

CHARTING OUR COURSE 2022-2028

# FOR A SMART, GREEN AND SOCIAL WORLD OF TOMORROW



OPEN UP NEW HORIZONS.

**HAN** UNIVERSITY  
OF APPLIED SCIENCES



# FOREWORD

The HAN 2022-2028 Institutional Plan charts our course for the coming years. It shows the direction we want to head in: contributing to a smart, green and social world. By the end of 2027 we aim to see every student and employee making a difference on social issues and so delivering a meaningful contribution to the world of tomorrow.

Of course HAN will continue doing what we've always done: providing good education and research so we can train the professionals of the future in close connection with the region and the professional field. That's the foundation of this course we have charted.

To reinforce this course and the accompanying six strategic goals in practice, we will set out here what students, alumni, staff and our community can expect of us, and what our promises are for the end of 2027.

The course we have charted is the result of an extensive stakeholder analysis, surveys and countless discussions with industry partners, students, staff (lecturers, researchers, support staff and management), alumni, the HAN Advisory Council, the Participation Council and the Supervisory Board. As such, we can rightly say that this charted course belongs to all of us. We'd like to thank everyone, internal and external alike, who has contributed to the realization of this document.

We look forward to working out the further details of this course with each other - students, staff and the professional field. Because only together can we further strengthen HAN and make a difference.

## **OPEN UP NEW HORIZONS!**

Executive Board

Rob Verhofstad  
Yvonne de Haan  
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# READING INSTRUCTIONS

Charting Our Course 2022-2028 is the “plan relating to the institution”, as referred to in Article 2.2 of the Dutch Higher Education and Research Act. It is the result of a stakeholder analysis, surveys and countless discussions with industry partners, students, staff (lecturers, researchers, support staff and management), alumni, the HAN Advisory Council, the Participation Council and the Supervisory Board<sup>1</sup>.

The details on how we will implement this charted course will be worked out in various long-term plans. These details do not form part of this document.

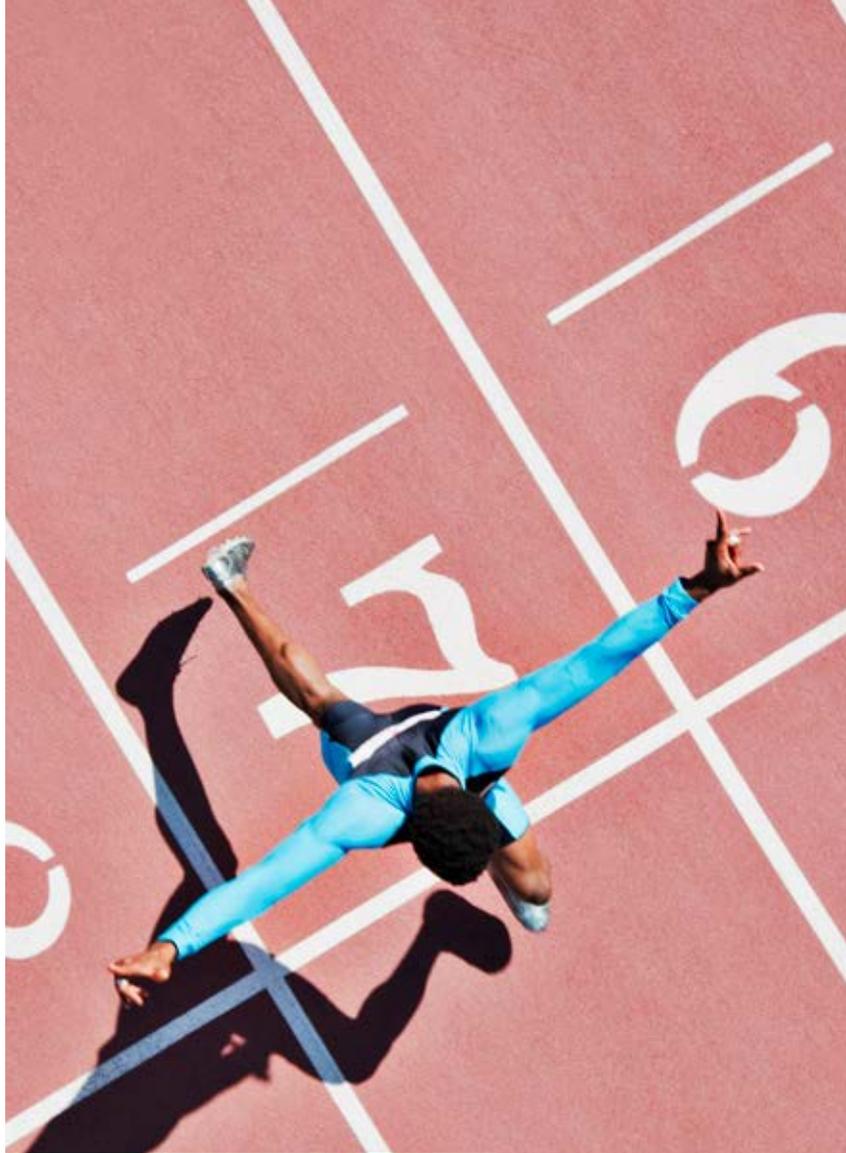
We will successively outline the implications of a changing world, HAN’s position in that world and the role of universities of applied sciences in a broad sense.

Subsequently we will explain in six strategic goals HAN’s choices for the coming years as well as indicating how we will continue on the course we began several years ago. The 2016-2022 HAN Institutional Plan focused on the themes “Student Seen, Recognized and Heard”, “Effective Organization” and “Quality Culture”. The focus on our previous course has added significant value and has laid a foundation for charting our new course. These underlying themes therefore remain as relevant as ever.

