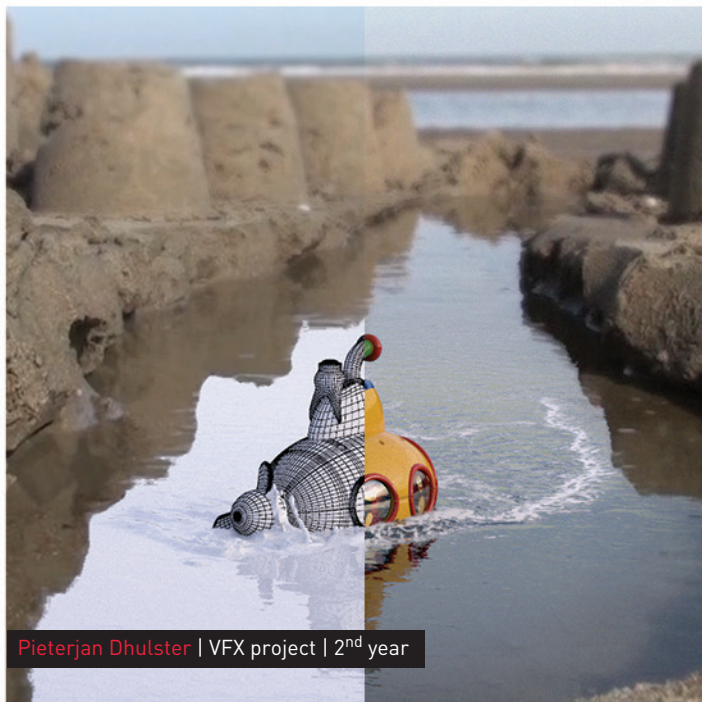|					
SEMESTER 1	COMPOSITING 1	3D 1	VISUAL LANGUAGE FOR FILM	APPLIED MATH & PHYSICS FUNDAMENTALS	PROGRAMMING FOR ARTISTS 1
SEMESTER 2	COMPOSITING 2	3D 2	PROCEDURAL: INTRODUCTION	3D PIPELINE	PROGRAMMING FOR ARTISTS 2
SEMESTER 3	COMPOSITING 3	3D 3	SCULPTING	VFX SIMULATIONS 1	PROGRAMMING FOR ARTISTS 3
SEMESTER 4	COMPOSITING 4	3D 4	PORTFOLIO	VFX SIMULATIONS 2	FILM PROJECTS
SEMESTER 5	GROUP PROJECT			GRADUATION WORK	
SEMESTER 6	INTERNSHIP				

Kynu Eloot | Graduation Work | 3rd year

Greenkey | Compositing

Pieterjan Dhulster | VFX project | 2nd year

Lars Somers | Graduation Work | 3rd year

3D ANIMATION

Are you enchanted by the magic of animation? We'll take you through the entire production process of a 3D animation movie, starting with visual storytelling. A 2D animatic will pave the way to a 3D block-out and eventually the final scene. During this process *you* are the puppet master. Make virtual beings jump, run, fly, speak, cry, fight or even fall in love. The possibilities are endless.

You will learn to analyze the reference material frame by frame. Whether the subject is an animal, human being, an inanimate object or even an alien, the silhouette, the emotion and key-pose you try to establish needs to be universal and believable. While also receiving a firm grasp on 3D modeling and -sculpting, texturing, rigging, shading and other invaluable techniques.

At the foundation of these insights lay creature anatomy and drawing in perspective. Skills you will be trained in at the start of your 3D animation career. A good understanding of common math & physics principles combined with an introduction to programming will lay the groundwork for more technical courses in the 2nd year.

All of our students also get the chance to experiment with motion capture and photogrammetry in our state-of-the-art Greenkey studio.

STUDY ABROAD OPPORTUNITIES

Semester 5 is our so-called 'mobility window'. This means it can be substituted by a study semester abroad at one of our international partner universities in Europe or worldwide. These partner universities have all been extensively screened, to ensure that the quality of your study programme abroad meets the DAE standards, and that the experience has an added value on all accounts.

INTERNSHIP

In their final semester, just before graduation, DAE students go on an 18-week internship. The internships take place in a wide range of companies and organisations all over the world, from AAA game, 3D and VFX studios to young and dynamic indie companies. Finding and securing the best possible internship is an important part of your senior year – the majority of DAE students get offered their first job at the company where they started as an intern.

FUTURE JOBS

-    Character animator
-    Character modeller
-    Rigging artist
-    Technical Artist
-    3D Artist
-    Animator Advertising
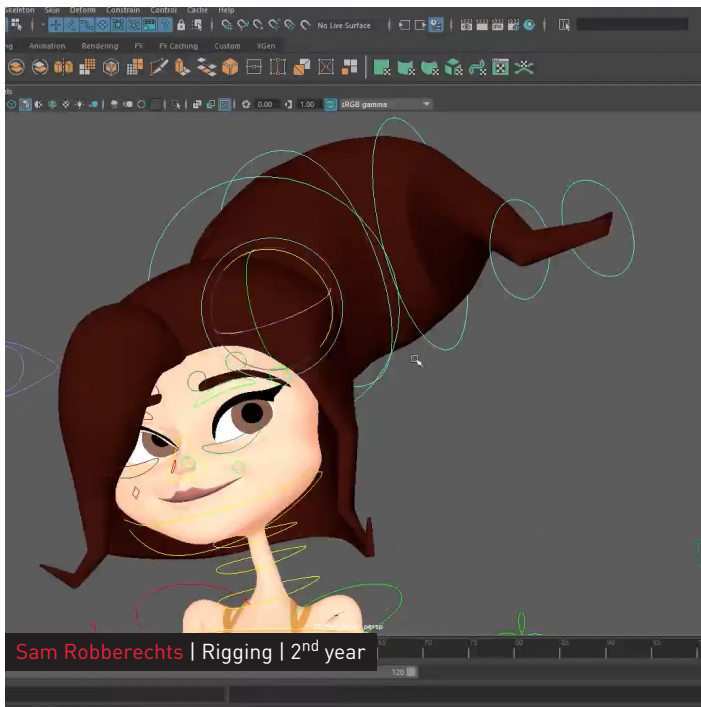-   ...

