Talent programme
‘Benefit from your talent’

Encouraging students to focus on innovation

MeetUp2: TU/e innovation Space Eindhoven

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Strong focus on innovation

The talent programme ‘Benefit From Your Talent’ brings together SME entrepreneurs and students of academic and vocational secondary and higher education (MBO, HBO and WO) to work on innovative solutions to real-world problems in the business sector and within the policy agendas. Currently, 10 programmes have been set up that serve as shining examples of what we wish to achieve:

- TU/e innovation Space (Eindhoven University of Technology)
- Innoveren doe je samen (‘Innovating Together’, Erasmus University)
- COAST (chemical sector & HAN University of Applied Sciences)
- FinTech (Utrecht University)
- Vertical Farming (InHolland)
- KE@Work (Maastricht University)
- North Sea 2030 (Ministry of Agriculture, Nature and Food Quality)
- Madeby (consultancy firm Diversion)
- YEP Impact (Utrecht University & YEP Programmes)
- Co-challenge (Utrecht Medical Centre)
TU/e innovation Space (Eindhoven University of Technology)

TU/e innovation Space is a community and a facility that supports interdisciplinary, contextual and applied education, design and entrepreneurship in the field of engineering. It is a place where students learn to tackle complex social and industrial challenges, create prototypes and develop new innovations in collaboration with researchers, the business sector and other stakeholders. It also gives any lecturers who wish to be part of educational innovation the freedom to conduct and develop their courses within this context.

Building on the strong scientific collaboration that Eindhoven University of Technology (TU/e) maintains with the business sector, TU/e innovation Space facilitates the development of an ecosystem that will provide the ‘Engineers of the Future’ for the industrial sector. In this way, TU/e innovation Space wishes to help train, develop and showcase engineers that are optimally prepared to satisfy the needs of the job market. Students will be selected based on their intrinsic motivation and passion.

TU/e innovation Space’s facilities enable development of new science-based solutions to tackle a vast range of social challenges. It has a workshop in which students can design and develop innovative prototypes with the aid of technical support and expert supervision. It also offers opportunities to present and exhibit these prototypes as well as to arrange formal and informal gatherings to enable networking with key contacts. As well as the physical environment, TU/e innovation Space also offers a platform that brings highly motivated students, staff and the business sector together within a dynamic collaborative partnership.

The TU/e innovation Space is led by Prof. Isabelle Reymen, Scientific Director of TU/e innovation Space.

More information
www.tue.nl/innovationspace
Innoveren doe je samen (‘Innovating Together’)
The Province of Zuid-Holland is home to a wide variety of important educational institutions in the fields of business, technology and creativity. This Zuid-Holland based talent programme combines the knowledge and expertise of all these institutions, the business sector and the government and crystallises it into innovative solutions to modern day problems. The ultimate goal of this programme is to optimally capitalise on the creative, technical and business strength of Zuid-Holland and to encourage innovation.

This talent programme is a collaboration between Erasmus University, Delft University of Technology, the Willem de Kooning Academy Rotterdam University of Applied Sciences, the business sector and various government bodies, and its goal is to bring together top talent from a wide variety of backgrounds to work together on innovative solutions.

It is structured in the form of an honours programme in which extracurricular credits can be earned. The talent programme lasts for two years and will be completed during the second and third year of Bachelor’s programmes, with student selection taking place during the second half of the first year. The participants will learn entrepreneurship skills both within companies (intrapreneurship) and within the start-up world (entrepreneurship), as well as gaining knowledge and insight via workshops. Practical assignments will also be carried out by transdisciplinary student teams. ‘We are ready to innovate’
The programme is supervised by Ruben Habraken of the Erasmus Centre for Entrepreneurship.

More information
www.ece.nl
COAST Analytical Sciences Talent Programme

The COAST programme – an extracurricular talent programme for Master’s students at the four technical universities (4TU) – was set up for the purposes of the Chemistry Top Sector’s Human Capital Agenda (HCA). The top sectors do everything they can to expand and maintain their talent pool and the goal of the HCA is to attract and develop talented employees.

The extracurricular COAST programme, which was launched in 2011, is based on public-private collaboration and is classified as private education.

The goals of the COAST programme include:

- boosting innovative capacity in order to solve social issues
- reinforcing the compatibility of education with demand from the labour market
- contributing to the Green Education development agenda
- ensuring compatibility with the Higher Education (2015-2025) strategic agenda
- ensuring compatibility with the agenda of the Netherlands Organisation for Scientific Research (NWO)
- engaging all potential talent that can be identified
- adjusting the programme content based on market demand

Participation in the COAST programme means companies can rest assured that the student in question is highly qualified.