Finally, we will make several promises to our students and staff, working professionals and alumni, companies and institutions. Additionally we will explain the process we will undergo to shape and implement our strategic goals.

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<sup>1</sup> In addition to the study day for all HAN staff and various meetings where we all helped to shape this plan, we consulted approximately 300 people (students, industry partners and staff members) through interviews and focus groups.



Every student and employee makes a difference on social issues and so delivers a meaningful contribution to the world of tomorrow.



# 1. OUR COURSE

HAN University of Applied Sciences offers education and conducts practice-based research. By doing so, we earn a place in and contribute to the world of tomorrow. So we can make a difference and bring about real change. Just as we have always done and will continue to do.

The world is changing and HAN is changing with it. At the same time, HAN itself is a source of change. To be of added value in this changing world, we form lasting connections and educate students to become versatile and reflective professionals. We also help to further social development, embrace digitalization and contribute to technological transformations.

Of course, we do not do this alone. We work together with industry partners, lecturers, researchers and students to innovate and develop knowledge and skills to solve social issues. We do so using a multi-disciplinary and lifelong approach. To this end, we link the major social

themes to our daily work. We also continuously evaluate our actions on the basis of our mission. So that we can make a direct and indirect sustainable and future-proof contribution to smart, green and social solutions for the social issues of today and tomorrow.

## **OUR FOCUS: SMART, GREEN AND SOCIALLY RESPONSIBLE**

HAN wants to contribute to a smart, green and socially-responsible world. That is why education and research at HAN focus on pushing frontiers with digital technology, on reducing carbon emissions and on narrowing socio-economic health disparities. HAN applies the same focus to its own organization. This focus is expressed in HAN's three key areas: Smart Region, Sustainable Energy and Environment, and Fair Health.

### **SMART BY FOCUSING ON SMART REGION**

The digital revolution is rapidly changing the world and offering new opportunities for versatile professionals, teams and organizations. We work together to push those boundaries using digital technology. For example, by making new technologies suitable for SMEs and by increasing the innovative capabilities of the working population, now and in the future.

### **GREEN BY FOCUSING ON SUSTAINABLE ENERGY AND ENVIRONMENT**

We reduce climate change by working together to lower carbon emissions. We contribute to solutions and accelerate innovations by tackling complex issues in the energy transition from a multidisciplinary perspective. For example, by investigating how we can use hydrogen efficiently and how we can grow toward a circular and bio-based economy.

### **SOCIALLY RESPONSIBLE BY FOCUSING ON FAIR HEALTH**

Everyone deserves a healthy life. Yet 30% of Dutch people with a low level of education or income live seven years shorter and feel less healthy. We work together on reducing socio-economic health disparities. For example, by teaching our future professionals how to deal with low literacy and by investigating how people in vulnerable positions can live full and healthy lives.

# DISTRICT-BASED ENERGY TRANSITION: WORKING ON SOCIAL ISSUES



*Erik Jansen – associate lecturer in Capabilities in Care and Wellbeing*

The district-based energy-transition project was initiated by local residents. They want an energy transition that is feasible and affordable for everyone, including those on a small budget. Energy transition is not only a technical issue, but also an economic and social one. So it applies across all sectors. HAN has responded to this need with a multi-disciplinary project. The students involved come from a wide variety of disciplines: architecture, engineering, circular economy and social work. Students go into the community, where they listen to and inform residents. The information the students bring back can be used to develop policies that reflect the wishes of the residents, thus securing their support. Of course, the energy transition also has its technical and economic requirements. That's where HAN research comes in, once again across all sectors. In short: HAN works together with the end users, in this case the residents, but also with companies, universities and public authorities through education and research. Radboud University, Nyenrode and the municipality of Arnhem, to name a few. Making those connections, that is what HAN has to offer.

Aim/perspective for six years from now: HAN has scaled up these types of projects. In doing so, HAN uses its expertise as a practice-based research institution, innovation hub and multi-disciplinary educator to make a real contribution to solving social issues. Companies and public authorities in the region know how to find HAN.



**When tackling a social challenge,  
we have to take seriously the  
perspectives of all involved parties.**



## 2. THE WORLD IS CHANGING ...

The world is in transition. Consider for example the transition toward a climate-neutral and circular economy, the energy transition and climate change. Or the growing divide in countless areas of society, the increasing inequality and the ever-louder call for an inclusive society.

The digitalization of society and the technological leaps being made in areas like Artificial Intelligence, Internet of Things, Machine Learning and Big Data offer us endless new opportunities. But they also bring new challenges, call for different laws and regulations and force us to rethink existing ethical frameworks.

This changing world has brought about complex issues, both ecological and societal, digital and technological. Issues that have global, national and also regional aspects. Issues that require multidisciplinary and cross-sectoral solutions and which all our students and staff will encounter sooner or later. After all, everything is connected.

### **... HAN MOVES WITH THESE CHANGES AND INITIATES CHANGE**

HAN makes a valuable and sustainable contribution to a better world. Also when that world is changing. As a broad, Euregional, multi-sector university of applied sciences with associate, bachelor and master degrees and a broad lifelong development portfolio and with practice-based research, we relate to the changing world and are part of those changes. By entering into lasting connections, educating students to become versatile and reflective professionals, embracing digitalization, and contributing to digital and technological transformations, we offer our students, our staff and the professional field the right tools to make a difference in the world of today and tomorrow.

### **THE ROLE OF UNIVERSITIES OF APPLIED SCIENCES**

Major world developments will cause the labor market to change considerably in the coming years. A number of jobs and professions are disappearing, while new positions and roles are emerging that require new skills. In every possible sector, digital and technological developments play a prominent and even disruptive role.