3D ANIMATION: CURRICULUM

SEMESTER 1	ANIMATION 1	3D 1	VISUAL LANGUAGE FOR FILM	APPLIED MATH & PHYSICS FUNDAMENTALS	PREPRODUCTION 1
SEMESTER 2	ANIMATION 2	3D 2	PROGRAMMING FOR ARTIST 1	3D PIPELINE	PREPRODUCTION 2
SEMESTER 3	ANIMATION 3	3D 3	SCULPTING	RIGGING	CHARACTER DESIGN
SEMESTER 4	ANIMATION 4	3D 4	PORTFOLIO	STYLIZED CREATION	FILM PROJECTS
SEMESTER 5	GROUP PROJECT			GRADUATION WORK	
SEMESTER 6	INTERNSHIP				

Veerle Zandstra | Preproduction 2 | 1st year

Team Nightshift | Group project | 3rd year

Sam Robberechts | Rigging | 2nd year

Ilke Alers | Graduation Work | 3rd year

Perry Wubben | Animation 2 | 2nd year

Noel Chengalath | Character Creation | 2nd year

GAME GRAPHICS PRODUCTION

A graduate from Game Graphics Production is an expert in creating graphical assets for AAA games. Starting from a concept, you translate the vision of your art director into breathtaking graphics. Just like a game developer, you have thorough understanding of the production pipeline and you are able to find a balance between quality and production speed. You master a wide set of 2D, 3D and technical skills. Moreover, you know which tool is best suited for a specific situation. At the start of the course, the GGP student learns all the basic skills he/she needs. In the first year you learn, among other things, a number of indispensable mathematical principles, a solid foundation of programming and a range of 2D and 3D skills. In the 2nd year you specialize in either creating game environments, or designing and creating characters and individual objects for a game world.

MINOR ENVIRONMENTS
Within this minor you learn the technical and artistical skills that are necessary to breathe life into a world. Through knowledge of procedural content creation and scripting, as well as deep insight into various illumination and shader creation techniques, graduates from this minor have all the skills they need to tackle the technical side of producing game graphics.

MINOR ASSETS
In this minor, you learn to create characters, creatures and individual assets. An Assets student has good knowledge of anatomy and stylization, next to his impeccable 3D and texturing skills. A graduate from this minor has all the skills he needs to create convincing characters and creatures and complex and realistic 3D models for games.

STUDY ABROAD OPPORTUNITIES

Semester 5 is our so-called 'mobility window'. This means it can be substituted by a study semester abroad at one of our international partner universities in Europe or worldwide. These partner universities have all been extensively screened, to ensure that the quality of your study programme abroad meets the DAE standards, and that the experience has an added value on all accounts.

INTERNSHIP

In their final semester, just before graduation, DAE students go on an 18-week internship. The internships take place in a wide range of companies and organisations all over the world, from AAA game, 3D and VFX studios to young and dynamic indie companies. Finding and securing the best possible internship is an important part of your senior year – the majority of DAE students get offered their first job at the company where they started as an intern.

FUTURE JOBS

MINOR ENVIRONMENTS
- Environment artist
- Lighting artist
- Shader artist
- Engine tool developer
- ...

MINOR ASSETS
- Character artist
- Prop artist
- Vehicle artist
- Texturing artist
- ...

The study programme is continuously under development and could therefore be slightly different from the one printed here. →
For the most current information, check out our website: www.digitalartsandentertainment.com

GAME GRAPHICS PRODUCTION: CURRICULUM

SEMESTER 1	PREPRODUCTION 1	3D 1	VISUAL LANGUAGE FOR GAMES	APPLIED MATH & PHYSICS FUNDAMENTALS	PROGRAMMING FOR ARTISTS 1
SEMESTER 2	PREPRODUCTION 2	3D 2	PROCEDURAL: INTRODUCTION	GAME ART 1	PROGRAMMING FOR ARTISTS 2

SEMESTER 3

SCULPTING	GAME ASSET PIPELINE	ENVIRONMENTS 1	MINOR ASSETS	
			STYLIZED DESIGN	CHARACTER DESIGN
			MINOR ENVIRONMENTS	
			SCRIPTING 1	PROCEDURAL ENVIRONMENTS

SEMESTER 4

PROCEDURAL ASSETS	GAME PROJECTS	REALTIME FX	MINOR ASSETS	
			STYLIZED CREATION	CHARACTER CREATION
		RIGGING FOR GAMES	MINOR ENVIRONMENTS	
			SCRIPTING 2	ENVIRONMENTS 2

SEMESTER 5	GROUP PROJECT	GRADUATION WORK

SEMESTER 6	INTERNSHIP

* Choose between one of the two tracks

Annelien Heyninck | Game Asset Pipeline | 2nd year

Annelien Heyninck | Game Asset Pipeline | 2nd year

GAME DEVELOPMENT

This major focuses on game programming. Your job is to write efficient, optimised code, in order to provide the best possible gaming experience for the players.

In Game Development we concentrate on the programming aspects of AAA games – pur sang development with a focus on graphics and gameplay programming, using C++ and a 3D API. This distinguishes you from a traditional programmer: the end result is always a real-time application (game, AR, VR, simulation, …). You are responsible for turning all the separate elements into a coherent product, which means you will be spending a lot of time on and in game engines!

Your thorough knowledge of the 3D pipeline and game engines allows you to efficiently combine various assets within a professional engine, into a finished game project. The focus is not on designing the content yourself, but on creating it and implementing it on the technical level. 3D translated into code!

STUDY ABROAD OPPORTUNITIES

Semester 5 is our so-called 'mobility window'. This means it can be substituted by a study semester abroad at one of our international partner universities in Europe or worldwide. These partner universities have all been extensively screened, to ensure that the quality of your study programme abroad meets the DAE standards, and that the experience has an added value on all accounts.

