

Sybren Steensma
Innovation advisor at Syntens

“At present I work at Syntens as innovation advisor. Syntens is an initiative by the Ministry of Economic Affairs, and provides (free) advice on innovation to SMEs. As an advisor I look together with the entrepreneur at how he or she can function more effectively. That means using smarter technologies and knowledge, to making better use of market opportunities. As innovation advisor I travel around quite a lot. I visit SMEs three or four time a week, often varying greatly in their activities. This variation is what makes my work so interesting, because you have the chance to see what's going on in those companies. This program as given me a good preparation for the technology through which you can understand exactly what an entrepreneur does. That, together with an understanding of innovation and change processes. Which is why I have very positives memories of my studies.”



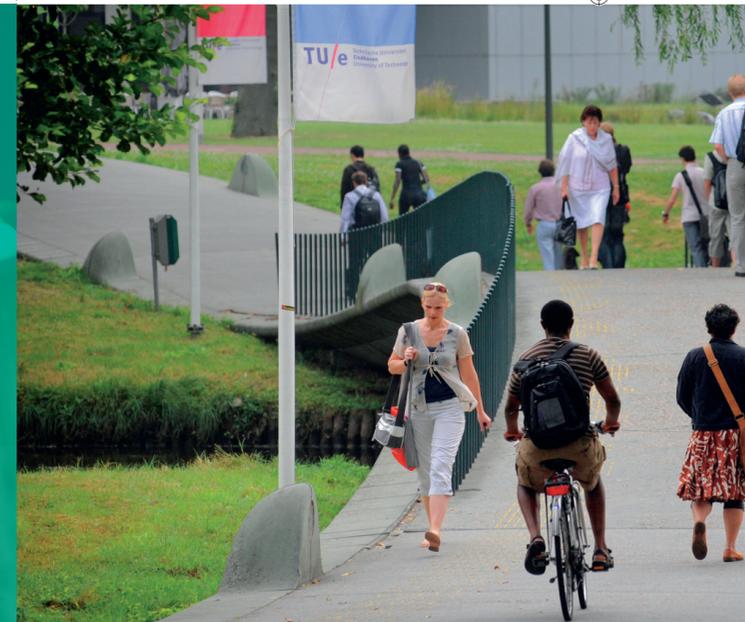
Marten Witkamp
Independent Sustainability advisor

“I've always been passionately interested in innovation, but I only realized that I wanted to study Innovation Sciences after secondary school. It was the interdisciplinary nature of the program that – working in a range of different fields – was what appealed to me most. I still benefit from that in my own business. Six months after I graduated I started my own enterprise, working by myself. My company carries out investigations and product development in breakthrough sustainability, working mainly in the building-related field and in urban farming. I also work together with two other companies, and I'm an active member of a group of other entrepreneurs in sustainability. I really enjoy the flexibility and freedom of being an entrepreneur, just like the other people I meet in my work. I can decide what I do for myself. It's important to find the right balance between sales and marketing, getting inspiration and working on projects. For example I'm working on one day on making a new website, and after that I can spend a whole week talking to people, or working hard with a team of people to reach a deadline. One project that I'm proud of is the 'House of Energy' – an inspiration book for home owners and others involved in the building process. The book makes the subject of energy-neutral (re-)building accessible for a large group of people, and not just those with a technical background. And I didn't just win this project myself, but I also led the team of 10 people from TNO and Except. We produced the book together in a bizarre period of two summer months. That was a big team effort, and it deserves the congratulations of all those involved!”