Universities of applied sciences occupy an important position in this respect, by playing a key role in the regional knowledge ecosystems, contributing to the region's profile, and promoting the development and circulation of knowledge by linking research, education and the professional field. Universities of applied sciences should also do their utmost to ensure that more students find the place that suits them best within higher education. This can be achieved by focusing explicitly on their personal circumstances and by offering educational opportunities to young professionals. Offering flexibility and customization are crucial in this respect.

In addition, universities of applied sciences can ensure an even better connection to the labor market and society by continuously improving, renewing and offering more in-depth education and practice-based research, together with industry partners and other knowledge institutions.

This is important not only for our students, but for the region too. The Dutch population is growing. But that population growth is unevenly distributed across the country. While the Randstad is becoming increasingly crowded, other parts of the country are threatened with decline. Effective, future-proof cooperation between education, research and professional practice is vital for keeping our region strong and resilient.



**Effective, future-proof cooperation  
between education, research and  
professional practice is vital for keeping  
our region strong and resilient.**



# FASTER TRANSPORT AND BETTER CARE WITH LAST MILE CARE LOGISTICS



*Dennis Moeke – professor in Logistics and Alliances,  
School of Organisation and Development*

Buur & Zo is a living lab that devotes extra attention to vulnerable citizens in the community and to smart logistics. Ever more health care services are offered to people at home. So the number of “thin” transport flows is increasing: a hot meal to one person, a box of medications to another. That means more costly car kilometers. Students and researchers at HAN worked together with the professional field to develop and introduce the concept of the district caretaker in Deventer. The district caretaker receives all the goods at a community center and then bundles them together in an electric vehicle and delivers them to the customers. The caretaker also has time for a chat; that works wonders and the caretaker sees right away whether there are any problems. In short: three social issues are tackled simultaneously: better health care, saving on health costs and reducing CO<sub>2</sub> emissions. HAN is gathering research data on the impact of the concept in a collaborative project with Radboud University, independent research organization TNO, and Saxion University of Applied Sciences. With the results of this evaluation study, the concept can be adjusted where needed.

Aim/perspective for six years from now: as well as Buur & Zo, HAN has an array of living labs where students from vocational training colleges, universities of applied sciences and research universities and researchers work on real assignments from society. The labs are completely integrated in the regular curricula of HAN degree programs. The living labs also provide an inspiring learning environment for staff of the allied companies, in the context of life-long learning.



### **3. DEVELOPMENTS THAT DETERMINE OUR STRATEGY**

To play a meaningful role in tomorrow's world and be able to make a difference, it is important to make strategic choices. To focus on themes that are relevant and in demand in the world around us, that coincide with our degree programs, and that are important for properly equipping our students for the labor market. And to connect professionals to HAN in education and research. Based on the detailed stakeholder analysis, surveys and extensive discussions, HAN sees three important developments that will determine our strategy for the coming years:

- Lasting connections
- Versatile and reflective professionals
- Digitalization and technological transformations

Here we explain why these three developments in particular are important and how we will implement them.

## **LASTING CONNECTIONS**

The changing world presents us with major challenges that increasingly demand multidisciplinary and cross-sector solutions. Industry partners have therefore indicated their need for a lasting connection with the education and research. Moreover, it is necessary to make use of all the available expertise to allow the region to continue to add value and so retain its strong economic position.

That is why HAN is committed to intensifying and strengthening working relationships with our community: smart partnerships in which knowledge, research and practice are not separate, but instead combine to form knowledge ecosystems. These kinds of larger partnerships, where mutual cross-fertilization occurs and where each discipline is constantly tested for relevance, adaptability and added value, are the only partnerships that will lead to innovation. They ensure we can make a difference. Especially if those partnerships are long-term, flexible and resilient.

## **VERSATILE AND REFLECTIVE PROFESSIONALS**

The rate at which the changing world is affecting professional practice is tremendous. In the coming years, many existing professions will disappear. But there will also be new jobs and disciplines, which will give rise to new professions.

The professional practice, including at HAN itself, therefore needs professionals who are versatile, so they can identify and recognize changes and master new skills. Professionals who are reflective, so they know who they are and what they are capable of. Professionals who can deal with change and are aware of their place in the world.

This means that students at HAN must not only develop the ability to work on multidisciplinary and cross-sector issues. They should also be stimulated in their personal and social development: the 21st-century skills. So that they are able to use their professional practice to make a meaningful contribution to the social issues arising now and in the future.

As a result of these developments, HAN offers the working population more opportunities to learn along the way by retraining, refreshing their knowledge or gaining higher qualifications. The need for lifelong development is already urgent, and that urgency is only growing.

## **DIGITALIZATION AND TECHNOLOGICAL TRANSFORMATIONS**

Digitalization and technological innovations are having a rapid and irreversible effect on the world. They are causing major and permanent changes in virtually every area of our personal, social and economic lives. Moreover, these developments mean that sectors and industries that were previously separate now increasingly overlap, intertwine and influence each other. It is no longer feasible for organizations, companies and knowledge institutions to remain isolated from the rest of the world and follow their own familiar path. Collaboration and cross-fertilization are the new norm. Digital and technological skills play a key role in this.

The professional field needs professionals who can help shape tomorrow's opportunities in the area of digitalization and technological transformations. They need professionals who also understand the risks, for example in the area of laws and regulations or ethical dilemmas.

Professionals, including those at HAN, should therefore not only be familiar with the currently available digital and technological possibilities. They also need to be curious about future developments and possibilities so they can contribute to utilizing opportunities.