The chemistry sector urgently wishes to broaden and deepen the knowledge and skills of its future employees to include an extensive variety of disciplines relevant to the chemistry sector and crossovers with the chemistry sector (e.g. key technology, process technology, etc.). A broader and deeper range of working methods will also be realised (conducting meetings, practising pitches, developing posters, creating animations and participating in challenges).

The programme will be made compatible with different research types (fundamental, applied, practically oriented, etc.) in order to ensure practicability and social relevance.

The programme is extracurricular and organised at the national level.
Master’s students will be selected based on an IQ test (participants must score 130 or above) and a personality development profile that focuses on motivation, persistence and inquisitiveness. Fifteen students will participate in the programme each year. The students will organise the assignment themselves and will receive a bonus for the work performed. Upon completion of the programme, the students will continue working on their Master’s programme at the university or opt for a doctoral research programme (PhD). Upon graduation, Master’s students will work for a company. The programme will be conducted on Saturdays (8-9 days) in combination with a summer course (1 week), involving a total time investment of approximately 600-750 hours per student. The programme is run by Oscar van den Brink of Akzo-Nobel.

More information
www.ti-coast.com/human-capital

FinTech
FinTech, a contraction of the words ‘financial’ and ‘technology’, involves all innovative financial products and services that enable you to handle money more quickly and easily. FinTech businesses are increasingly focusing directly on their customers/users and pitching themselves as ICT companies with programmers who are capable of analysing and combining data. Other companies are concentrating more on services or infrastructure. Currently, B2B FinTech service providers are primarily focusing on technology, although modern entrepreneurs need financial advisors who can give them greater understanding of new financing methods. For this purpose, a FinTech talent programme has been set up.

The FinTech talent programme is based on the following principles:
• Within the Top Sector Policy, we want to develop a programme that enables us to collectively tackle social challenges and capitalise on economic opportunities.
• Responsibility for the process is shared between education and the business sector.
It must be an honours programme at the Master's level involving a mix of specialisations such as computer science, economics, finance (including alternative finance and innovative finance) and entrepreneurship. The programme is scheduled to begin in 2019 and will be supervised by Prof. Erik Stam.

More information
www.utrechtuniversity.nl/schoolofeconomics

**Vertical Farming**

In February 2018, the regional collaboration Greenport West-Holland set up the Innovation Pact together with regional parties, the objective of which is to encourage and facilitate disruptive breakthroughs in order to realise the Feeding & Greening Megacities strategy. Many of these breakthroughs include crossovers. University programmes lay firm foundations for its students, although they are not always sufficiently capable of anticipating major developments within professional practice. Therefore, an extracurricular programme designed in collaboration with the business sector can give talented students the extra challenge they need as well as providing an excellent springboard to a successful career. In close collaboration with businesses and the WO sector, talent programmes encourage, train and develop the innovative capacities of highly ambitious MBO and HBO students who are motivated to innovate together with other students, lecturers and professors.

One particularly promising development is Vertical Farming, a new multi-layer high-tech cultivation technique that brings together many different disciplines and generates powerful new insights. Disciplines involved in Vertical Farming include life sciences, biotechnology, cultivation systems, big data & blockchain, new business models & chain arrangements, and alternative funding for open innovation ecosystems. Many businesses working on this new development still have many questions and expect graduates to be up to speed on this disruptive innovation.

Together with its regional educational partners, Inholland University of Applied Sciences is seeking to create an extracurricular programme for Vertical Farming that supports talent development and optimises graduates’
compatibility with the needs of the labour market. The programme consists of a winter course and an honours programme. Another objective of the programme is to revamp and modernise existing study programmes. The learning projects that the students will conduct are based firmly on the innovative needs of the company in question. For this purpose, the knowledge work placement method was developed, within which students and lecturers work on business problems based on a long-term knowledge agenda. The purpose of knowledge work placements is to implement innovation into the educational process. The talent programme was developed as a public-private collaboration within the Greenport West-Holland Innovation Pact and the programme will commence with the issue of Vertical Farming. For this purpose, a ‘community of practice’ will be set up by the participating partners: businesses, municipalities, research institutes, the education sector, the Ministry of Economic Affairs and Climate Policy and the Ministry of Agriculture, Nature and Food Quality. The programme is supervised by Woody Maijers, a professor at InHolland University of Applied Sciences.

More information
www.groenpact.nl

KE@Work
KE@Work is part of the honours programme organised by the Department of Data Science and Knowledge Engineering (DKE) at Maastricht University. During the two years of the KE@Work programme, the best and brightest Bachelor Data Science and Knowledge Engineering students are given the opportunity to spend half of their time on their study programme working on challenging academic assignments within regional businesses and organisations under the guidance of a supervisor from the university.