Catelijne van de Moosdijk
Senior Program Advisor at SenterNovem

“I started work at SenterNovem as (junior) advisor as soon as I graduated. SenterNovem carries out government policy in the field of innovation, the environment and sustainability. In the first years I worked mainly on projects to promote energy saving by consumers. Together with researchers, entrepreneurs and manufacturers, I investigated the opportunities to develop domestic appliances that encourage energy-saving behavior. At present I'm working as a senior advisor at SenterNovem. As advisor my work involved promoting sustainable energy production. I look for the bottlenecks to innovation, and working together with ministries I develop communion, legal and financial tools and methods to eliminated them. In recent years I've been working mainly on a coordinating function, which means I've been less involved personally on the execution aspects. As coordinator/project, my role is to take care of leading the various activities (which are carried out by others), and to make sure that the desired result is achieves. I take care of the contacts with the client, for which I provide policy advice and coordinate the monitoring activities to promote sustainable energy production (SDE). The knowledge of the Innovation Sciences program focuses on societal innovation themes in a technical environment. It gives you a broadly based outlook, so you are well prepared for this kind of coordinating position. The multidisciplinary approach of the program has given me the right attitude to work together with experts in the different disciplines. I understand the technological context, but I can also look further than the technology alone to be able to manage the process properly.”



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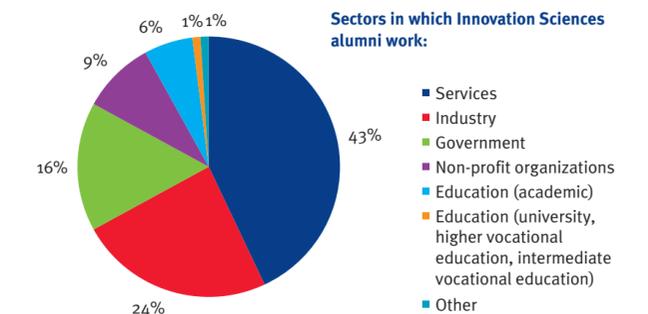
Sustainable Innovation*

* This major is formally part of the Bachelor's program in Innovation Sciences

What alumni say

The major in Sustainable Innovation lets you proceed directly to the TU/e Master's program in Innovation Sciences. Depending on the elective courses you choose, you can continue to other TU/e Master's programs and Master's programs outside TU/e. After completing the Master's program in Innovation Sciences, you'll have an understanding of technology, innovation, sustainable development, social sciences and economics. You'll be able to find a position in industry, in consulting firms or in government.

You'll be a key player in technology development, policy, strategy and advisory work. Typical functions include Innovation Manager and Business Developer in industry, Energy Policy Coordinator in government, Smart Mobility Coordinator in an international consultancy, or entrepreneur in a sustainable housing collective. In this brochure, alumni of the Master's program in Innovation Sciences talk about what their positions involve.



Where innovation starts

Tina Tijmsma

European Project Developer Renewables at Electrabel

"While I was studying I could have chosen from a whole range of courses, all of which would have been a perfect match for my future function. Even before graduating I had already accepted this position with the Belgian energy company Electrabel, which has more than 14,000 employees all over Europe and has global activities in energy and the environment.

I started as management trainee in the Project Development department, where I worked on a wide range of projects such as wind energy, biomass, legislation, communication and customer relation management, as well as drawing up investment plans. My work involved all kinds of aspects: economics, sociology and technology. I'm currently working on wind, biomass projects and making CO₂-free production plants for large-scale industrial customers. People want sustainable energy, but preferably not in their own back yards. I'm always traveling, meeting lots of customers, seeing many different companies and – also important – contributing to managing our environment. I always say I must have the best job in the world!"



Susan van der Heijden

Advisor at RnR Group

"I chose the Innovation Sciences Master's because of the breadth of the program, the policy aspects and the links between technology and society. I found the group work during the program to be very enjoyable and instructive. You don't just learn how to approach projects, but also how to work together as part of a team. That's very useful in what I'm doing now. The same applies to the broad, analytical way you approach your work. The advantage of this program is that you get involved with different disciplines. That's very useful in my present work!

After graduated I started work as an advisor at ARCADIS, in the Strategic Consulting department. Here the focus is on building regulations, and the quality and sustainability of buildings. The department works on things like building approvals, and carries out research for the government into the quality of educational buildings. As far as sustainability is concerned, I've worked on advising on improvement opportunities for buildings and given training on aspects related to the sustainability of buildings.