# HYDROGEN ROUTE: FLEXIBLE AND MULTI-DISCIPLINARY

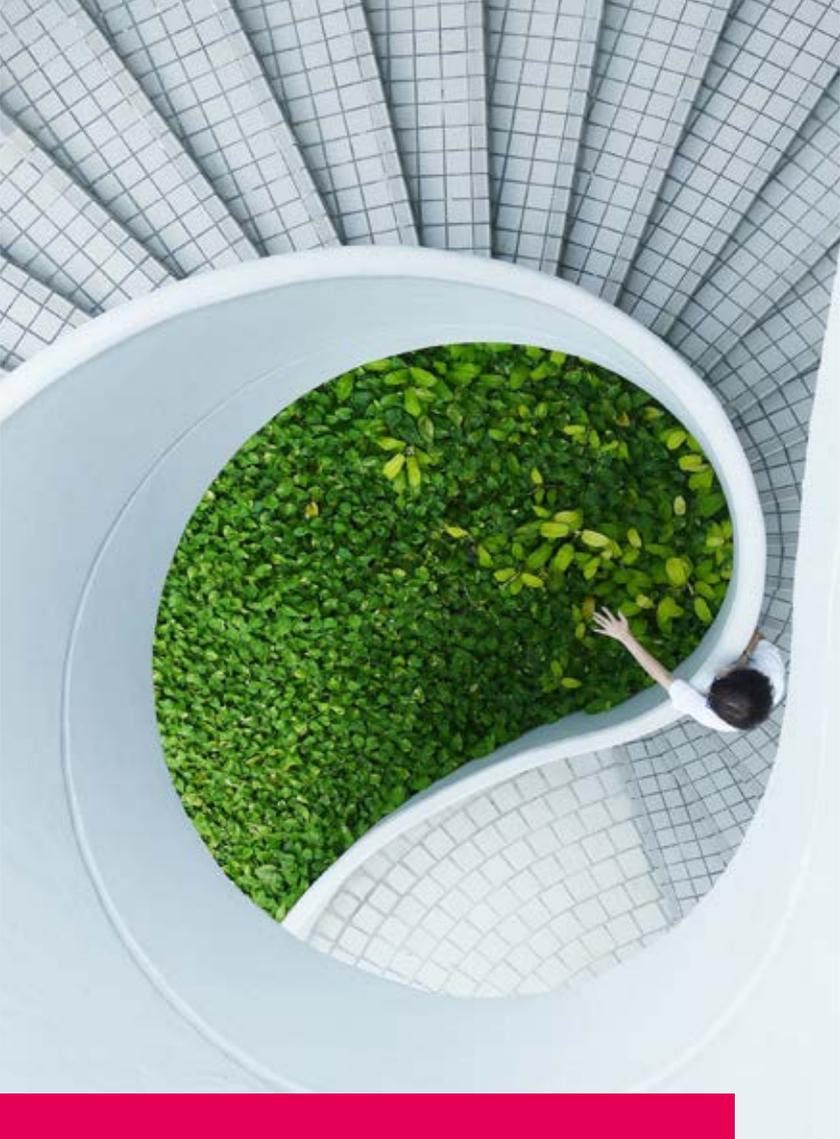


*Mika Damen – almost graduated in electrical engineering/  
embedded systems, Frank Mietes – Everything about Hydrogen,  
Ruben Bruins – practical skills trainer and manager of the hydrogen lab,  
School of Engineering and Automotive*

One avenue of thought in the energy transition is the use of hydrogen. HAN educates professionals who want to be part of this development, so they can contribute to a greener world. That cannot be achieved with a mono-disciplinary learning route where everything is set in stone. So HAN has developed a learning route that is flexible and elicits collaboration. Students partly determine their own curriculum by choosing elective subjects, also from other study programs. These subjects stem from programs like electrical and electronic engineering, embedded systems engineering, mechanical engineering, circular economy, business management or legal studies. Students always work together on an assignment. The hydrogen route involves activities such as working on a hydrogen-powered scooter and cargo bike, or participating in races for energy-efficient vehicles, like the Shell Eco marathon.

HAN cooperates with various companies and organizations on the hydrogen route, for example the foundation Everything about Hydrogen. The work is carried out in the Connectr lab, where companies are also active. This leads to cross-pollination, i.e. students help experts and vice versa. Students have to independently carry out their part of the project and communicate with companies about their projects. They have to really "sell" their project. HAN researchers are also closely involved in the hydrogen route, for example by conducting research on hydrogen storage. The hydrogen route thus connects innovation with implementation and with entrepreneurship. Three ways to work towards a better world, but only together do they have real impact.

Aim/perspective for six years from now: companies, knowledge institutions and public authorities know how to find HAN for solving issues related to the energy transition, including hydrogen. HAN lecturers and researchers are working on further innovations in the Connectr lab, together with research universities and vocational training colleges. The first start-ups and scale-ups are busy implementing the acquired knowledge and experience.



## **4. OUR STRATEGIC GOALS**

**The developments that are relevant to us arise from the needs of our community. To give shape to these themes, HAN has set six strategic goals for the 2022-2028 policy period. Together, these strategic goals will ensure that HAN makes a direct and indirect sustainable and future-proof contribution to smart, green and social solutions for the social issues of today and tomorrow.**

### **GOAL 1**

#### **STUDENTS EVOLVE INTO REFLECTIVE AND SOCIALLY ENGAGED GLOBAL CITIZENS**

We educate our students to be versatile and reflective professionals who are socially engaged. We offer a rich multidisciplinary and cross-sector learning environment where education, practice-based research and professional practice come together. We educate professionals who can connect different disciplines and adapt to changes in the professional field.

At HAN they develop into global citizens who approach the world with an open mind and a borderless and intercultural perspective. All our curricula therefore cover the broader international context and intercultural skills. With an awareness for diversity and inclusiveness, guided by the needs of the professional field. All fields of study also devote attention to the development of students' personal and professional identity throughout the entire duration of their education.

By the end of 2027, our students will know that at HAN they are not only acquiring knowledge and practical skills to shape the future: they are also developing on a personal and social level and can reflect on how they can make a difference.

