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UNIVERSITY OF TWENTE.

Honours programmes



Shooting for the stars



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This magazine is a special edition by U-Today, an independent journalistic medium at the University of Twente. It was made in close collaboration with the Honours programmes coordinators and the Honours Office.

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FOREWORD



Up to the stars

Remember to look up to the stars and not down at your feet', the late Stephen Hawking once said. In other words, stay curious about the world around - and above! - you, and don't limit yourself to the small part of the world that you can directly oversee. This could be the motto for our Honours programmes, stimulating our students to take some decisive steps beyond what they do in their regular study programme. 'Never give up work', Hawking adds, because work gives meaning and purpose.

You may ask, should we not give these recommendations to all of our students? My answer would be yes. As a university, we have to offer study programmes that stimulate students to explore new fields and cross borders. Today's study programmes can't be 'one size fits all' anymore. Students expect more from us. That is a good thing; after all, society isn't waiting for one standard type of graduate. All talents have to be able to flourish in their own way.

Still, there is a category of students that keeps asking questions. They want to know more, they are willing to invest time in other fields of science and they, like Hawking advises, keep looking up to the stars, searching for explanations. For them, broad knowledge is not the same as 'knowing a little bit about many things', they want to explore the depths of several disciplines and try to make connections between them. Over ten years ago, we decided to set up the Honours programmes here at the University of Twente for this type of talented students. Every time I speak to one of the students or read about his or her work, I am truly impressed and proud. Society is, undoubtedly, in great need of these talents. They will make the difference, shaping the changes society urgently needs.

Being inspired by a special programme is one thing. It is my conviction that talent, in turn, comes with a responsibility. That is inspiring others: another way of 'not staring down at your feet'.

This special issue is all about inspiration. It is an invitation to our students to consider the Honours programmes. It also introduces the special qualities of our students to possible employers. I hope you will get just as amazed by the stories as I am!

Professor Thom Palstra
Rector Magnificus

INTERVIEW



Text:
Michaela Nesvarova
Photo:
Frans Nikkels

‘It is a curiosity driven education’

..... ‘There is a need to give extra attention to talented students. Such students can do more and want to do more. If we don’t give them the chance to develop themselves to their full potential, we are going to lose them,’ says Nelleke van Adrichem-Rotteveel, Key Strategist and Programme Director of the UT Honours programmes.

How would you describe an Honours programme to somebody who has never heard of it?

‘It is an extracurricular programme on top of your regular study. It is time-consuming and you need to put effort in it. It addresses many multidisciplinary issues and it is more complex than a regular study. It allows you to meet people with the same attitude toward learning but from different faculties and it gives you more freedom to choose your projects based on your interests. The core of it is being challenged, in this case academically challenged. It is a curiosity driven education. That is probably the best way to describe it. Debating and critical thinking are very important parts of it. You will develop skills that are not necessarily addressed in your regular education. It consists of 30 EC over 1,5 years for Bachelor tracks and 15 EC in one year for Master tracks.’

Who can apply and be accepted for it?

‘It is not for everyone. You need to be ambitious and motivated to do it. Motivation is key. We are targeting the top 10% of students but it is not all about grades. It is about your story. Good grades are important, because we don’t want you to neglect your regular study, but anyone can be an Honours student. It is about willingness to grow. When you apply, you can specify your preferred track and you are invited for a selection interview with the track coordinator

and an Honours student. Then you need to explain why you want to be part of the Honours community.’

You said it requires hard work and a lot of time. What do you get in return?

‘You get a different attitude. You gain more confidence, more perseverance, you become an independent thinker and a leader – of yourself and others. You get what we call an “Honours attitude”. You see this change immediately. Students change during the programme. Besides the academic content, it is a lot about your personal development. Some tracks also offer a personal coach who focuses on the students’ personal goals and projects. Through this guidance, you become the person that inspires others and makes a difference. Because of this, the programmes are not just attractive for students but also for teachers. It is a different type of education. It is quite independent - which is nice but also challenging, because as a teacher you don’t know exactly where it’s going and you need to be creative.’

Is it all work or is it also fun?

‘It is also fun. You can find yourself in it. It is very rewarding for students to be recognized. They have a say in everything and can decide on their own education. And for teachers it’s interesting because they get new ideas from the students. It is a real community. We are working on getting new

housing and we try to involve everyone in formal and informal meetings.’

In your opinion, what drives students to participate?

‘For most students it’s intrinsic. It allows them to develop their talents and gives them something for their whole life. As an Honours student, you have a better possibility to make an impact. Moreover, it is a good thing for your resume, of course. For example, the Research track can help you speed up your PhD trajectory because you can use the 15 EC during your doctoral research.’

What is the programme’s value for the rest of the university?

‘Honours students inspire other students; and education innovation from within the programme will spread to the other programmes as well. Everyone’s educational needs are different. This specific group needs to be academically challenged and as a university we are responsible for their development.’