INTERNSHIP

In their final semester, just before graduation, DAE students go on an 18-week internship. The internships take place in a wide range of companies and organisations all over the world, from AAA game, 3D and VFX studios to young and dynamic indie companies. Finding and securing the best possible internship is an important part of your senior year – the majority of DAE students get offered their first job at the company where they started as an intern.
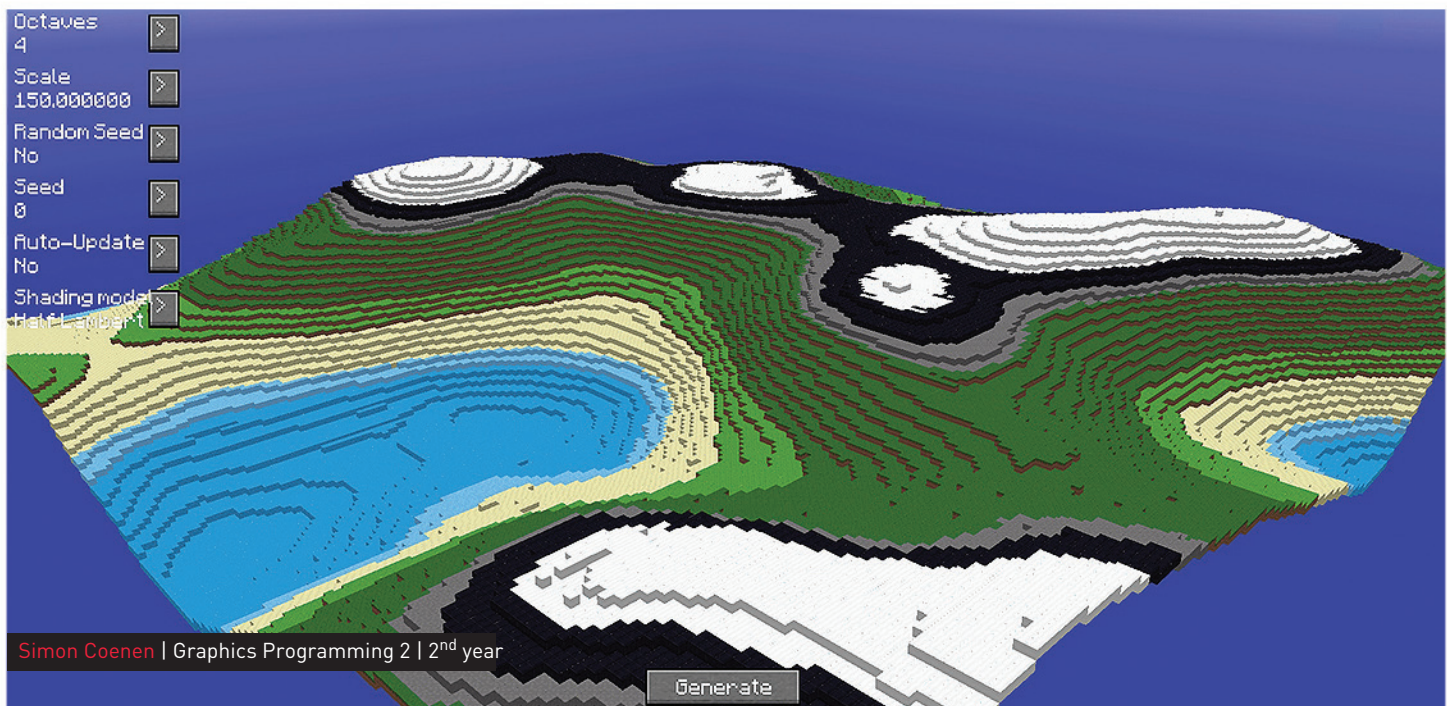
FUTURE JOBS

- 3D programmer
- Level designer
- Console programmer
- Technical artist
- Game Engine programmer
- Gameplay programmer
- Tool developer
- Shader developer
- …

GAME DEVELOPMENT: CURRICULUM

SEMESTER 1	ALGORITHMS	2D FOR GAMES 1	VISUAL LANGUAGE FOR DEVELOPERS	APPLIED MATH & PHYSICS 1	PROGRAMMING 1
SEMESTER 2	GAME TECH	3D 1	GAME DESIGN 1	APPLIED MATH & PHYSICS 2	PROGRAMMING 2
SEMESTER 3	GAMEPLAY PROGRAMMING	GAME MECHANICS	ENVIRONMENTS 1	GRAPHICS PROGRAMMING 1	PROGRAMMING 3
SEMESTER 4	TOOL DEVELOPMENT	3D FOR GAMES	GAME PROJECTS	GRAPHICS PROGRAMMING 2	PROGRAMMING 4
SEMESTER 5	GROUP PROJECT			GRADUATION WORK	
SEMESTER 6	INTERNSHIP				

Sun Speed:
Moon Speed:
Overcast Amount:
Cloud Amount:
Rain Amount:
Wetness:
Snow Amount:
Snow Strength:
Snow Thickness:
Cloud Darkness:
Fog Strength:
Wind Strength:
Activate Fire:

Ewout Van Gasse | Graduation Work | 3rd year

The Future of Exercising | Group Project | 3rd year

SOUND DESIGN

Sound is an indispensable and crucial part in audiovisual media and games; its importance can hardly be overstated in modern-day game productions. With this DAE major in Sound Design, we aim at imparting you with an attuned set of programming skills. This part of the program enables you to fully grasp and function in various roles of a game development team (e.g. basic programming skills, knowledge of audiovisual language, math, physics, 2D & 3D, game engines, level editing, procedure and pipeline).

The DAE Sound Design program specifically zones in on the necessary skills to properly understand, integrate and communicate demands for a given game production's sound design. Also, you are taught to produce and deliver pro-level quality audio to fit the practiced protocols and state-of-the-art requirements of contemporary game studios. Unlike more artistic programs, we predominantly foster technical proclivities and accuracy; honing artistic sensitivities is subordinate to understanding and mastering the audio craft. We provide insights in 5 areas of game sound creation, namely: SFX, Music, Voice recording/acting, Foley acting, and Ambient. Within these fields, the focus is on creation, editing skills, integration and delivery. Graduates are assumed to have a proper working knowledge of recording/mixing/mastering, expert-level control of their Digital Audio Workstation (DAW), proper insights into how audio functions in-engine and by means of middleware, and readily applicable control on full audio project delivery and implementation.

STUDY ABROAD OPPORTUNITIES

Semester 5 is our so-called 'mobility window'. This means it can be substituted by a study semester abroad at one of our international partner universities in Europe or worldwide. These partner universities have all been extensively screened, to ensure that the quality of your study programme abroad meets the DAE standards, and that the experience has an added value on all accounts.

INTERNSHIP

In their final semester, just before graduation, DAE students go on an 18-week internship. The internships take place in a wide range of companies and organisations all over the world, from AAA game, 3D and VFX studios to young and dynamic indie companies. Finding and securing the best possible internship is an important part of your senior year – the majority of DAE students get offered their first job at the company where they started as an intern.

FUTURE JOBS

- Sound designer
- Studio director
- Field recordist
- Foley artist
- Sound editor
- Mixing engineer
- Voice director
- ...