I'm now a consultant at RnR Group, and have a widely varying range of tasks. At present I'm working for ROC on the setting up and completion of a building location. Together with ROC I decide on the best layout for a new building location and I help in the implementation by supervising tenders and subcontractors. An important part of my work is keeping a close eye on the link between the educational organization and the building-related aspects, to ensure the optimum result for the future users."



Anke Verhagen

Credit Analyst Renewable Energy and Infrastructure Finance (REIF) at Rabobank International

"I already heard a lot of positive things about Innovation Sciences, and after taking part in an orientation day I was convinced that the combination of technology with history, geography, sociology and economics was the right choice for me.

The program gave me a good preparation for my first job as Global Sector Specialist Biofuels & Solar Energy at Rabobank Group. My broadly-based studies meant I was used to taking a wide-ranging and multidisciplinary approach. That was exactly what my first job demanded of me. As Global Sector Specialist Biofuels & Solar Energy I helped colleagues to take commercial decisions. It was my job not just to understand the technology, but also to analyze the economic and policy aspects. And based of this analysis to advise on subsidy systems or interesting new technologies to invest in.

I'm now a credit analyst for Renewable Energy and Infrastructure Finance (REIF), and I work on project financing – for example worldwide sustainable wind and solar projects, and projects about infrastructure in the Netherlands. In the financing of a windenergy project, it's my job to calculate the returns over the lifetime of the project in terms of cash flow, and whether that's enough to repay the financing.

As well as that I help in making new deals, and I monitor our European portfolio. That involves analyzing whether the technology is reliable, if all the contractual aspects are covered, and whether the financing is in order. I really like working in such a big organization as the Rabobank!"



Jeanine Brouns

Regional planner for the Province of Limburg

"After I graduated I first worked as a spatial planning advisor for two consulting firms. After seven years of consulting work I made the switch to the Province of Limburg, where I've now been working for two years. I work as a regional planner, and I'm responsible for the (provincial) assessment of the spatial plans for a number of municipalities in the South Limburg area. The Province of Limburg aims to constantly reduce the number of rules and regulations. This means in practice that more consultation is needed with municipalities and other involved organizations to ensure good spatial planning. That makes the work more difficult, but also more challenging. So I'm involved in many different areas every day.

This study program gave me an excellent basis to find a position that I really liked right from the start, and that I also found really instructive. The work is directly related to the program, and even as a starter I was immediately able to make a contribution. That also meant I learned a lot in my work, and I now have a job that really suits what I want to do. The broadly-based nature of the program means I'm still constantly broadening my knowledge of relevant aspects, so I'm a well qualified discussion partner for the municipalities and the other stakeholders that I'm working together with."



Arthur Vankan

Junior researcher and advisor at Dialogic Innovatie & Interactie

"I work as a junior researcher and advisor at Dialogic Innovatie & Interactie – a small research and consulting firm with a team of around 25 people. I'm involved in a lot of different projects, for example dealing with investment strategies for provincial authorities about broadband, and evaluation of national education programs. A central aspect of all these projects is dealing with data. To investigate projects like these and to develop the right plans you need to have access to good data, which has been well processed and analyzed.

My job involves finding, processing, analyzing and reporting data – all of course in consultation with the client. I find it a very varied function, in which I have a lot of freedom to decide how I'm going to approach projects. The Innovation Sciences program taught me to be analytical and critical, and how to look at topics from a broad point of view. This way of thinking is also very important in my present position. And because I was already involved in all kinds of subjects while I was studying (such as sociology, economics and mathematics), I'm now able to analyze and structure a complex societal problem or a problem in industry."