How do you envision the future of the Honours programme?

‘I believe it will become part of the general talent development of the university. We cannot see the future, but I think we will move towards an “Inspiration Lab” for students, teachers, companies and various other organizations.’

Established in
2008



>160
Master
Honours alumni



>300
Bachelor
Honours alumni

BACHELOR HONOURS PROGRAMME

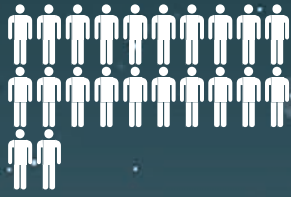
1.5
Year

30
EC

5
Tracks

Facts & Figures
about the Honours programmes

HONOURS
COMMUNITY



>220
People



>50
Nationalities



>160
Students



>40
Passionate
teachers, coaches
and field-experts

MASTER HONOURS
PROGRAMME

1
Year
3
Tracks

15
EC

STUDENT'S OPINION



Saskia Nies (23)
Study: Biomedical
Engineering (Msc)
Honours track: Master Research

I got into the Honours programme because I wanted to improve my academic writing and I found it very beneficial in that aspect. I was lucky in the sense that I could combine it with my thesis and therefore was flexible in the hours I put in. The track was quite useful as I got additional accreditation by completing it and organizational experience, because you meet a lot of new people from different backgrounds. However, this also leads to some assignments being easier for certain students as some have more knowledge in certain fields than others. I would probably not follow the programme if I were taking courses because I would not have the time to follow through. Nevertheless it was fun, there is a lot of free food and I would recommend it to anyone who is doubting whether they should pursue a PhD or is interested in organisation of research.'

STUDY ASSOCIATION H.V. OCKHAM

‘It is such a rich collection of people’

..... H.V. Ockham is the association for all students of the Honours programmes. ‘In many ways we are like any other study association, but we are also quite different,’ say members of its 10th Board, Eline Uiterweerd and Remco Abraham. ‘We are more personal, more international and our members come from all studies and disciplines, so it is a much more diverse group.’



The 2018/19 Board of H.V. Ockham. From left to right: Eline Uiterweerd, Remco Abraham, Sander Oosterveld, Bilge Tekeş

When and why was Ockham started?

Eline: 'It was thought up by the first dean and the first group of students about ten years ago. At that point, the Honours programme was very new and its participants wanted to grow their community and have activities outside the classroom. Some students don't feel strong connections to the students and activities in their regular study programme, they prefer to be part of a more diverse group.'

Remco: 'That's right. You can't really choose your regular study association, but Ockham offers an alternative. We are much more diverse and international, including the board.'

Eline: 'We are also smaller and a lot more personal than other associations. I know every active member and what they do within and outside their studies. Everybody knows each other and that is really nice.'

How many members do you have?

Remco: 'It started with a very small group of about ten people in 2009 and it has grown to nearly 400 members, out of which about 150 are still somehow involved. About 40 of them are active in committees of H.V. Ockham. The total number of members also includes students who have long finished their Honours programme, because after three years as an Ockham member you become a member for life. We try to stay in touch with our alumni and we include them in our activities.'

What type of activities do you organize?

Eline: 'There are the monthly drinks, lunch lectures, study tours and all sorts of fun and educational activities. We maintain a healthy balance between fun activities and more professional activities.'

Remco: 'Basically anything from dinner colloquia to pooling and trampoline jumping.'

What does it take to become an Ockham member?

Remco: 'Technically nothing. We hold an introduction event for new Honours students where we introduce ourselves, but it is up to the students themselves to decide if they like

to join or not. Anybody can join. There are no specific requirements, but there is a certain mentality that is expected – for the Honours programmes in general. Our members tend to like diverse discussions and learning from each other.'

Eline: 'At the drinks, people are able to discuss topics for hours. Our members are generally very open minded and that creates some lovely debates.'

What does Ockham give you?

Eline: 'A community. It is such a rich collection of people who all think in such different ways. That is what I really like about it. You meet people that you would otherwise never meet and I think that is very valuable. It is a very diverse group. On the other hand, we are not a large association which means we are very personal. So if you don't feel comfortable in a big crowd, here you don't have to be afraid. It is very accessible.'

You will soon hand over your positions to the new board. What do you hope the future of Ockham will look like?

Eline: 'Hopefully we keep growing, just like we have grown in the past couple of years, but without losing the personal attitude.'

Remco: 'I know that the next board wants to focus a lot more on education. Ockham has always been a meeting point for educational issues within the Honours programmes, but they want to concentrate on that and include teachers more. Because in this type of association, teachers should also be part of the community. After all, they have very close connections to the students.'

Looking back, what is the best thing that Ockham has given you?

Remco: 'The community.'

Eline: 'And the satisfaction you get from being able to maintain such a community as a board member.'