SOUND DESIGN: CURRICULUM

SEMESTER 1	SOUND DESIGN 1	2D FOR GAMES 1	VISUAL LANGUAGE FOR DEVELOPERS	APPLIED MATH & PHYSICS 1	PROGRAMMING 1
SEMESTER 2	SOUND PROJECT 1	3D 1	ALGORITHMS	GAME DESIGN 1	PROGRAMMING 2
SEMESTER 3	SOUND DESIGN 2	AMBIENT & MUSIC	FOLEY & VOICE	ENVIRONMENTS 1	GAME MECHANICS
SEMESTER 4	SOUND PROJECT 2	3D FOR GAMES	SFX	AUDIO LAB	GAME PROJECTS
SEMESTER 5	GROUP PROJECT			GRADUATION WORK	
SEMESTER 6	INTERNSHIP				

INDEPENDENT GAME PRODUCTION

In this major you learn to develop games by yourself or in smaller teams. Therefore we focus on the necessary graphical, programming and design skills, and we teach you about the games business and how to manage your own projects.

The games industry has grown into a multi-billion dollar market and its technology is used in many other sectors too. New platforms are constantly on the rise and new business models are generating more revenue than ever. As an independent game developer, you are an entrepreneur, combining creative and technical skills in order to design, develop and market your games, and enable the application of game technology in other sectors. Therefore you don't specialise in one single discipline; instead you acquire a broad knowledge of all areas of production.

You will have to come up with unique, compelling and innovative game design ideas. Add to this strong 2D and 3D skills and an in-depth knowledge of UX and UI, so you can easily create a style, setting and mood for any casual game. At the same time, strong programming skills will enable you to program for any platform, be it mobile and pc or newly-emerging platforms like VR or wearables. Gameplay is key, and wherever needed, you use middleware to speed up the production process.

Your knowledge of marketing, monetisation, retention, target audience, scrum, business models, project management, communication skills... enables you to make better and more profitable games. You can also go through the different steps of setting up a company, and if you wish you can kick-start your own company in our incubator during the last semester of your studies.

STUDY ABROAD OPPORTUNITIES

Semester 5 is our so-called 'mobility window'. This means it can be substituted by a study semester abroad at one of our partner universities in Europe or worldwide. These partner universities have all been extensively screened, to ensure that the quality of your study programme abroad meets the DAE standards, and that the experience has an added value on all accounts.

INTERNSHIP

In their final semester, just before graduation, DAE students go on an 18-week internship. The internships take place in a wide range of companies and organisations all over the world, from AAA game, 3D and VFX studios to young and dynamic indie companies. Or why not start up your own company in our incubator and test your business skills firsthand?

FUTURE JOBS

- Indie game developer
- Start-up / Entrepreneur
- Game prototyper
- Game designer
- 2D/3D artist
- Applied game developer
- Mobile game developer
- ...

INDEPENDENT GAME PRODUCTION: CURRICULUM

SEMESTER 1	3D 1	2D FOR GAMES 1	VISUAL LANGUAGE FOR DEVELOPERS	APPLIED MATH & PHYSICS	PLATFORM DEVELOPMENT 1
SEMESTER 2	GAME ART 1	2D FOR GAMES 2	GAME ENTRE-PRENEURSHIP 1	GAME DESIGN 1	PLATFORM DEVELOPMENT 2
SEMESTER 3	GAME ART 2	COMMUNICATION	GAME ENTRE-PRENEURSHIP 2	GAME DESIGN 2	PLATFORM DEVELOPMENT 3
SEMESTER 4	3D FOR GAMES	APPLIED GAMES	GAME ENTRE-PRENEURSHIP 3	GAME DESIGN 3	PLATFORM DEVELOPMENT 4
SEMESTER 5	GROUP PROJECT			GRADUATION WORK	
SEMESTER 6	INTERNSHIP				

Divine Commander team | Group Project | 3rd year

Inverted team | Group Project | 3rd year

WILL DAE PREPARE YOU FOR THE INDUSTRY?

DAE graduates are top quality and can easily compete with students from all over the world. This is confirmed by:

- The extensive and ever-growing list of high-profile companies that hire DAE alumni;
- The number of internship offers and job opportunities for our students and graduates;
- The publications and online communities where our students' and graduates' work is prominently featured (Artstation, The Rookies, Polycount, ZBrush Central, Sketchfab, 80 level, Exposé, …);
- The large number of international competitions in which our students stand out;
- The enthusiastic feedback we're getting from our industry network on our students' and graduates' skills.

Studying at DAE will constantly push you to grow and get better at what you do - and at how you do it. Through all this hard work, your skills will increase, sharpen and improve, and you will be able to tackle stricter deadlines, more complex projects and challenging new technologies.
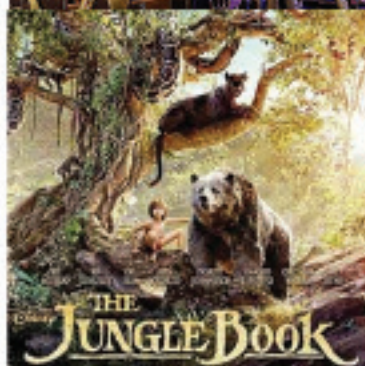
All this will prepare you for a job in the industry, whether in your home country or anywhere else. Your internship in your final year will be a big step towards your future career. Choosing the right company is again an important decision. Will you go for games or for VFX, for animation, architectural visualisation, advertising, serious games, hard-core programming, VR or for one of the many other industries where 3D is a game changer? All this – and more – is possible.

Internships can take place all over the world, and the majority of our students are hired by their internship company right upon graduation. So far our students and graduates have ventured out to more than 20 countries, including Austria, Belgium, Canada, China, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Japan, Malta, The Netherlands, Spain, Sweden, Switzerland, Turkey, the UK and the US. But by the time you read this, you can be certain we will have covered new ground.

CAMPUS THE LEVEL

The Digital Arts and Entertainment campus building, called The Level, clearly reflects our and our students' ambitions. When you first enter The Level, the link to a first-person shooter or action-adventure game is easily made. The raw materials, the level differences, the 'peculiar' staircase, the overview of the space, the mystical light coming through the atrium – it all contributes to the setting and atmosphere. The Level is also a multifunctional building, where everything revolves around (interactive) 3D. So what exactly goes on in there?

EDUCATION

You can't miss the 1000+ DAE students who occupy the grounds. Besides classes, The Level hosts many student activities and events, such as weekly industry sessions, study nights, workshops, game jams, film nights, ...