## **GOAL 2**

### **STUDENTS AND STAFF DEVELOP INTO DIGITAL AND DATA SAVVY PROFESSIONALS**

Our students and staff are digital and data savvy. They know the possibilities offered by digitalization and technological innovation, how to recognize new opportunities and how to make use of them. But also what restrictions these developments have and what risks they could entail.

Students and staff alike can easily familiarize themselves with new developments in the area of digitalization and technology and they are not afraid to venture into new territory. In addition, HAN students learn about the following from the perspective of their own professional profile: change management, business administration, working in knowledge ecosystems, organizational development and ICT. This teaches them to optimally guide the digital and technological transformation in their field overall or as individual professionals.

By the end of 2027, students and staff will have the skills to help shape the opportunities presented by digitalization and technological transformation. At the same time, they will be aware of the risks, for example in terms of laws and regulations or ethical dilemmas.

## **GOAL 3**

### **WE ADOPT A FLEXIBLE APPROACH TO ORGANIZING OUR EDUCATION**

HAN takes a flexible approach to organizing its education, with an optimal balance between meeting online and in person. Every student has the opportunity to follow a student pathway that suits their personal ambitions and development. Students receive part of their education in a hybrid learning environment, such as a hub or work-based learning location. These are non-profit partnerships in which students at vocational training

colleges, universities of applied sciences and research universities increase the multidisciplinary collaboration and innovative capacity of SMEs and institutions through research and innovation projects.

By the end of 2027, students, staff and the professional field will experience HAN as a dynamic educational institution where every student has the opportunity to choose a student pathway that suits their own personal ambitions and development.

#### **GOAL 4**

#### **WE ENTER INTO LASTING CONNECTIONS WITH OUR PARTNERS**

We enter into lasting connections with our students and the greater community. We also continue to develop the triangle of education, research and professional practice to best suit the needs of the individual student. In this way, we foster innovation, we work with regional partners to add value to the region and we offer students and thus also staff a challenging learning environment. We strive to play a meaningful, connecting role in the regional knowledge ecosystem: we connect education, practice-based research and the professional field so that everyone can interact and benefit optimally from existing and new expertise and create a healthy environment to foster innovation.

By the end of 2027, there will be a set of resilient regional knowledge ecosystems, with a focus on smart, green and social solutions for the region, with HAN as one of the key players.

## GOAL 5

### WE ALIGN OUR LIFELONG LEARNING PORTFOLIO FOR PROFESSIONALS WITH THE PROFESSIONAL FIELD IN THE REGION

Our lifelong development portfolio caters to the needs of our community and the Human Capital Agenda of the region. Every working professional should have the chance to continue developing as they see fit.

Together with the professional field we develop our portfolio for professionals into a distinctive educational offering within all our areas of study. We do this for working professionals who want to obtain a university of applied sciences degree (associate degree, bachelor, master or professional doctorate). Also for the growing group of people who want to retrain, refresh their knowledge or gain higher qualifications through a certified course from bachelor through to master level. Naturally, we also actively encourage our own staff to continue working on their development. That is why the educational offerings are also open to them.

By the end of 2027, HAN will be the most important partner in the region for part-time education and lifelong development at university of applied sciences level.

## GOAL 6

### STUDENTS FEEL A LIFELONG CONNECTION TO HAN

We make a commitment to all our students that extends beyond the duration of their studies. We strive to ensure that alumni return to HAN to continue their personal and professional development. So they have the most relevant skillset for the social challenges at hand whenever they need it. In addition, our graduates remain involved at HAN, for example by commissioning research assignments, providing internships or supervising graduation projects, and giving guest lectures.

By the end of 2027, choosing to study at HAN will mean a lasting connection with HAN.



# THE VERSATILE INFRAWALL



*Mark Hofman – OFN, Rudi van Hedel – Sweco, Fieke Schulten (not in the picture) – lecturer in Industrial Design Engineering, School of Engineering and Automotive*

The infrawall is a multifunctional wall, designed by second-year HAN students together with numerous others. The infrawall not only screens out the noise along the highway, but also contributes to the circular economy as it is made of 100% reusable materials. It is also biobased, which means the CO<sub>2</sub> footprint is up to 80% smaller than that of a regular noise barrier. The infrawall ensures that rainwater running off the road into the verge can be used for agriculture. Also, solar energy is generated from the noise barrier and a wall of plants adds biodiversity. In time the wall will also be able to collect traffic data (smart mobility). The possibilities for this are being integrated. It is no wonder the province of Gelderland has committed to building a prototype, in the testing grounds for biobased materials along the A348. This is now in progress.

Considering all these features, it is only logical that cooperation is needed between students from different disciplines (and with participating companies OFN and Sweco) to make the project a success. What's more, students not only learn so much in their own field, but they also gain experience in project management, presentation, visualization and multidisciplinary collaboration. The system of assessment in the programs is fully in line with this and also includes competences such as a critical attitude, self-reflection and how to give and receive feedback. Because the project runs for a longer period, different student teams follow each other up. Each team benefits from the previous team's results: by standing on each other's shoulders you can look further.

Aim/perspective for six years from now: the infrawall has been scaled up considerably and is ready to be taken into production. Students from even more disciplines work together on this: mechanical engineering, civil engineering, IT and media design and circular economy (already involved). Collaboration with vocational training colleges, research universities and the business community has been strengthened and HAN is linked to a start-up or scale-up.



## 5. FURTHER STRENGTHENING OUR FOUNDATION

The 2016-2022 HAN Institutional Plan focused on the themes “Student Seen, Recognized and Heard”, “Effective Organization” and “Quality Culture”. The focus on our previous course has added significant value and has laid a foundation for charting our new course. Just like the focus on good education and practice-based research, these underlying themes remain unchanged. Both for HAN students and for the organization and its staff.