STUDENT'S OPINION



Melvin Willems (21)

Study: Business Information Technology (BSc)
Honours track: Philosophy

I fell in love with the Honours programme and thoroughly enjoyed doing it. I made the decision to take it because I wanted to broaden my view. I study BIT and the Philosophy track is a counterpart to my study as it takes the higher and ethical motives into account, whereas my study concentrates on the quantitative and technology aspects. The programme is fun because you meet people with the same thoughts as you and there's a great community. I would say you need some time management skills as I had to work on my Bachelor thesis at the same time as my philosophy essay but it was worth it. The Honours programme gave me an extra dimension of thinking about different matters and that is applicable to my future. If anyone is looking into the Honours I would tell them to choose a subject they really enjoy and are curious about and they will easily make it through the programme.'

ROUND-TABLE DISCUSSION WITH TEACHERS AND COORDINATORS

‘I am more of a coach and mediator’

..... Without teachers, there would be no Honours programmes. Reason enough for a round-table discussion with involved teachers and coordinators. They share their vision on the programmes based on five statements.

Text:

Jelle Posthuma

Photos:

Frans Nikkels



*Desirée
van Dun*



*Professor
Miko
Elwenspoek*



*Professor
Jurriaan
Schmitz*



*Anne
Dijkstra*



#1 The Honours programmes are not visible enough

Van Dun: 'I think that the programmes are quite visible to bachelor's students. At the same time, there is significant room for improvement. We compete with other extracurricular activities that are of interest to our target group.'

Dijkstra: 'There is a wide range of options available to students. This includes student teams and the Batavierenrace for example. This is what we have to compete with, so our message needs to be very clear. What do we have to offer them?'

Van Dun: 'A lot, I think. Especially with regard to the broadening and deepening of knowledge. Students benefit from this for the rest of their lives. Maybe students think that it is very serious. A lot of learning is done and students work very hard, of course, but they also become friends for life. This makes it very special.'

Schmitz: 'I think that the visibility among our students is alright but is rather limited beyond this scope. I've noticed that there's not quite enough reach within the university. This is why it would be great if the programme directors in particular contributed a bit more to pushing the right individuals in our direction.'

Elwenspoek: 'It was always a battle to get the Honours programmes higher up on the UT website to create sufficient visibility. Not all faculties are prepared to support the initiative wholeheartedly. The "not invented here" syndrome

plays a significant role in this. Some faculties also say that we should focus more on the "average" students. Achieving the highest possible graduation rate is often granted priority over an excellence programme.'

#2 We invest too much focus in mediocrity

Schmitz: 'I've noticed that academic thinking has been cut from standard education. Even in degree programmes, students are rushing to put something, anything, on paper. There remains little space for reflection. It is great that teachers can take the time in the Honours programmes to invest in this way of thinking.'

Van Dun: 'At the start, I always need to do my best to pull the students out of the consumer state in order to promote interaction. This says a lot, because these are the UT's best students. I don't mean to discredit them, but it's just something I've noticed.'

Dijkstra: 'I've also noticed this during my reflection meetings. Some students seem to have difficulty with self-reflection: they've never done anything similar.'

Schmitz: 'Take Asian students, for example. They are accustomed to participating. In their home country, they are awarded greatly if they do this well. Not if you say: we could also do this differently.'

Elwenspoek: 'The academic shaping, learning to think critically, has fallen away from the standard education somewhat. While university education is focused on exactly that.

Interviewees	UT position	Honours programme position
Jurriaan Schmitz	Professor of Integrated Devices and Systems	Bachelor's teacher Great Designs: Manhattan Project
Desirée van Dun	Assistant Professor Change Management & Organizational Behaviour	Bachelor's teacher Processes of Change & Coordinator Change Leaders Master Honours programme President of Honours EQC
Anne Dijkstra	Assistant Professor in Science Communication	Coordinator Research Honours Master programme
Miko Elwenspoek	Emeritus Professor Transduction Technology	Former Honours Dean and one of the founders

It's not about cramming facts; students need to learn how to interact with facts and find new facts based on these. Fortunately, there is space for this within the programme.'

#3 Educating Honours students is more interesting for teachers than standard programmes

Dijkstra: 'I also find the "regular" bachelor's programmes interesting but during the Honours training you can really witness the development of students. This strengthens my bond with them.'

Van Dun: 'I find that it provides a challenge. You are asked a certain type of questions that you don't see as often within the standard programmes. There is room for debate and depth.'

Dijkstra: 'You could describe it as follows: in the Honours programme, I am more of a coach and mediator, while in the bachelor's programmes, I am primarily a teacher.'

Elwenspoek: 'The programme is different. Small groups are paramount. You can compare it to a group of graduates. There are no formal aims. This is an important and exceptionally rewarding difference for the teachers. At the same time, I do want to emphasize that I don't view the standard programme as uninteresting. It's just different. In the bachelor's education the challenge is primarily didactic: how do I get the students to work?'