DAE RESEARCH

DAE Research is the research cell of our Digital Arts and Entertainment study programme. Their focus is on state-of-the-art technology, trendwatching and applied research on the use of game technology in non-game sectors, such as healthcare, architecture, cultural heritage, machine building and much more. Alongside their own projects and demand-driven cooperation with a wide range of companies and organisations, DAE Research also supports and coaches companies and other knowledge institutions in starting up projects: from defining the research questions and drawing up project plans and funding applications, to executing and following up on the project in a later stage.
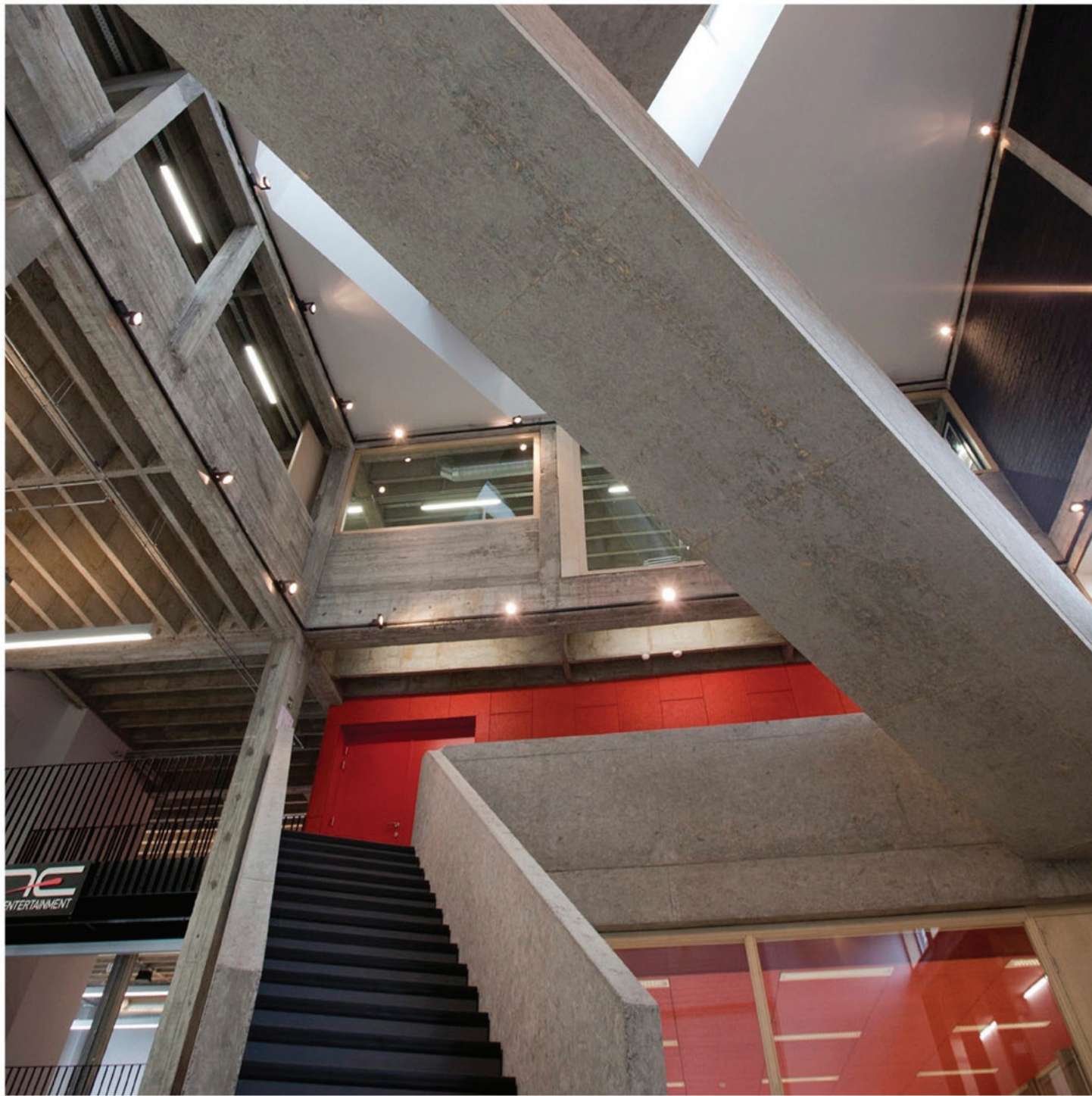
THE HIVE

At the heart of The Level, an entire floor is established and furnished to mimic the environment of a game or 3D production studio as closely as possible. Here our senior DAE students work on their graduation works and team-based group projects, and meet up with their coaches and supervisors. Sometimes peaceful, often buzzing, The Hive is a space where dreams and plans come to life.
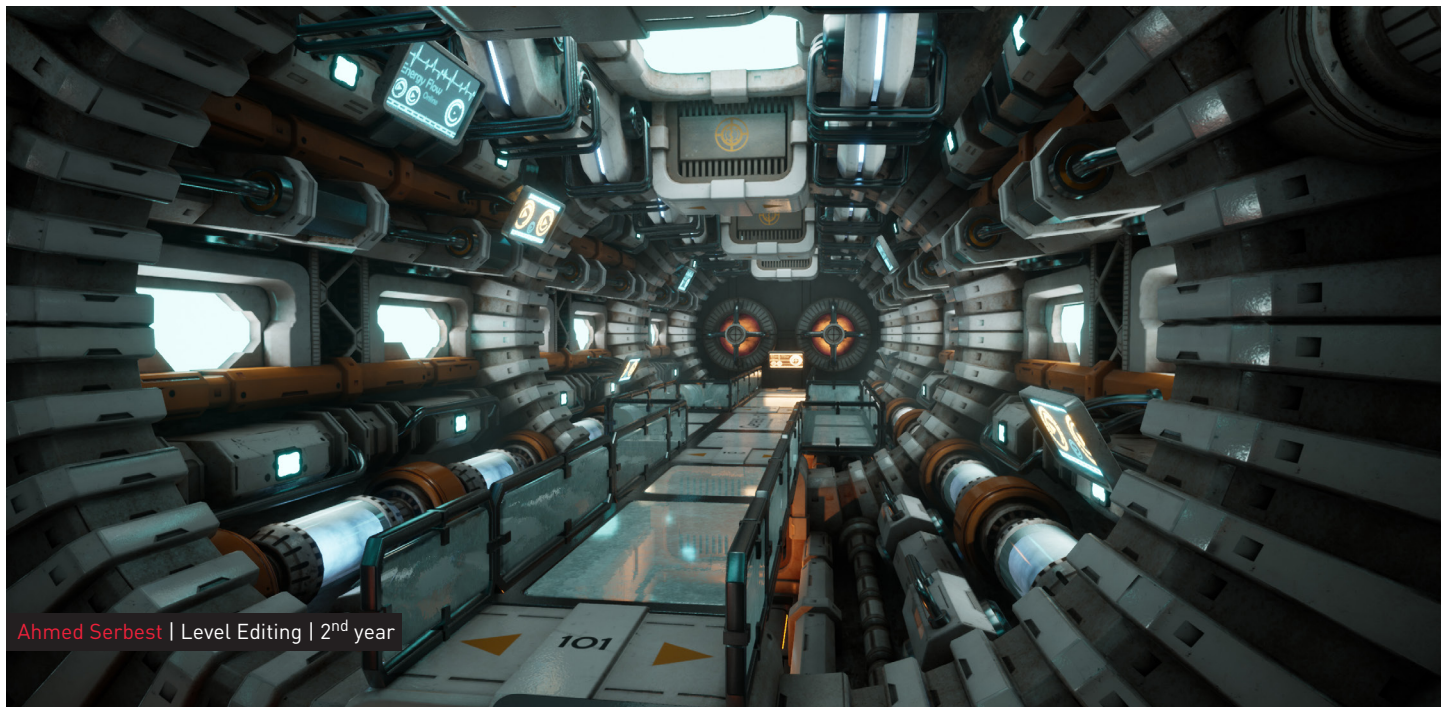
KNOWLEDGE AND COMPETENCE CENTRE