### **STUDENTS FEEL SEEN, RECOGNIZED AND HEARD**

HAN is a great place to learn. A place where student welfare, student participation and student focus are key. We provide a safe and inclusive study and internship climate where students feel they belong and treat each other with respect. We use various strategies to increase student success and reduce dropout rates. One of these is ensuring a smooth transition from secondary school and vocational training to higher education. HAN students are full members of the community. They are involved in policy development and, together with the professional field, influence the curricula that are developed.

## **EFFECTIVE ORGANIZATION**

HAN is a flexible, effective and efficient organization that draws on its expertise and broad background to improve its own organization and make the world smarter, greener and more socially responsible. We arrange our internal and external processes and working methods accordingly. In doing so, we use the opportunities offered by digitalization and develop into a more data-driven organization.

We provide clear and responsive points of contact for our community, staff and students. Our HAN campuses form an inspiring and attractive environment for both our students and staff, and our contacts from the community. In addition, HAN is an attractive and safe place to work where everyone feels valued and respected. We offer our staff plenty of opportunities for personal and professional development and growth, in an environment where job satisfaction is key and where there is attention for an acceptable workload.

## **QUALITY CULTURE**

Our quality culture is the basis of our relationships with students, with each other and with the professional field. A culture that is based on distinctiveness and ambition, that revolves around professional independence and responsibility and that is characterized by safety and trust. In this way we offer future-proof education, innovative practice-based research and social relevance. HAN is an inclusive university of applied sciences. This is visible and recognizable and is reflected implicitly and explicitly in what we do and how we are perceived.

In order to develop this culture further, we will continue along the path of Professionals Governance, results-accountable teams and leadership development. We will also be guided by our behavioral compass: innovative, collaborative, open, daring and inquisitive.

# THE POSITION OF VIRTUAL REALITY IN EDUCATION



*Astrid Timman – lecturer in Arts Therapies, School of Health Studies,  
Jos Schenkeveld – intern*

Astrid Timman from the Arts Therapies program developed a virtual client called Max. She worked on this together with all the other health and welfare degree programs at HAN, iXperium Health and The Simulation Crew. Students practice an intake interview wearing VR goggles. They interview Max and make a list of his needs. Max responds in real time to what the students say. After the interview the students receive automated feedback, based on the communication theory taught in the degree programs. For example: did I listen well and did I ask enough follow-through questions? Students even get to hear whether they had sufficient eye contact with Max. They can practice when, where and as often as they like. The remarkable thing is: they actually do. They like using the VR goggles. The feedback is personal, objective and, in particular, safe. Students feel free to practice because nobody sees or hears them and a mistake has no immediate consequences. The VR simulation appeals to students' playfulness: "playing elicits learning".

The next step is the complete integration of this app (and later other apps too) in education. Further learning resources are linked to the app as an extra practice opportunity, so that students can receive training in the areas they need. If the automated feedback shows a student has mastered the material, then that counts as a learning result, giving the student more control over the learning process.

Together with Radboudumc, HAN developed more VR simulations, such as three VR simulations with motivational interviewing. The professional field and students also contribute to this, which results in a win-win situation for all parties. They all learn from each other and that process continues. The students are prepared to use these techniques in the professional field and can also develop apps in their work. VR is already used a lot in mental health services to give clients control over their own therapy.

Aim/perspective for six years from now: virtual reality is a fully-fledged part of education at HAN. It is always used in service of education and so eventually in service of health and welfare. In this way, HAN continues to improve the quality of its education. In doing so, HAN educates professionals who take control of their work and have an open mind for the social issues they encounter in practice.



# 6. HAN PROMISES

Changes take time to fully mature. However, we can already make a number of promises to our students and staff, working professionals and alumni, and to companies and institutions in the region.

## OUR PROMISE TO STUDENTS

Anyone studying at HAN will develop into a future-proof professional who is equipped for the labor market and has a solid understanding of opportunities and risks. Already during their studies, our students contribute to solving social issues through smart, green and socially-responsible applications for the region.

Learning is not limited to the HAN campus. Every curriculum offers possibilities for working together with students from other programs and schools and with people from different fields of work. There is also the possibility to conduct research and follow part of the study program in a hybrid learning environment, such as a hub or work-based learning location.

Students are not only given the space to grow as professionals, but also as human beings. They learn to reflect on choices made, to seek the most suitable role (innovate, implement and take action) and to contribute to solutions for social issues. In doing so, they demonstrate not only their professional skills, but also their personal and social development.

In addition, each student is free to shape part of their curriculum as they see fit. They can follow a student pathway that matches their personal ambitions and development, with various options in terms of sequence, content, pace, teaching methods and assessment of the program. It is also possible for them to take modules at other higher education institutions.

### **OUR PROMISE TO STAFF**

By offering responsive education, research and entrepreneurship, HAN shows itself to be an innovative knowledge institution where students, lecturers, researchers and partners inspire, influence and improve each other. It is a place where results are not the end of the line, but the basis for follow-up research. HAN offers a social, safe and inclusive working environment where everyone uses their own expertise to contribute professionally and personally to a smart, green and socially-responsible community. Outside, but also within the institution itself. HAN is a good employer and socially-responsible partner for the entire region. It offers room for personal development and for promoting expertise in education, research, digital skills and data use within one's own discipline. We challenge schools and departments to engage in joint activities and to share and enrich each other's knowledge and progress. Effectiveness and efficiency are key requirements for the use of space, energy, equipment and materials. HAN optimally supports its staff with processes and systems and devotes attention to ensuring a good work-life balance and an acceptable workload. It offers room for its staff to develop as professionals and grow as people, as well as contributing to their versatility and well-being.