Schmitz: 'The participants could be described as volunteers: they make the choice voluntarily and go to university in the evening of their own accord to take part in an educational programme – teachers and students alike. This creates a completely different mindset. A bond is formed among the students themselves and between the students and the teachers. Very different from the standard 9 to 5 programme.'

#4 An excellence programme is a breeding ground for future (world) leaders

Dijkstra: 'In my track, students are educated for the scientific world, not necessarily as future leaders. But maybe they will become the future professors in the scientific world, who knows?'

Elwenspoek: 'The participants are our best students. We expect them to do well later. The programme contributes to this. The most important aspect is that the students are introduced to reflection. This helps the students to determine what they truly want, now and in the future. Whether they want to become a professor or a manager later on is not important. That's not the objective. We want to give them the opportunity to truly think deeply about something.'

Van Dun: 'Students say: we were aged and matured during the programme. I think that this is an accurate description. It ultimately revolves around personal development: getting to know yourself within a context where students with a range of backgrounds work together. They will encounter this frequently in the future.'

#5 The Honours programmes are very challenging

Schmitz: 'They are challenging. Students often underestimate how much time it will cost, and we notice this as teachers.'

Elwenspoek: 'On the other hand: these are the UT's best students. We have admission interviews and we emphasize the question of whether they really have time for the programme.'

Van Dun: 'In general, Honours students are highly entrepreneurial. They launch their own businesses or chair an association. Entrepreneurship seems to be inherently embedded in Honours students. We discuss this during the admission interviews. It is an important moment because they are choosing where they will assign their priorities during their studies.'

STUDENT'S OPINION



Atis Kazaferi (19)

Study: Industrial Engineering & Management (BSc)

Honours track: Processes of Change

‘When I came here I did not know anybody. In the programme we have guest lectures every week which connects you with different students, teachers and companies. This helps you build a large network as they have a large community. The Honours programme also has events where you can network and since they are catered especially for

Honours students I feel that you miss out on opportunities if you aren't involved. I would recommend the programme to determined and motivated students who are looking towards their career from an early stage and actively want to get something out of the programme. I would sign up again but it's not without its challenges. Sometimes working in a team is quite difficult because everyone comes from a different background and has a different way of tackling a problem. However, at the end of the day, it is always worth doing.'

Bridging the gap between university and career

Whoever would have thought that a bank like ING would become one of the biggest tech employers in the Netherlands? The idea would probably have been ridiculed a decade ago, but now it's reality. In recent years we've gone through a transition that was unavoidable if we were to continue to play a relevant role in the rapidly changing world around us.

Such a change requires maximum agility, both from the organisation and its employees. It calls for people who feel at home in an agile environment, who are willing and able to approach things from different points of view, learn from colleagues with a different mindset and quickly adopt new and effective behaviour. This demands curiosity and intrinsic motivation to continuously keep learning, both within and beyond one's own domain.

That's why I am so positive about Honours programmes. They challenge students to go the extra mile – not only to broaden their knowledge and then put it into practice, but also to look at things from many different angles, and in doing so learn to appreciate other views. In fact, it's a pity that this approach is merely reserved for Honours programmes. Ideally, every student should have the chance to learn this way!

The labour market is changing faster than ever. Skills that are in high demand today may be outdated tomorrow. Artificial intelligence and blockchain technology are hot topics right now but will soon be 'business as usual', and it won't be long before data science is old school. So what's next? And moreover, how do you keep yourself employable? At ING we encourage employees to develop their craftsmanship and to use their talents to the fullest, with a firm eye on their inner purpose. We give them access to a wide range of development tools, but they have to be enterprising and take control of their own career – just like students in Honours programmes are invited to take control of their own learning curve.

Every day at ING, we see proof that people's work is so much more rewarding and collaboration pays off so much faster thanks to agility. In our multidisciplinary teams, marketing specialists and Java developers work side by side to bring ideas to life. Innovation is so much easier and quicker, which enables us to keep our nine million clients happy.

As far as I'm concerned, Honours programmes are a great way to take a step towards bridging the gap between university and career. Thanks to Honours programmes, students are more relevant and better prepared for their future working life. They are also significantly more employable, because they are inspired by challenges and are focused on further developing their talents – and that's the kind of attitude that we, as an employer, are all too happy to have on board.



Désirée van der Geest

is Expert Lead CoE Talent & Learning at ING. She is closely involved in the development of the Amsterdam Innovation District, an innovation ecosystem initiated by ING. She is currently exploring the possibilities of developing a minor programme in close collaboration with several universities.

Choose your own path

Honours programmes are divided into tracks, each with a unique character and development goals.

Within the Bachelor Honours programme you can choose from five different tracks:

Shaping the Future

The new track Shaping the Future is expected to start in February 2020. Shaping the Future will focus on analysing big societal issues, where new scientific findings, insights or technological developments did or may invoke large structural changes. In order to achieve this, the track is divided into three parts: past, present and future. Students will learn from the past, apply this knowledge to a current problem and foresee and anticipate on future problems. These are competences that students can also use to tackle problems in their own field. These competences aim to encourage students to use a unique way of problem solving, so they will be able to influence the future. Are you a curious, inquisitive student who is thrilled by ground-breaking research and design? Then this might just be the track for you!