The Level has an extensive green key with motion capture and state-of-the-art equipment. Our students learn to work with these materials and in this environment, so they are familiar with the latest technology in their field. Our knowledge and competence centre also comprises an audio studio, editing studio and a multi-purpose meeting and conference room.

These facilities are also available to the alumni start-ups and other companies in our network, and can be rented by other businesses and organisations.
For more information, contact kwe.l@howest.be.

Ahmed Serbest | Level Editing | 2nd year

Team Piano | VFX Projects | 2nd year

STUDYING AT HOWEST: MORE THAN JUST CLASSES

DAE is hard work, but we offer a lot of extra opportunities to help you succeed:

GAME OR VFX JAMS

For the 2nd-year students, during the creativity week, all classes are cancelled and replaced by the game or VFX jam, in which teams of 5 create their own game or short film in no more than 3 days!
We also actively encourage and support our students to take part in other game jams and in a wide range of competitions in Belgium and abroad.

CAREER/INTERNSHIP FAIR

Each year in October, when the senior students are looking for an internship, we organise a big fair on campus, where more than 60 companies from different countries come to The Level. Here on campus they introduce themselves and their internship offers to our students, they give feedback on students' portfolios and they get the opportunity to interview the candidates.

INDUSTRY SESSIONS

Every Tuesday, we invite companies to give presentations to DAE students and staff, to enlighten and inspire us with their passion and expertise. We also regularly have our alumni back on campus to give portfolio feedback and talks about what they're working on. Subjects are very diverse: artistic or programming topics, how to get into the industry, level design workshops, a post-mortem of a newly-released game, a movie breakdown or a TEDx presentation.

COMMUNITY MANAGEMENT AND STUDY NIGHTS

Every Thursday evening, the campus stays open late for students of all years, to study together and help each other out in an informal setting, with extra focus on the bigger deadlines and assignments that are due around that time.

But also at other times, our dynamic Community Management Team organises activities and events for our students. On top of that, international students and their buddies find a 'home away from home' at The Oasis, our international students' lounge, where they can organise their own gatherings, movie nights and events, together with the exchange students of the other study programmes at Howest.

STUDY TRIPS TO ENGLAND, THE UNITED STATES, CANADA OR JAPAN

The study trips are one of the highlights of your study career. They give you a chance to visit world-famous companies, take a look behind the scenes, get first-hand invaluable advice from industry professionals and possibly secure an internship or job offer.

Companies we have visited in the previous years are Naughty Dog, Riot Games, Blizzard, Glitch City, DreamWorks Animation, Blur Studio, Scopely, Framestore, Rodeo FX, Method Studios, Digital Dimension, Google, Valve, Arenanet, Bungie, Microsoft Game Studios, Facebook, PopCap, Unity, Pixar, Electronic Arts, MPC, Sony, Ubisoft, Capcom, Splash Damage, The Creative Assembly, Boss Alien, Studio Gobo, Polygon Pictures, Sanzigen, and many more!

WHAT ALUMNI & COMPANIES ARE SAYING ABOUT US

'DAE helped to kickstart my career and was the beginning of an amazing adventure.'
Jeroen Maton (DAE Alumnus. Sr Environment Artist – Bungie, US)

'It was my childhood dream to become a game developer, DAE turned this dream into reality. From Belgium to the Netherlands, to the United Kingdom, to China. Now I am a world traveler and a global citizen.'
Brian Cox (DAE Alumnus. UI Programmer – Ubisoft Shanghai, CN)

'As a technical artist, my job is to build new perspectives on how to make real-time computer graphics experiences. DAE offered me the supportive environment and well-balanced curriculum to build these skills, and pushed me to think and act independently. To remain curious and to share.'
Robbert-Jan Brems (DAE Alumnus. Senior Solutions Technical Artist – Unity Technologies Vancouver, CA)

'Howest DAE is a world class university, the students that I've worked alongside have all run with AAA experienced dev crews within their first weeks, concluding their internships with showcase features and in-game artwork in top-quality released games and have gone on to launch themselves as hugely influential and successful talents in the game-dev industry.'
Jason Green (Studio Art Director - Electric Square / Studio Gobo, UK)

'Education and know-how is the proper base for a future career. A lot of DAE talent has found a place at Grid – not just because DAE is an important step towards becoming a professional digital artist, but also because DAE is constantly fine-tuning its curriculum together with the industry, in order to deliver the best quality. We consider DAE the best Belgian pool of well-educated talent. We've always found the right level of expertise and the mentality we demand in the students from DAE.'
Jan Goossen (Owner – Grid VFX, BE)

'Howest-DAE is a source of future great talent of the video game industry. We welcomed 6 students during the last 4 years. They were all talented 3D artists and designers. We fully integrated them in our team and they were working on our games like any other employee of Black Forest Games. All the work they did has been integrated and used in our final released games. They can work in any AAA studio, as a result of their talent, but also of the great mentorship and education they got at Howest.'
Eric Urocki (Technical Art Director – Black Forest Games, DE)