Wouter Drinkwaard

Lifecycle CO₂ Analyst at Shell

"At secondary school I already had a broad study profile in Nature & Technology with economics and management & organization. I wanted to use these broad interests in my studies, so they had to cover not only technology but also – and especially – how to use it in a practical way. After taking part in a number of orientation days at different universities, it was Innovation Sciences that clearly emerged as my favorite! It included technology, but also had attention for economics, policy and management. After completing my studied I started work as Energy Consultant at Cofely Energy Solutions. I worked there for one-and-a-half years on making larger office building and hospitals energy-efficient. I've now been working for one-and-a-half years as Lifecycle CO₂ analyst at Shell, where I help to calculate the CO₂ emissions in new projects.

In this work I look not only at the project its, but also at the entire chain that the product passes through. I investigate the opportunities to make saving, and at how the CO₂ regulations may develop in the future and how this could influence the project. As well as that, I look at how Shell can build up a portfolio of projects, so the company is ready for the future.

My job is very international. A lot of my colleagues are from other countries, and my work on projects involves people from all over the world. In the future I'd like to work abroad on setting-up sustainable energy projects."



Peter Cozijn

Partner (consultant and joint founder) at Gibbs Quantitative Research & Consulting

"I work as quantitative consultant for a number of clients, and I help companies with large amounts of data about their customers to learn from that data and to make use of the information they gain. I do that by using econometric methods. For example for a large telecom company I relates the results of a customer satisfaction survey to customer behavior, with the aim of increasing customer satisfaction. I also work together with charities to improve their marketing strategy, and to make their financial projections based on changing customer behaviors. What I like about my work is the variety of what I do, and that I can help the organizations based on my own specialized knowledge.

I found the Innovation Sciences program very varies, involving a lot of group work. The multidisciplinary approach was what always appealed to me most. In my present work I still benefit every day from the technical knowledge and the way you're constantly building bridges between technology and the world around you. The key technique I use in my work is econometrics, and it's my role to help clients use that technique optimally for their own marketing."



Jeroen Klijs

Doctoral candidate at Technische Universität München

"I was always interested in two questions: what do we want to find out about, and how can we make sure we use what we discover to the full? I found the answers to my questions about both technology and society in the Innovation Sciences program. The success of an innovation depends on many different factor. A product must not only work well in technical terms, but the costs also have to in line with the benefits. And an innovation must be user-friendly, so people can use it effectively. That means the right match between technology and the human aspects is vital for success.

I'm currently working on my PhD research at Technische Universität München. I spend half my time on my research, and the other half working on 'Ulab', a European project about the University of Technology of the Future. For Ulab I've gathered best practices on aspects including policy and strategy dealing with research and entrepreneurship. I'm now using the results from Ulab in pilot projects to introduce four of these best practices at the Ulab participating universities. We intend to announce the results at the end of this year, and they will be shared between all the European universities."



Yvette Marijnissen

Energy and climate policy advisor at SRE Milieudienst

"I can still remember very well that at secondary school I found it very difficult to choose the right study program, even though I knew exactly what I wanted to do later. I wanted to work on a better environment in the field of energy. And I wanted work on the problems in that area, and on solving them. But I didn't just want to do calculations, complex exercises and writing documents; I wanted to really work together with people and do something practical.

Now, ten years later, I have the job I really wanted! I'm working on my second job, at SRE Milieudienst, a regional environmental service that supports municipalities in projects on the living environment. My own job is as advisor on energy and climate policy.

I notice that the subject of the energy is widely distributed within municipalities. There's one person who's responsible for buildings, and another for the public lighting. During my studies I constantly had to use different disciplines, and the knowledge that I gained there is proving to be very useful in practice! As well as the organizational aspects of energy management, I also work on analysis of energy consumption – in other words, working out the numbers. This is where the knowledge I gained during of technical courses is useful – how can you get the information you need out of a mass of data? Translating all that information into something that's clear, readable and motivating for a policy-maker in a municipality – that's the real challenge as far as I'm concerned. And that's exactly the strength of Innovation Sciences!