Coordinator: Maarten Krol

Philosophy

For students specializing in technology, managerial or behavioural sciences, an apprenticeship in the broad scope of philosophy is a valuable prerequisite to keep High Tech in touch with the Human Touch. After all, philosophy and certainly its major representatives can be considered as best practices of creative and self-critical thought that proved its fecundity in science, ethics, politics, literature and art. The Philosophy track guides students into an encounter with philosophic primary sources. It is not an introduction

in applied ethics or philosophy of a specific discipline, but it aims at students acquiring a Socratic attitude. For, Socratic wisdom entails the insight that if one asks long enough about the presuppositions, the legitimations and consequences of current scientific, ethical and political ideas, they turn out to be apt for philosophical reflection.

Coordinator: Professor Jan Hoogland

Entrepreneurship & Business Development

This track trains students to become real-time entrepreneurs. The focus is on different ways to run their companies and how they can ensure that their businesses are relevant for society. We work in close cooperation with Novel-T to help out the students in practice. Last but not least, the track is focused on the student's personal growth as entrepreneurs. They have a big say in the design of their own curriculum (supported by DesignLab's Science2Design4Society method). The main perspective on entrepreneurship and business development taken, is called Effectuation. This is a relatively new way to look at Entrepreneurship. In the more traditional approaches, starting your business is a stepwise, planned action mostly focused on writing a business plan. However, expert entrepreneurs hardly follow this approach. Effectual entrepreneurs work with the means available to them and are actively searching for partners to cooperate and share risks by pre-commitment to the

new venture. Co-creation is important; it is not a one-way trajectory but together with partners you will establish a two-way cooperation where means are exchanged to create synergy.

Coordinator: Martin Stienstra

Mathematics

The Mathematics track delves far beyond equations and teaches students how to solve problems using a mathematical approach. Aside from delving deeper into challenging mathematical topics, students will develop skills that go hand-in-hand with mathematics such as computer coding and signal processing, and develop a structured, yet creative way of problem-solving. The track will deepen as well broaden your understanding and knowledge of mathematical skills. It is partly aligned with math curricula of engineering studies, but also new and challenging disciplines in this field of science will be discussed, e.g Coding Theory and Geometry. The track is divided in six modules, running from pure to applied mathematics. We offer this track in presenting (guest) lectures and tutorials, also homework and final projects are part of the deal. The intended learning outcome is a new creative way of problem solving with the aid of mathematical tools.

Coordinator: Gerard Jeurnink

Processes of Change

This track teaches students to understand change, and to help change the world around

them. Change, and its desirability, will be analysed at various levels: society at large, organizations, teams and individuals. Change at one level will induce change at other levels; innovation and reform imply change at various levels. Leaders or other people who want to contribute to positive change need to have knowledge about these relationships. Students also have to be creative and have the ability to really think independently, which the teachers will stimulate in various

ways. For instance, students will develop a new theory about organizations (without reading any literature), and they will design and execute real-life change interventions. Social skills like presenting, consulting, coaching and leading will be taught and trained, together with individual skills including self-assessment and self-improvement. The obtained insights and skills will be put into practice during the execution of an individual project at the end of the course, to

be presented during a final seminar. In sum, this track focuses on the students' ability to let themselves, other people and the groups and organizations they are part of, turn to new views, attitudes, behaviours and policies.
Coordinator: Professor Celeste Wilderom

Within the Master Honours programme students can choose from three different tracks:

Change Leaders

The track focuses on developing one's personal leadership skills during the execution of projects. In the track, you will further develop your knowledge, attitudes, and skills related to leadership and change, allowing you to contribute substantially in advice or change projects. You will gain insights into which approaches and techniques work best to achieve improvements. You will learn to recognize different forms of resistance, gain knowledge about different interventions, and accompany processes like learning in teams. On top of that, you will reflect on your own role as a leader or during advice processes.
Coordinator: Professor Celeste Wilderom and Desirée van Dun

Design

The Master Honours Design is a programme that will guide you through a full design process, integrating both technological and

societal challenges. These challenges are rooted in the research of various engineering labs at the University of Twente. In this programme, you will work in small design teams. You will develop your skills in mastering complex design problems and creating novel solutions. Students from all UT disciplines and faculties –engineering, social sciences and philosophy– are enabled to develop understanding and insights in solving complex, multidimensional (often societal) problems using design (thinking) approaches. In doing so, students learn to combine high tech with human touch.

Coordinators: Jelle van Dijk and Professor Gijs Krijnen

Research

The Research Honours is for excellent students who have the ambition to pursue a career in academic research. It supports students in their broader development as

researchers. Through workshops, trainings and meetings, as well as individual coaching, the track helps students in their graduation phase to develop knowledge and skills in the area of academic research and reflect on their future position as a researcher in society. The support of their supervisors helps building their confidence. In our experience, the majority of students who completed the programme will find a PhD position either at the UT or another university.