'During my 5 years at Boss Alien we employed 4 students from the Howest DAE programme and all of them have had an amazing impact on our products. In fact, it's safe to say we've never encountered a student from the DAE course that isn't industry standard. There's a running joke in Boss Alien where people think that Howest is actually the name of the factory that 3D prints our Tech Artists.'
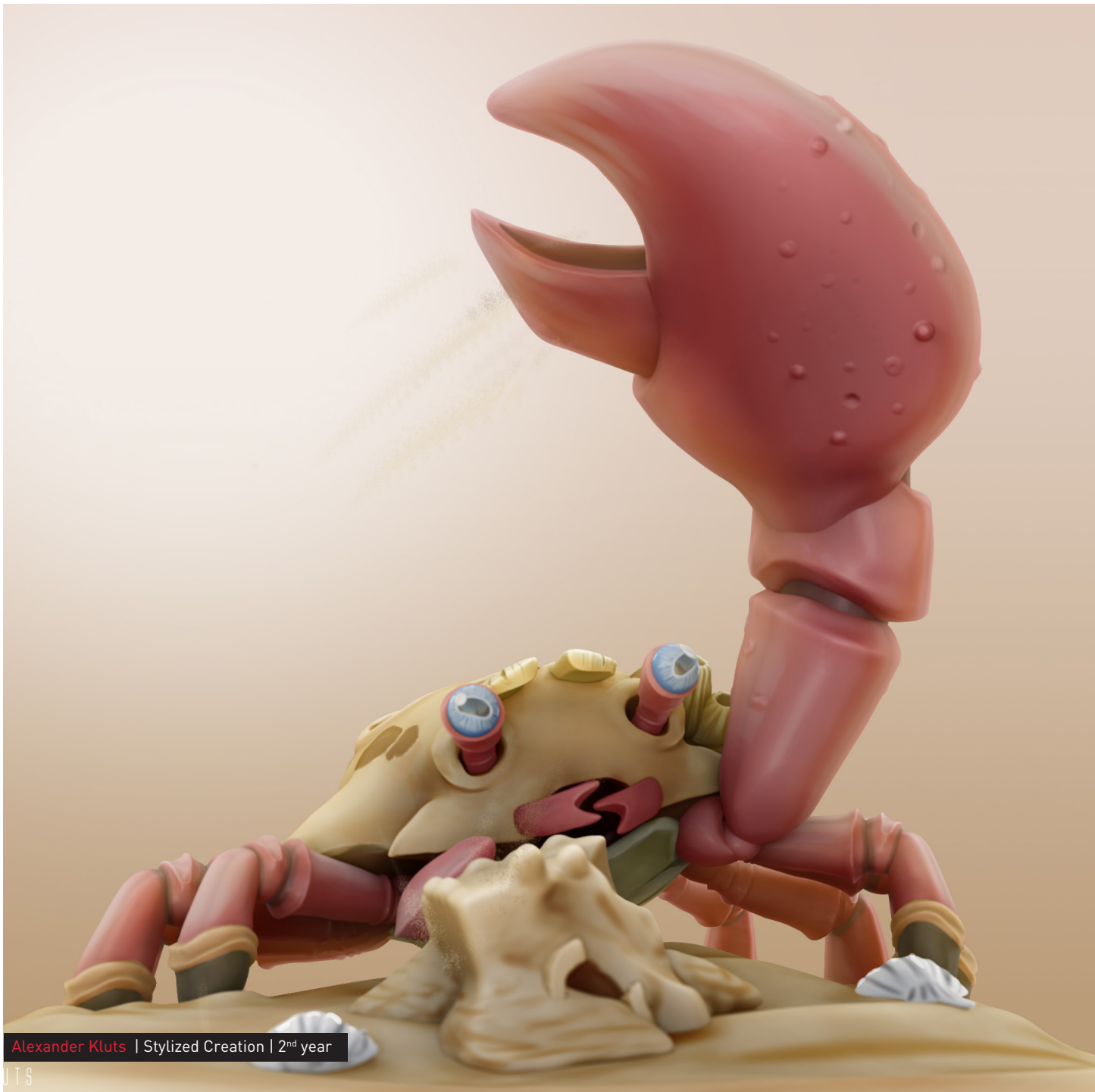**Dan Rossati (Creative Director – RedLynx/Ubisoft, formerly Boss Alien, UK)**

'We have been lucky to have very talented DAE students from HOWEST doing their internships at Elite3D. They come really well prepared and it takes them very little to adapt to our demanding productions. In fact, some have stayed on our AAA development staff. We feel very grateful to HOWEST and with no doubt we´ll keep this perfect symbiosis in the future.'
Jose Luis Queral (Art Director - Elite3D, ES)

'From our side of things, it's always a pleasure to meet your students – they were, as ever, amongst the very best we saw.'
Mark Green (Development Director - Codemasters, UK)

PRACTICAL INFORMATION ABOUT HOWEST UNIVERSITY OF APPLIED SCIENCES

DIGITAL ARTS AND ENTERTAINMENT

- Howest is a modern, creative, innovative and entrepreneurial university of applied sciences;
- campuses in Bruges and Kortrijk, Belgium;
- over 6000 full-time students in a total of 24 Bachelor degree programmes;
- renowned for developing unique and successful study programmes in close cooperation with industry partners: Digital Arts and Entertainment (DAE), Digital Design and Development (Devine), Computer & Cyber Crime Professional, ICT & Blockchain Consultant, Industrial Product Design, Smart Tech & AI Creator, ...

HOWEST STUVO: STUDENT SERVICES

- Howest students can address STUVO for help and guidance with financing, housing, study issues, independent living, student jobs, mobility, sports, cultural activities and much more!
- More information about what STUVO can do for you can be found at: www.howest.be/stuvo

MEALS AND STUDENT RESTAURANT

Belgium is proud of its food culture, so it is almost impossible to go hungry here. Everyday, a selection of budget-friendly dishes (including vegetarian options and a salad bar) is available at different student cafeterias on the Howest Kortrijk campuses close by, less than 10 minutes' walking distance from our campus building The Level. There are also several student-focused snack bars, restaurants and shops within walking distance, and DAE students can eat their packed lunch in The Level's lounge. Tuesdays are Howest Fruit day! Fruit for everyone in all Howest campuses, offered by STUVO.

Howest works with cashless campuses. Payments can be done with bank cards or with your student card, on which you can upload money at several central locations on the different campuses.

MULTIMEDIA CENTRE

Scanners, printers and all other facilities you need for classes or assignments are available in each campus building. On top of that, Howest Kortrijk's main campus has a modern and dynamic library with specialised books and press, computers, printers, scanners and study nooks for individual or group work. All students have access to a wide range of electronic databases, which, in a few clicks, lead to thousands of newspapers, magazines, specialist journals and scientific publications.