### **OUR PROMISE TO WORKING PROFESSIONALS AND ALUMNI**

HAN offers numerous opportunities for working professionals to share their knowledge with our students and staff and to make use of the knowledge and skills present here. For example, through research assignments, the supervision of internships and graduation projects, and

guest lectures. We offer a wide and suitable range of further education, training and workshops. We do this for working professionals who want to retrain, refresh their knowledge or gain higher qualifications through a certified course from bachelor through to master level. Also for those who want to obtain a degree at university of applied sciences level (associate, bachelor or master). We also provide opportunities to participate in research and to make use of current research findings.

Alumni have access to a large and relevant network, the knowledge and contacts of lecturers, students and former students, companies and institutions. Through these channels, HAN likewise stays up-to-date on current developments in the field and so also remains connected to its alumni after they graduate.

## **OUR PROMISE TO COMPANIES AND INSTITUTIONS**

HAN encourages sustainable networks and networking between the professional field, knowledge institutions and students. Together, in mutual collaboration and cross-pollination, we work on sharing, expanding and applying smart, green and socially-responsible knowledge and expertise. This allows all parties involved to work together on and benefit from innovation, relevant and practice-based education and research. And to work on solving social issues. Our campuses are open to the professional field so they can use our centers of expertise and laboratories. We also help to create learning environments where education, practice-based research and professional practice meet, influence each other, and learn and innovate together. There is a clear point of contact for our industry partners, for all questions, internships, (research) projects and training. Above all, HAN provides the labor market with well-equipped professionals and is the most important knowledge partner for lifelong development in the region.



# THE BIOBASED INNOVATIONS MINOR: LEARNING TO WORK TOGETHER ON A GREENER WORLD



*Richèle Wind – associate lecturer in Biobased Technology,  
School of Applied Biosciences and Chemistry*

Society needs graduates who can help make the Netherlands fully circular by 2050, which means it will keep reusing residual materials so raw material stocks are not exhausted. The use of new/other raw materials plays an essential role in this. HAN has launched a new minor to specifically address this social issue. The minor was devised by researchers from the HAN BioCenter and lecturers from various fields of study: Biology & Medical Laboratory Research, Chemistry, Industrial Product Design and Architecture & Construction Engineering. Students learn from the very start of the minor to work together. That begins with understanding each other's language: a chemist speaks a very different language from that of a product designer. The program is taught in English, so international students also take part. This gives an added dimension as they bring their own culture with them. That requires flexibility. Also of the lecturers, who learn just as much as the students. It really is pioneering work and that is inspirational. That also counts for the numerous and long-standing contacts with the business community, who allow students to carry out real assignments.

Aim/perspective for six years from now: the minor can be taken by students from all engineering programs, in their own biobased lab environment where researchers are also active. There is also a strong connection with students from the Master in Circular Economy. Because if you want to make a real impact, you also need people who can translate the technical concepts into earnings models and business plans. In this way, innovation and implementation go hand in hand with entrepreneurship, meaning multiple value creation.

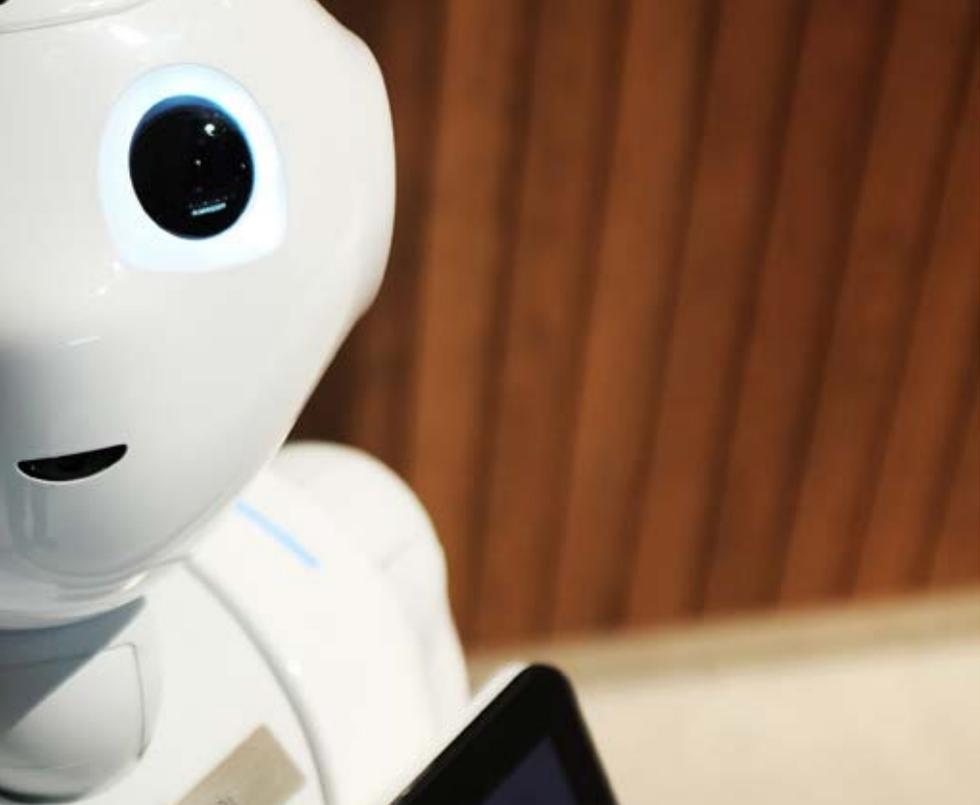


# 7. IMPLEMENTATION AND APPROACH

Charting Our Course is the “institutional plan” as referred to in the law. It describes HAN’s course for the next six years, based on the developments that we consider important - lasting connections, versatile and reflective professionals, and digitalization and technological transformations - and in relation to big social issues that require smart, green and social solutions. It sets out six strategic objectives and promises to our stakeholders.

