# Academic Guide Exchange Health, Nutrition and Sport 2023-2024

**Faculty of Health, Nutrition and Sport** 

International Offer for Exchange Students
Autumn and Spring
Semester

2023-2024





# Academic Guide Exchange Health, Nutrition and Sport 2023-2024

### **Faculty of Health, Nutrition and Sport**

Author Rosalie Schimmel – van Helden Revised by Amal Aakif Juraj Trouw

#### Date

30 juni 2023

**Version** 

5.0

### **Disclaimer**

The information contained in this guide is, to the best of our knowledge, true and accurate at the time of publication and is solely for information purposes. Changing circumstances may cause alterations in its outline at any time. The programme of The Hague University of Applied Sciences accepts no liability for any loss or damage howsoever arising as a result of use or reliance on this guide or on the information thereon or in respect of information accessed via any links from the Web pages.

### Content

General Information THUAS	4
The Faculty of Health, Nutrition and Sport	5
Practical Information	
Two Campuses _ocations	
Year calendar Practical Information and how to Apply	6
Contact 6	C
Education	
Full Degree Programmesnternational Exchange Offer	
Course Descriptions Exchange	
•	
Global Issues in Football Management	10
The Sociology and Psychology of Food, Fitness and Health	12
Volunteer Management	15
nternational Sport Law & The Role of the Sport Agent	17
Sport and Sustainable Development	19
Esports, Gaming & Gamification	21
Science & Technology in (adaptive) Sports	23
Design Thinking: Globesity and Metabolic Syndrome-Not offered in 23-24	25
Design thinking: Child Nutrition in Sickness and Health	28
Nutrition, Sports and Exercise	31
Research opportunities in Department of Nutrition and Dietetics – 15 ECTS	
Research at the SenselabResearch at the Healthpoint	
Digital tools in behaviour change	

#### **General Information THUAS**

The Hague University of Applied Sciences (THUAS) is one of the most diverse universities in the Netherlands with students and staff representing 146 nationalities. Around 24,000 students join our four campuses in The Hague, Delft, Sport Campus Zuiderpark and Zoetermeer every year. We welcome international exchange students to this innovative and international environment for a semester or two. THUAS is located in the city of The Hague, which is the Dutch seat of government and home to many major international legal, security and peace institutions, which makes The Hague one of the major cities hosting the United Nations.

Consequently, THUAS has the ambition to be the most international institution of its kind in the Netherlands. In order to earn this title, THUAS has developed a strong strategic plan on internationalisation in which one of the key goals is "To prepare students with the necessary professional, personal and academic competencies to function successfully in the global community dealing with the evolving issues of the 21st century world." When we talk about success, we don't mean just in student employability, but also in the broader sense i.e., the impact internationalisation can have on the quality of a student's experience:

- Academically, by fostering an international and intercultural dimension to our teaching, research and services, THUAS will ultimately improve our academic standards and quality and therefore students' academic experience.
- Socially, as an educational institution we play a key role in how the local and wider community develops. By giving all who come into contact with us an international playground, THUAS can enhance students' understanding of and competence to deal with modern 21st century society that knows no borders.
- Economically, the labour market demands workers who have an international mind-set, who see neither barriers to the opportunities that they have, nor limitations to the growth they can muster. Internationalisation can connect our students and institution to the global marketplace of ideas, discovery and concepts.
- Politically, to bridge gaps students need to be aware of how differences emerge and what rules govern the playing field. Internationalisation can help us shed light and develop knowledge areas to foster better co-operation.

In achieving this strategic goal, THUAS strives to produce graduates who are "Global Citizens", meaning, students who are interculturally competent, demonstrate the knowledge, skills and attitudes needed to thrive in a world characterised by global mobility and social, cultural, economic, political and environmental interconnectivity. Global citizenship reflects an awareness and appreciation of diverse people, cultures and environments throughout the world and the ability to manage this interconnectedness harmoniously and productively.