Coordinator: Professor Petra de Weerd-Nederhof and Anne Dijkstra

Find out
more here



STUDENT'S OPINION



Annemarte Visscher (19)
Study: Technical Medicine (BSc)
Honours track: Science

I have always had broad interests and during my studies I wanted to engage with something, which would fit my multidisciplinary curiosity and develop my professional skillset. I found out about Honours via an e-mail, which was an invitation to learn more about the programme during a lunch market. I went there and what really got me hooked was talking with other students who just graduated Honours. They were all overjoyed about the experience and happy about their

personal growth on account of the programme. I gave it a try and if I could rewind time, I would do it all over again! What was pretty cool about it was the opportunity to get tutored by researchers and experts working in the area you chose to do your research proposal in. Meeting professionals in the field gave me a real idea about the problems people in this domain have to tackle daily, as well as what it's like to build a career in my field. One of the things I truly loved about the programme was the community feeling and the opportunity to encounter intriguing people and learn together. The sense of community made me more involved and motivated to discover new thoughts and ideas!

MOVING TO TECHNOHAL

A new home



..... The Honours programmes have taken up residence on the ground floor of the renovated and newly named TechMed Centre. 'It's a major improvement over the former situation,' says Luuk Buunk of the Honours Office. 'This is our new home.'

As someone who has been part of the Honours programme for quite a while and almost set to graduate, Buunk knows the former situation all too well. 'We used to reside in the Citadel. It's hard enough to find your way in that building anyway. Adding insult to injury, another issue was that the study association and the Honours Office were two floors apart.' How different is the current situation. The Honours Programme has found a new home on the ground floor of the former Technohal, called the TechMed Centre. 'We now have a place with the Honours Office and Ockham next to each other, with an extra meeting space. Adding to that, this building has become one of the most beautiful buildings on campus, so we're very happy to be a vivid part of that,' says Buunk. 'More importantly, this

is a place where we're visible and approachable.' That central location offers more benefits, according to Buunk. 'We're right between the O&O square and DesignLab. Which is an extra bonus, given the fact that we offer a design track. And for our quarterly events with more than a hundred students coming together, we can use the atrium which has a really cool and informal vibe to it.' Being in the TechMed Centre, the question arises as to whether the Honours programmes see potential in offering more health-related education. 'Anything could happen,' says the student. 'Being neighbours essentially, you can always look where you can strengthen your ties. In our new home, there certainly won't be any lack of foot traffic.'

STUDENT'S OPINION



Ana Ortiz Perez (23)
Study: Biomedical Engineering (MSc)
Honours track: Master Research

‘When I went to the official presentation of the Honours programme, the coordinators began talking about the notion of transversal skills such as critical and innovative thinking, time management, presentation and communication skills. I knew I wanted to be a researcher and obtain a PhD diploma since the day I started my bachelor degree, yet having a career in the field requires a wide range of skills

they don't teach you during the regular period of a master programme. That's when I knew I should sign up for the Research track of the Honours programme and I believe the effort was definitely worth it! I knew I had some skills to develop my career further, but I did not really know how to. Now, after finishing the programme, I feel much more confident to enter the research world and continue with my plans to take a PhD. I would recommend the Honours programme to anyone who feels insecure on whether to pursue an academic carrier, but also to anyone who finds himself on a crossroad and wonders which way to take.'

Text:
Rense Kuipers
Photo:
Frans Nikkels



HONOURS OFFICE

'We are both foot soldiers and firefighters'

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The Honours Office is the programmes' so-called management team, which is completely run by recent Honours alumni. They play a vital role in being a link between policy and students. Let's meet Tjo-Kin Man, Iris van der Loo, Luuk Buunk and Marie-Laure Snijders.

The Honours Office is best described as a team that solves problems, organises activities and helps creating policies within the Honours programmes. 'Being part of this team is a great way to positively influence the education we all already experienced first-hand,' says Iris. Luuk adds: 'We are both foot soldiers and firefighters. If students come to us with problems, we try to fix them. But we also help with implementing policies, like the Teaching and Examination Regulations.' The amount of work for the members of the Honours Office can vary widely, even on a daily basis. 'Besides our weekly meetings, we operate in a very ad hoc way,' says Tjo-Kin.

'So if people reach out to us through email or even WhatsApp, we try to act on that as soon as possible. That does require a lot of flexibility on our side though.'

What are the things the Honours Office usually has to deal with? 'Honours students are quite critical,' says Iris. 'If they disagree with something or think their education needs improvement, they will let you know. One student came to us, saying he needed more room for discussion during class. After a quick back-and-forth between us and Jennifer Herek, the Honours Dean back then, she immediately decided to lead several discussion sessions.'