HAN is a learning organization that consistently adjusts its operational policies based on the values of its own behavioral compass and on what is happening in the world around us. HAN follows a layered approach in working out the details of the course it has charted. That includes further detailing in three-year plans at the strategic target level, school plans and annual plans. These plans do not form part of the institutional plan referred to in the law and therefore do not form part of this document.

For each of the six strategic goals, a three-year plan will be drawn up, which, together with a number of other HAN-wide three-year plans, will provide guidance for the three-year school plans. These plans will

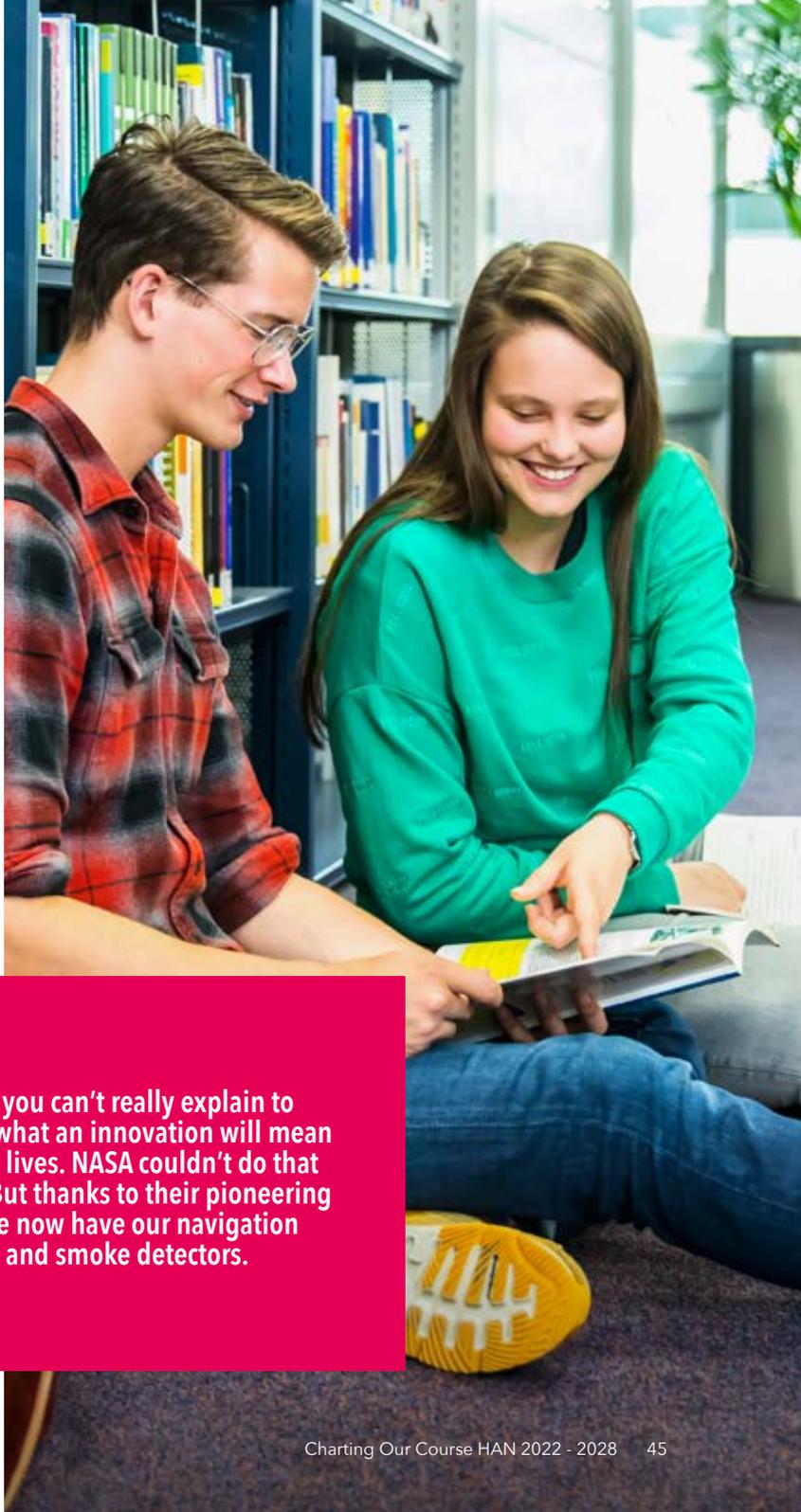


be adopted before the summer of 2022. A mid-term review will take place after the first three years, allowing us to assess the extent to which the undertaken activities have had the desired effect. The mid-term review is also the starting point for a second, updated three-year plan for each of the six goals. The three-year plans will in turn guide the annual plans of the schools and departments. These plans describe how the schools and departments aim to realize the six strategic objectives and the chartered course each year. They do so using an integrated and cumulative approach. All of these plans are included in HAN's planning & control cycle.

# CONCLUSION

We have shaped this vision with input from our students, the professional field and our staff. We have been inspired by the many reflections and contributions. In numerous meetings, we have entered into dialog about the developments that are important to us, the ambitions that arise from them and how we ourselves can remain flexible. In this way we put into practice the goals and ambitions described in our charted course. We will also apply this method to the translation of the strategic goals into long-term and annual plans. We look forward to working out the further details of this course with each other - students, staff and the professional field. Because only together can we further strengthen HAN and make a difference.

**OPEN UP NEW HORIZONS!**



## //

Initially you can't really explain to people what an innovation will mean for their lives. NASA couldn't do that either. But thanks to their pioneering work, we now have our navigation systems and smoke detectors.

# COLOPHON

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