### The Faculty of Health, Nutrition and Sport

Specifically, within the Faculty of Health, Nutrition & Sport, we aim to connect education, research and society on a local, national and international level, offering our students a dynamic and meaningful learning environment, contributing to the development and innovation of health, nutrition and sports. Our faculty combines seven programmes, i.e., six Dutch-taught programme and one international programme. In addition to this we offer various English-taught minor programmes and also international internships. All our programmes focus on educating a new generation of health, nutrition and sport professionals, approaching health from different angles and cooperating to work towards the health (related) solutions of the future.

Currently, we are redeveloping the six Dutch-taught degree bachelor programmes we offer, by adding more internationally orientated courses to each programme. We are integrating Virtual Exchange - Collaborative Online International Learning (COIL) assignments into each programme and investing in international students and staff. In doing so, we aim to ensure all of our students receive an international experience and obtain the required international competences to become global citizens. In addition, we understand health and sports is multifaceted issue. Hence, our faculty is the place to be for any student who would like to contribute to the all-round quality of life of their future patients, students and/or clients.







#### **Practical Information**

#### **Two Campuses**

The Faculty of Health, Nutrition and Sport is one of the largest faculties within The Hague University of Applied Sciences and is spread across two campuses.



Both the International and the Dutch Sport Management departments and the Teacher Education in Physical Education department are located at the brand-new Sport Campus Zuiderpark which was opened in the summer of 2017. The Sport Campus offers top-class facilities for sports, education and movement.

The other four departments, Nutrition and Dietetics, Nursing, Skin Therapy and Kinetic Technology, are part of the buzz of the Main Campus in the middle of The Hague's city centre.



#### Locations

Main Campus
Johanna van Westerdijkplein 75
2501 EH The Hague
The Netherlands

**Sport Campus Zuiderpark**Mr. P. Droogleever Fortuijnweg 22
2533 SR The Hague
The Netherlands

#### Year calendar

The first semester runs from late August 2023 until late January/early February 2024. The second semester runs from early February 2024 until the end of June 2024. Lessons start in the first week and will take place from Monday to Friday, from 8.30hrs until 17.00hrs. Depending on the subject choices, exchange students will receive a personal timetable.

#### Semester 1

Term 1: Monday 28 August 2023 – Friday 10 November 2023 Term 2: Monday 13 November 2023 – Friday 2 February 2024

#### Semester 2

Term 3: Monday 5 February 2024 – Friday 19 April 2024 Term 4: Monday 22 April 2024 – Friday 28 June 2024

#### **Practical Information and how to Apply**

For practical information on how to apply and also on accommodation please see THUAS' website: <a href="https://www.thehagueuniversity.com/programmes/other-courses/exchange-programmes/practical-information">https://www.thehagueuniversity.com/programmes/other-courses/exchange-programmes/practical-information</a>

#### Contact

If you would like more information on registration for our Exchange programme, please contact: <a href="mailto:exchange@hhs.nl">exchange@hhs.nl</a> or for academic information please contact one of the International Programme Coordinators, which you can find on the next pages (p7-8).

### **Education**

The Faculty of Health, Nutrition and Sports offers six Dutch-taught bachelor programmes, one English-taught bachelor's degree in International Sport Management and various English-taught minors all educating a new generation of global health, nutrition and sports professionals.