HELPDESK AND SOFTWARE

All DAE students work on their own laptop. It is vital for your studies that this laptop remains in good order, and to help you with that, we have an on-site helpdesk at Howest Kortrijk's main campus nearby, where our IT service agents can assist you with all your problems and questions concerning hardware and software.

Laptops can be purchased via Howest, as part of a group purchase from an external company. There are a few advantages to this, such as a replacement laptop if your own laptop has to be repaired, but it is by no means obligatory to buy your laptop here. Every student is free to bring their own laptop to class. More information about the laptop project and about the minimum required specifications can be found at www.howest.be/laptops.

Howest chooses to work with legal software only. We have however negotiated good deals for educational and student licenses, so our students can download and use all the necessary software for a small amount (indicative price for first-year students: 75€, included in the study cost).

INTERNET, PRINTERS AND COPIERS

With your Howest account, you have access to high-speed campus-wide Wi-Fi on all campus locations in Kortrijk and Bruges. All students also have their student card, with which they can use the scanners, printers and copiers in any Howest campus building.

EVENTS

Howest loves arts, culture and design in all its forms. Howest not only sponsors local cultural activities and concerts, but organises its own student events, showcasing local and student bands, food trucks and all kinds of activities. This festival is organised by the students themselves, with the support of STUVO, our Student Services.

Every year towards the end of June, Howest organises Bump Festival, where you can get your mind blown by illustrators, graphic designers, UX experts, creative coders and motion graphics artists.

QUINDO

Quindo is the medialab of Howest. As a member, you can rent out various audiovisual technologies (e.g. cameras, tablets, portable recorders, laptops, ...), follow media workshops, get press accreditation for most Kortrijk-based shows and concerts, and use the infrastructure to make podcasts or stream radio shows. Quindo is also a broadcasting organization, offering daily local news and radioshows on their site (www.quindo.be) and social media.

If you want to join, Quindo studios are located at Music Center Track, Conservatoriumplein 1, 8500 Kortrijk.

Loan Estevez | Character Design | 2nd year

Fierens Luna | Graduation Work | 3rd year

Piter Hillewaert | Level Decoration | 2nd year

Team Heart | Group project | 3rd year

PRACTICAL INFORMATION ABOUT BELGIUM, FLANDERS AND KORTRIJK

Digital Arts and Entertainment is a study programme of Howest University of Applied Sciences, campus Kortrijk. The city of Kortrijk is located in the beautiful region of Flanders – the northern part of Belgium.

WHY COME TO FLANDERS, BELGIUM?

- The standard of education in Flanders is one of the highest in Europe;
- Flemish people are known for speaking several foreign languages. Almost everyone you meet will speak English well, and most people are happy to switch to English and help you out if there would be anything you don't understand. You will also find many people who speak or understand French, German, Spanish, Italian and many other languages;
- Flemish cities have a rich cultural heritage and a diverse and vibrant nightlife;
- Our gastronomic reputation is well known around the world: Belgian chocolate, beer, fries or waffles – we cater to many different tastes. A lot of international cuisines are well represented in Belgium, and there are many vegetarian and vegan options.
- Belgium is a small country with good public transportation. As a result, it is easy to visit the nearby cities of Bruges, Ghent, Antwerp and Brussels. Or to travel to London, Amsterdam, Paris, Berlin, Geneva, Prague, Rome, Barcelona or Madrid, which are all in a 3-hour radius around us by train or plane.

ACCOMMODATION IN KORTRIJK

Students in Kortrijk tend to rent rooms in the private market. Kortrijk has a surplus of student rooms, which means there is a wide offer, and student rooms tend to be of good quality. There is also a city-wide evaluation system of student room quality and safety. Via www.kotwest.be or www.kortrijk.be/sterrenkot students can easily find suitable accommodation.
Students are supported by Stuvo for housing. Student rooms offered by Howest in a former hospital: "The Wing". For more information contact: Geert BROECKAERT, geert.broeckaert@howest.be.

We advise to look for a room in the vicinity of our 'The Level' campus building (address: Botenkopersstraat 2, Kortrijk), because that's where most of your friends are likely to be, and it will be most convenient to attend classes and other activities.

TRANSPORT IN KORTRIJK

Kortrijk is a fairly small city, and our campuses are located at walking distance from the city centre and the train station. For longer distances and to get to the other side of town, we recommend getting a bicycle or taking the bus.

- BIKE: the most efficient way to get around in Kortrijk is by bike. The non-profit organisation Mobiel rents out bicycles for only 5 EUR per month. For more information: www.mobiel.be/en
- BUS: for just 10 EUR, Howest students get a bus pass for Kortrijk and the surrounding municipalities. This pass is linked to your student card, so always take your student card with you when taking the bus.

JOIN US

APPLICATION PROCEDURE AND TUITION FEES

Check out the 'Apply Now' section of our website for up-to-date information about the admission requirements, application deadlines, required application materials and tuition fees.

www.digitalartsandentertainment.com

VISA

Students from non-EEA member countries may need a visa to enter Belgian territory.

For questions regarding visa and related matters, you should contact the Belgian embassy or Belgian consulate in your country or a neighbouring country.

You can find more information on the website of the Belgian Immigration Office at dofi.ibz.be.

You cannot enter Belgium on a tourist visa if you intend to stay longer than 90 days or 3 months.

APPLICATION QUESTIONS

For all further questions about applying to DAE, contact:

Thobias EXPEEL
International Admissions Howest
admissions@howest.be

CONTACT OR VISIT US

CONTACT DAE

Address: Botenkopersstraat 2, 8500 Kortrijk – BELGIUM
Website: www.digitalartsandentertainment.com
Telephone: +32 (0) 56 23 43 60
Email: International Admissions Howest: Mr. Thobias EXPEEL: admissions@howest.be
Academic Director DAE: Mr. Rik LEENKNEGT: rik.leenknegt@howest.be
Director DAE Research: Ms. Vicky VERMEULEN: vicky.vermeulen@howest.be
Coordinator study track counseling: Mr. Kevin VROMAN: kevin.vroman2@howest.be
General information: info@digitalartsandentertainment.com

OPEN HOUSE DAYS

Howest University of Applied Sciences and DAE have regular open days, during which you can visit the campus, talk to staff and students, and get all the information about DAE you could wish for.

Check out the dates at www.howest.be/infodagen.

Eli Bastiaens | Digital Sculpting | 2nd year

Pauline De Houwer | 3D Production | 2nd year

www.digitalartsandentertainment.com