Besides taking care of the more current

events, the Honours Office also pulls its own weight when it comes to the long-term affairs. Like with the big get-togethers after every quarter. 'At first, these plenary sessions were set-up as very formal occasions. Every track gave a presentation, afterwards there was time for drinks. There wasn't much incentive to attend these sessions,' says Marie-Laure. 'So we looked for a way to better involve the students, by having several groups organise these get-togethers. It was an improvement, but we weren't quite there yet. Recently, we've started to collaborate with H.V. Ockham and a specific committee is now in charge of organising these meetings. Now, we feel that things are running as smooth as can be expected.' The members of the Honours Office are the true linchpins of the organisation. 'It really feels like we are an important switch,' says Luuk. 'Be it in significant policy changes or helping students with personal decisions, like choosing an Honours track. Whenever we're needed, we try to help to the best of our abilities.'

Real products improving the real world

..... Following the Honours programme is a lot more than 'just studying'. It can be quite hands-on. A staple of Honours education is your own development and innovation, which can be done through different types of individual projects and real-life challenges. Here is a small sample of products created by Honours students.

Funshion
Viriega Fauzia
Rachmanda



Master Design track
Study programme: Master Industrial Design Engineering

'Clothing is something that defines each and every one of us, whether we mean for it to or not. It is what influences people's first impression of you and it also often influences how you feel about yourself. Mass produced clothing has varying inaccurate sizes that often don't fit right. They are also usually made in specific cuts and colours that tend to reinforce existing gender stereotypes. Funshion is here to show you that there is another option. You don't have to settle for ill-fitting clothes that don't make you feel great. Instead you can make your own clothes that look and feel the way you want. Funshion lets you choose a pattern and fabric, enter in your measurements and then sends you your pattern, printed on the fabric you chose. Now you can sew your own clothes and make any additions you'd like without having to do the hard part of drawing and calculating the pattern. Funshion also aims to create sewing cafes where you can do this with your friends, over some coffee and with some help and advice from trained experts.'



Chronic Fatigue Game of Life
Sven van Wincoop

Bachelor Design track
Study programme: alumnus Bachelor Biomedical Technology

'When patients get the diagnosis of Chronic Fatigue, they are often provided with an information package containing informative folders. Discussions with friends and family members of their content is often experienced negatively. A boardgame provides a much more friendly setting for the patient to discuss how their life is affected by the disease and how friends and family members can provide support. Chronic Fatigue Game of Life contains different types of social activities in which the players get to know which activities are suitable to do with their sick friend or family member and which are not. These activities can be personalised by the players to fit their own interests. Chronic Fatigue Game of Life is a game with both an educational side and an entertaining side with a touch of personalisation, which I am very proud to present as my Honours individual design project.'



Better diagnostics for jaundice in newborns

Kim van der Tak

Bachelor Science track

Study programme: alumna Bachelor Technical Medicine, currently Master Technical Medicine student

The individual project takes place in the fourth and fifth module in the science track of the bachelor Honours programme. The main goal of this project is investigating a theme of your interest (and your discipline) with a personal research proposal according to the format of a Veni-form as end product. Normally, a Veni-proposal is submitted by postdocs, which makes this a very prestigious and challenging project to do in the bachelor. I focused on the improvement of diagnostics for jaundice/icterus in newborns through evaluation of cephalocaudal progression (CCP). CCP is the progression of the yellow-colouring of the skin from chest and back towards belly, arms and legs. I proposed to try to relate the total bilirubin concentration in the blood to CCP, leading to more accurate transcutaneous bilirubin measurements, resulting in fewer invasive blood analysis in newborns. Overall, I learned a lot and I think it is awesome to see what a (bachelor) student is capable of!

Bachelor Design track

Study programme: Bachelor Industrial Design Engineering

I developed DrumTunes to brighten up the days of elderly people with late-stage forms of dementia. While visiting nursing homes for dementia patients, I have often witnessed how these patients suffer from apathetic behaviour. Many patients remain physically and cognitively passive throughout the day, while passive behaviour has been proven to negatively influence their quality of life. DrumTunes is a handheld electronic drum that plays the favourite tunes of the patients when they are interacting with it. DrumTunes stimulates



Booklet design

Anouk Westerdijk

Master Change Leaders track

Study programme: Master Industrial Design Engineering

During the Change Leaders Honours programme, all of us worked on our personal development. The booklet we presented is a summary of how we have grown, what we have learned and how we experienced these nine months. The honour was mine to design the booklet and put all these nice faces and stories together. During the first module, we learned about leadership styles and what type of leader we might be. A personality test resulted in one colour that represents a combination of traits that fits you best. These four colours, red, blue, green and yellow, were the inspiration for the artwork on the cover of the booklet. It was by total coincidence that I saw this painting, painted by my grandma a few years ago, but it was perfect for the cover. My grandma was present during the booklet reveal at our symposium and the reactions to her painting were overwhelming. It was great to see what art can do. In a way, art can be the same as a leader; it can be inspiring. For the future I hope that I can be that too, an inspiring leader.'