#### **Full Degree Programmes**

Name of programme	Language	European Credits (ECTS)
Bachelor of Arts (B.A.) in Sport Studies - International Sport Management 3-year International programme Sport Management deals with the organisational side of sport. The ISPM (International Sport Management) programme is the first step on your way towards professional success in the global sport community. During your ISPM studies you will become an established leader, participate within international sport networks and actively engage in intercultural initiatives. International Coordinator: Juraj Trouw Email: j.trouw@hhs.nl	English	180
Bachelor of Science (B.Sc.) in Nutrition and Dietetics 4-year programme The department of Nutrition and Dietetics at The Hague University of Applied Sciences was established in 1943. It is the largest department of its kind in the Netherlands and currently enrols 1200 undergraduate students. Students study a range of topics related to nutrition and dietetics, ranging from giving dietary advice in a hospital setting and designing interventions to prevent obesity for primary schools to developing new food products for the food industry. There is a clear focus on research, entrepreneurship and interdisciplinary cooperation throughout the program. The third year of this programme is taught entirely in English. International Coordinator: Gwendell Foendoe Aubèl Email: g.a.j.foendoeaubel@hhs.nl	Dutch	240
Bachelor of Science (B.Sc.) in Human Kinetic Technology 4-year programme Students focus on health care and technology, innovation and research. Throughout the curriculum, students learn to develop technological solutions meant to improve the mobility and kinetics of both healthy and sick people. International Coordinator: Rienk van der Slikke Email: r.m.a.vanderslikke@hhs.nl	Dutch	240
Bachelor of Science (B.Sc.) in Nursing (Registered Nurse) 4-year programme Students will be able to work as a general nurse in hospitals, psychiatric nurse, as a family- home nurse as well as a nurse at a nursing home and in the community. Besides extensive practical training in different settings, graduates focus on the research -, networking - and organizing skills that are essential for a flexible and proactive nurse in a changing, dynamic health system that places the patient and his or her network at its core International Coordinator: Sander Kerstens Email: S.Kerstens@hhs.nl	Dutch	240

Bachelor of Arts (B.A.) in Sport Studies 4-year programme Students study a range of subjects related to Sport Management - the commercial sports sector; sports and movement environments at the local and municipal level; organised sports (at both the national and club level) – and will be equipped with necessary (event) management skills. Contact: TBA Email:	Dutch	240
Bachelor of Education (B.Ed.) in Physical Education (Teacher Training) 4-year programme  Physical health is an integral component of an overall education. The Hague's Physical Education department offers a 4-year bachelor programme which trains future teachers to be able give physical Education lessons at all educational levels, from primary to higher education. Currently the department enrols 1000 PE students all being trained to help the next generation of students improve their health and learning abilities through physical fitness. International Coordinator: Jonas Leenhouts  Email: J.J.Leenhouts@hhs.nl	Dutch	240
Bachelor of Science (B.Sc.) in Skin Therapy 4-year programme Students study a range of topics related from skin care to dermatology. Besides training in skin therapeutic practice, students focus on applied research, prevention, education and interdisciplinary cooperation with other health professionals. International Coordinator: Gerbrich Hoeve Email: g.j.hoeve@hhs.nl	Dutch	240

#### **International Exchange Offer**

The Faculty of Health, Nutrition and Sports welcomes incoming students to study at our Faculty mainly during the first semester (Fall/Autumn 2022) to take part in our minors offered by the Faculty of Health, Nutrition and Sport. The Faculty also offers research programmes as well as internship opportunities year round.

On the following pages you can find the list of English-Taught courses that exchange students can choose to study. If students wish to study in The Hague for a full semester (30ECTS), they must choose one 15ECTS course from each term.

#### Semester 1

Term 1: Monday 28 August 2023 – Friday 10 November 2023 Term 2: Monday 13 November 2023 – Friday 2 February 2024

#### Semester 2

Term 3: Monday 5 February 2024 – Friday 19 April 2024 Term 4: Monday 22 April 2024 – Friday 28 June 2024

### **Course Descriptions Exchange**

If you choose to take part in the exchange and join the Faculty of Nutrition, Health and Sport, then you will be able to choose a course from September to November which lasts 10 weeks. It is then possible to take part in another course for the time of November to January, which also lasts 10 weeks. Some courses, such as "Designing for Health: Metabolic Syndrome 1 & 2", runs for the whole semester throughout September to January and is worth 30 ECTS. More information on each of the courses offered can be found below.