Participants in the programme will take on an additional study load of 33 ECTS (European Credit Transfer System): 28 ECTS for the assignments within the businesses and 5 ECTS for participation in a university honours+ programme. The main educational concept featured in the programme is Project Centred Learning (PCL). While the other students are working on group projects, the KE@Work students will carry out tailor-made individual projects.
In addition, these students’ Bachelor’s theses will address a subject that is relevant to the business for which the student is carrying out the KE@Work project. The students and businesses participating in the KE@Work programme will select each other based on a matching procedure involving a series of interviews in order to guarantee optimal compatibility of both parties. All project assignments will be evaluated by the Examinations Board based on a number of quality criteria and an academic supervisor will be appointed whose expertise is suited to the subject matter. The first cohort of students started the programme in 2014. Businesses collaborating with the project include Vodafone, Medtronic, PNAGroup, Mediaan, Compo and Mercedes Benz, among others. A total of 57 contracts have been signed with 23 businesses. The programme is supervised by Prof. Frank Thuijsman.

More information
www.maastrichtuniversity.nl/datascienceandknowledgeengineering

North Sea 2030: an integrated strategy (programme in development)
The Ministries of Agriculture, Nature and Food Quality, Economic Affairs & Climate Policy and Infrastructure & Water Management are working on the North Sea Strategy 2030. The strategy, which consists of a strategic agenda and an implementation programme, will soon serve as a guide for future activities and processes as well as providing input for the National Environmental Vision (NOVI).

This agenda must provide perspective with regard to three strategic issues: healthy and sustainable use of the North Sea; striking a balance between energy, nature, food and other uses; and facilitating an innovative and competitive blue economy.

The direct reason for the review of this policy is the enormous increase in the number of offshore wind farms. The space that these wind farms take up and their possible/actual effect on various areas and aspects of the North Sea mean the government must carefully consider how to deal with these developments in order to ensure quality and spatial management of the North Sea.
It is a huge challenge: approximately 1 gigawatt of wind power is generated at sea, an amount that must be increased to 11 gigawatts or more by 2030 if we wish to achieve our climate objectives. Furthermore, according to the PBL (Netherlands Environmental Assessment Agency), it will have to be increased to 50-60 gigawatts by 2050. The available space will accommodate a total of approximately 10 gigawatts, after which only multi-purpose use and smart innovation can further increase the amount of power generated.

For this reason, together with entrepreneurs, ministries and knowledge institutions, we must explore possibilities and seek opportunities for multifunctional use of the North Sea to enable the space to be used for several different purposes. What uses can go together and what synergy will this create? If certain functions are incompatible with each other, how do you arrange the zones in which each activity is performed? By exploring this issue via a joint fact finding process, the Agenda 2030 can also give us insight into the situation in 2050. This will involve aspects such as frameworks for the construction of new wind farms, creating new islands in the sea for energy storage or maintenance crews and alternative uses of the sea, e.g. combining wind farms with seaweed and shellfish farms.

The quite intensive interaction between all of the different stakeholders – such as energy companies, wildlife protection organisations and fishing companies – is a vital factor in achieving this strategy. We also pay a great deal of attention to new opportunities in the fields of economics and nature conservation.

The integrated strategy within this programme is in line with the crossover approach and themes in the talent programmes (FoodTech, EnergyTech). The parties involved include government bodies, businesses, the top sectors, social organisations and knowledge institutes.

The programme is led by North Sea 2030 project manager Ton IJlstra.

Made By 020
Within today’s dynamic labour market, skills such as entrepreneurship, collaboration, networking, creativity, communication, leadership and critical thinking are becoming increasingly vital and higher education institutes are doing everything they can to anticipate these new developments. For this reason, they offer a
wealth of opportunities for ambitious students to develop their professional profile and skills as a supplement to their regular study programme. Via special guest lecturers and further training in which students are taught by leading figures in the business sector, participants can learn important career and life lessons. However, facilities such as these are largely unavailable for ambitious MBO students despite the fact that the labour market is crying out for skilled practical professionals. When it comes to getting the most out of their ambitions and talents, MBO students are mainly left to their own devices. As a result, they don’t know just how vital these skills are and create very few opportunities for themselves to develop and apply these skills in practice.

During the 12-week extracurricular programme Made By 020, 100 MBO students will develop cutting-edge solutions to challenges faced by society in collaboration with the business sector.

Groups of 8-12 students of different study programmes, levels and ages will work together on challenges formulated by businesses, addressing issues such as electric transport, diversity in the workplace and security and social cohesion in the community. These challenges will be conducted together with peer coaches: role models of similar backgrounds and ages to the group members who will provide an inspirational example of what the students are capable of. The students will also work on their own development via a wide range of workshops, master classes and networking opportunities. Businesses are queueing up to be a part of this programme and big hitters such as Booking.com, Ziggo Dome, Tata Steel, ABN Amro, IBM and Microsoft are already involved. Made By 020 works together with the following Regional Training Centres (ROCs): TOP Amsterdam, Mediacollege Amsterdam, ROC Amsterdam and the carpentry college HMC Amsterdam.