DrumTunes

Eline Uiterweerd

the user to keep interacting with the product: the music slowly fades away when the user remains passive. This way, the patient is stimulated to actively keep making music. The use of DrumTunes is not limited to individual patients, as multiple devices can be connected to create a drum circle which is suitable for music therapy. All in all, I can look back on an educational and successful design project, of which the end result is an interactive and innovative design concept for a product that could bring back a smile on the patients' faces.'

'It still helps me today'

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Arvid Keemink, university lecturer in Biorobotics & Interaction Control was part of the first batch of the Honours Programme. A time he looks back on with fond memories. 'If you have the opportunity, it's a great way to broaden your studies.'

Keemink does a lot of teaching and his research focuses on the interaction between humans and robots. He is primarily interested in robotic exoskeletons, with the aim of developing smarter solutions to help patients walk without needing crutches. 'The Honours programme did not contribute directly to my career as a researcher,' Keemink notes, 'but it did help me discover my interest in academia and science.'

In 2007, when Keemink was a second-year Advanced Technology student, he received the email: the UT is launching an Honours programme and your grades are good enough to get you in. 'I went to an information session with Professor Miko Elwenspoek, the spiritual father of the programme,' Keemink remembers. 'I thought it would be interesting, and I signed up. As I look back at my time as a student, I think this is the programme that taught me most. You meet some incredibly clever students, who challenge you and help you learn more.'

Working with students from completely different disciplines broadened his horizons. 'We read original work by Newton and talked about Freud and Machiavelli. We discussed the

"big issues" and approaching them from many different angles and perspectives proved very interesting and instructive. During the two-year programme, I developed certain academic skills that still help me today.'

'It gave me a better understanding of how proposals work'

Writing a research proposal was a particularly useful exercise. 'It certainly made the Master's project for Mechatronics (now Systems and Control) a lot easier,' Keemink assures us. 'But it's still a valuable experience today, as it helps me in writing funding applications. It gave me a better understanding of how proposals work and how to put your research into words.'

It wasn't particularly intense. 'It takes up some of your time, of course, but I still managed to keep playing in my band at the same time. I was fortunate enough not to have to work a job while I was a student, so that left me with some time to spare.'

Along with several fellow students, Keemink founded the Ockham Honours Association after graduation. 'We wanted to keep in touch with future batches and build up a network,' Keemink tells us. 'Gradually, a certain group spirit emerged, which is still there today. I now teach a minor in Biorobotics, and I love meeting students enrolled in the Honours programme today. The best part is that I met my girlfriend at Ockham, she started the programme a few years later than me.'

What did Honours alumni learn from the programme?

Werner Schouten (21)

Track: Processes of Change
Studied: Advanced Technology
Currently: launching a start-up company **IMPULSE** providing carbon compensation services

'The most important lesson I learnt thanks to the Honours programme is collaboration with people of other backgrounds. Students from other disciplines approach issues from such different perspectives. That can cause friction at first, but later on you learn the importance of these different points of view.

Sevim Aktas (22)

Track: Processes of Change
Studied: Advanced Technology
Currently: studying MSc Energy Systems at University of Oxford

'The Honours programme taught me how to work with different disciplines and understand their language. I was more daring to think outside of the box and learned to be more confident with my opinion and statements. Processes of Change is a very particular track in which you investigate change on an institutional, organisational, and personal level. Naturally we also touched on leadership. I realized that true leadership points at the shared values, not at the successes. In this context, I understood that people with a message are not always good listeners. One needs to listen in order to engage. My main takeaway was that change is a difficult process that involves discipline and acceptance. This gave me a better understanding of our current societal constructs and decisions.

For me, the Honours programme unites different opinions, ways of thinking, mindsets, disciplines, skills and more. What we share is one ambition. Going through this experience is mind opening but also challenging at the same time. But watch out, the Honours programme asks for a lot of independence. It is not a matter of what the professors tell you to do, but what you make out of the template that is provided to you. You determine the outcome by utilising the resources, tools, and people available to you. It is the experience that you make - you determine the outcome.'

The most valuable part for me was testing my own leadership style. The programme gives you an outside perspective on your own personality traits and leadership style. Moreover, I've always had a variety of interests and thanks to the personal coaching I could find the intersection of my passion and my competences and combine it all in my start-up. I would definitely recommend it to others. Anyone who aspires to be a leader or an innovator, the programme can teach you how to make an impact in a responsible way. All in all, I very much enjoyed participating in the Honours programme.'

A year in the life of an Honours student

..... As an Honours student, you spend time in lecture halls and classrooms, but you can also compete in a national 'hackathon', go on field trips, meet likeminded people and celebrate – be it at a monthly drink marking the end of long day or at a pinning ceremony symbolizing your successful graduation of the Honours programme.

Photos: Hung Nguyen,
Eric Brinkhorst, Rikkert Harink