Course title	ECTS	Semester 1 Term 1	Semester 1 Term 2	Semester 2 Term 3	Semester 2 Term 4
Global Issues in Football Management	15	х			
The Sociology & Psychology of Food, Fitness and Health	15	x			
Volunteer Management	15	х			
International Sport Law and the Role of the Sport Agent	15		х		
Sports and Sustainable Development	15		Х		
Esports, Gaming & Gamification	15		х		
Science & Technology in (adaptive) Sports	15	х	(x)		
Design Thinking: Globesity and Metabolic Syndrome	<del>30</del>	*	*		
Design thinking: Child Nutrition in Disease and Health	30			х	х
Nutrition, Sports and Exercise	30			Х	x

## **Global Issues in Football Management**

Code	GVS-HMVT23-FM		
Title	Global Issues in Football Management		
Туре	Minor (10 weeks)		
Year of Study	Undergraduate, year 2		
Semester when component is delivered	Semester 1, term 1		
Number of ECTS credits allowed	15 ECTS		
Department	International Sport Management		
Learning outcomes	At the end of the course the student is able to:  Demonstrate an understanding of the changing football industry landscape through debate, analysis and application of the following issues:  Geopolitical influences in tackling societal in-equalities  The relationship between governance and corruption  Internationalization of leagues and tournaments (compare and contrast national and international league & tournament formats)  Evaluate relevant developments in football  Discuss the revenues and costs of professional football teams so as to evaluate football clubs financial stability  Develop an understanding of the roles within an international football organization and how they relate to the operations and strategic direction, discussing issues related to:  Leadership theory and managing organizational change  Strategic operations and administration  Marketing, communications, data insights and sponsorship activation  Fan engagement/experience  Stadium management  Evaluate appropriate sources to come to an evidence based conclusion		
N. Cl. d	Effectively communicate evidence based content to a specific audience		
Name of lecturers	Marc Brady m.brady@hhs.nl		
Mode of delivery	Blended Learning (online and face-to-face)		
Prerequisites and co-requisites (if applicable)	Have followed at least one year of higher education at bachelor level or more. Have a b2 level of English or more.		
Course content	The football industry landscape has changed significantly in recent decades and has progressed from being an amateur sport, to a professional sport and now increasingly a commercial sport. Globalization has impacted significantly on the reach of football with Deloitte (2022) suggesting that the 'big five' football leagues will generate a record level of € 18.6 billion aggregate revenue during the 2022/23 season – there is no doubt that football is big business. However, with significant global attraction comes responsibility and the recent FIFA Qatar World Cup 2022 has divided the opinion on whether football should be seen as simply a world sport or a political body (using its power to influence societal change).		

	During the minor we will define, debate and analyse the internal and external environment of the football industry to broaden our understanding of the possible challenges and opportunities in the sector. The influence and power football has at a local, national and global level will be evaluated and we will discuss the history, present-day and future issues we are presented with through our research and reflective observations. We will also apply our knowledge and understanding of business functions (such as marketing, sponsorship activations, leadership, finances, etc.) to the football sector in order to suggest how football can influence positive change.  The programme combines both theoretical and practical content and includes sessions with industry leaders, guest lecturers and study trips within The Netherlands. The topics covered during this course include:
	<ul> <li>Geo-politics</li> <li>Globalisation</li> <li>Equality</li> <li>Governance</li> <li>Finances and economics</li> <li>Fan engagement</li> <li>Data insights</li> </ul>
	Operations and administration
Recommended or required reading and other learning resources/tools	
Planned learning	This is a 15 credit course (400 hours of work). The content of the minor is
activities and	delivered over 10 weeks which equates to 40 hours of study per week, 8 hours
teaching methods	per day. Content will include, interactive online lectures, seminars, feedback sessions, and guest lectures. It is important that you understand this is a full time 9.00-17.00 Monday-Friday course. The minor consists of eight different topics. The days and times that content is delivered may vary week by week so please check the topic outline in the syllabus.
Assessment	Group Presentation (30%)
methods and	2. Individual Portfolio (70%)
criteria	
	Minimum mark to be obtained is 5.5 for each point of assessment, isrequired to pass this subject.
Language of instruction	English