The goal of this programme is to initiate a movement that creates role models, optimally prepares MBO students for the ever-changing labour market and brings them into contact with businesses who are in urgent need of innovative young professionals.

The programme is run by Diversion’s project manager Maisha van Pinxteren. Diversion is looking to expand the programme into different cities and regions in the near future.

More information
www.madeby020.nl
YEP Impact

YEP Programmes and Utrecht University’s Department of International Development Studies (IDS) have set up a new initiative. The YEP Impact programme brings together participating Master’s students and organisations in order to conduct research that is optimally relevant to professional practice. By setting up YEP Impact, Utrecht University (via IDS) and YEP Programmes are striving to boost the compatibility of study programmes with the practice of international collaboration. The programme helps students to gain practical experience with international organisations in a wide range of developing nations in Africa, Asia and South America as well as enabling organisations to identify young talent at as early a stage as possible. Furthermore, the research conducted by the students gives organisations greater insight into their social impact.

All students taking the Master’s programme in International Development Studies at Utrecht University will carry out their field research in Africa, Asia or Latin America. YEP Impact matches teams of 2-3 of these students with participating YEP organisations in the continent in question. During their fieldwork period, the students will examine a particular subject, intervention or investment that is relevant to the organisation, with particular attention paid to its social impact at the local level. These impact studies can examine subjects that the YEP programme already focuses on, such as:

- efficient water management (especially in the agriculture sector)
- improved river basin management and safe deltas
- access to clean drinking water and sanitation facilities
- combating hunger and malnutrition
- promoting inclusive and sustainable growth in the agrarian sector
- realising ecologically sustainable food systems

The students’ input can give insight into the organisation’s social impact and/or specific activities. Furthermore, students often provide fresh perspectives to issues and use innovative methods and crossovers when gathering relevant data.

The participating organisation will ‘host’ a team of 2-4 students in Africa, Asia or Latin America and specify a relevant subject that the impact study will focus on. In consultation with the organisation and the academic
supervisor, the students will formulate and structure the study and execute it over the course of a 6-12 week fieldwork period (duration depends on the curriculum). Upon completion of the field research, the students will provide a brief report to the host organisation via a written report and infographics, often accompanied by photos and video footage. The results can be presented as a joint project.

The students will receive guidance and supervision from Utrecht University and no costs will be involved for the participating organisations. The students will be expected to spend the majority of their time on field research, although the ideal situation is for the participating organisation to offer students a flexible workstation between the field visits as well as initial input, information and networks to assist the students in their research. The current crop of 'young experts' could also be enlisted to answer questions that the students may have.

Once a year, YEP and Utrecht University will create a list of all organisations that are interested in impact studies by students.
The programme is supervised by Prof. Annelies Zoomers, professor of International Development Studies (IDS) at Utrecht University and Marjon Reiziger, programme manager at YEP Programmes.

More information
www.uu.nl or www.yepprogrammes.com

Co-challenge programme
Co-create: Life’s Professional Challenges

Twice a year, together with the Municipality of Utrecht, Utrecht University’s Graduate School of Life Sciences and Career Services offers an elective course in which students can work on current and highly relevant social problems as part of a small interdisciplinary team. The client organisation (the Municipality of Utrecht) challenges students to devise realistic and highly detailed solutions to a diverse range of issues that can boost
the quality of life for residents of Utrecht. This two-week full-time course is conducted via the Graduate School and focuses on developing professional skills to ensure students are able to apply the knowledge obtained during their studies within a practical environment. This is done by focusing on talent development in collaboration with Career Services via inspiration sessions, workshops and both group and individual coaching. Students of all faculties at the university are welcome to participate, which gives the course an international and interdisciplinary dimension. Furthermore, students will individually monitor their own personal development and gain insight into its compatibility with the professional skills required for their future career. Under the supervision of experts from various fields, this programme will incorporate aspects such as policy, professional practice, research and entrepreneurship, resulting in concrete concepts that will be presented to a panel of experts at the end of the course. The course and its objectives have been received with a great deal of enthusiasm: evaluations show that this creative challenge takes students out of their comfort zone, broadens their horizons and is a welcome addition to the curriculum offered by Utrecht University.

General information on the programme:
- It is a UU-wide elective taught in English and carries 3 ECTS.
- It is open to all third-year Bachelor’s students, Master’s students and PhD students at Utrecht University, as well as recent graduates.
- It is a full-time programme that lasts two weeks and is conducted twice a year.

The programme is supervised by Prof. Harold van Rijen, professor of Innovation in Biomedical Sciences at UMC Utrecht.

More information
www.co-challenge.nl or www.umcutrecht.nl