## The Sociology and Psychology of Food, Fitness and Health

Code	GVS-HMVT23-FOOD1
Title	The Sociology and Psychology of Food, Fitness and Health
Туре	Minor (10 weeks)
Year of Study	Undergraduate
Semester when component is delivered	Semester 1, Term 1
Number of ECTS credits allowed	15 ECTS
Department	Nutrition and Dietetics
Learning outcomes	This minor puts a focus on developing the skills and competencies to understand, predict behaviour, to communicate, collaborate successfully (across cultures) and change your own and other's behaviour. By following this minor, you will learn more about yourself, your own culture, and other cultures. You will have a better understanding of how and why people behave and respond in different situations. These skills and competencies are essential for not only your own personal development, but also your professional success.
Name of lecturers	S. Hackett, P. Bulsing, P.Treanor sehackett@hhs.nl
Mode of delivery	Blended Learning
Prerequisites and co-requisites (if applicable)	<ul> <li>Demonstrates ability to discuss and formulate new ideas based on new skills developed, theories and research.</li> <li>Awareness of and respect for the norms, values and assets of people from different nationalities or cultural backgrounds</li> <li>The attitude (open, respectful, curious), skills (observing, listening, analysing and reflecting) and knowledge (of own and other cultures) to interact and communicate effectively and show proper behaviour in culturally or linguistically diverse contexts.</li> <li>Knowledge of and concern for global issues; and</li> <li>A global and an international perspective in their discipline.</li> <li>Have followed at least one year of higher education at bachelor level or more.</li> <li>Have a b2 level of English or more.</li> </ul>
Course content	Are you fascinated by human behaviour and do you want to understand your own and other's behaviour in relation to Food & Sports? If so this minor is for you! In order to understand why people, make certain decisions and behave in certain ways when it comes to food, sports or physical activity we first need to study the underpinnings of social life, social change, and the causes and consequences of human behaviour.  During this minor you will follow several courses:  1. Sociology, which is the study of the development, structure, and functioning of society. During this course we will explore how societies function and influence individuals (and vice versa how individuals influence society) when it comes to food, fitness and health. We will also look at social problems, such as inequality, global warming and sustainability. You will use sociological perspectives to analyse and understand human behaviour and to explore how and why individuals behave in certain ways, produce and consume within society and how these vary across cultures.

- 2. In the Behavioural Psychology course a focus will be put on advertising and consumer psychology, and you will discover how the advertising industry, which is constantly evolving, is one of the biggest socialisation agents when it comes to influencing human behaviour. For example, in western society, every day we are bombarded with (sublime) messages, through advertising, product placement and social media about food, sports and health. Food is among one of the most heavily advertised sectors and influences our behaviour to a great extent. However, the global climate crisis has forced marketeers, health, environmental and governmental bodies to rethink and change their strategies to appeal and change human behaviour. During this course we will explore these developments, challenges, and strategies
- 3. In addition to these two courses, you will follow the Culture course in which you will be introduced to intercultural communication concepts and practices. Considering the class will consist of Dutch and international students, students will be encouraged to actively learn more about each other's cultures, approaches and attitudes to different topics and tasks. Using this knowledge students will learn how to collaborate more effectively with one another (in person and online!) to solve problems.
- 4. Finally, you will participate in a Collaborative Project. In this project course you will bring together the skills and knowledge you have acquired in all courses and apply them. You will be given an assignment to complete which will relate to one (or all) of the minor themes i.e., food, sports and culture. Through this experience students will develop their cross-cultural communication skills and will discuss the various different perspectives to Food and Sports around the world.

In addition to these four subjects, students will also receive guest lectures from experts on the field of Food and Sports and participate in optional social activities such as cooking breakfast/lunch from around the world in the THAUS kitchens and a Physical Activity Day in which we play games and do physical activity/sports at the state-of-the-art Zuiderpark Sports Campus.

This minor puts a focus on developing the skills and competencies to understand, predict behaviour, to communicate, collaborate successfully (across cultures) and change your own and other's behaviour. By following this minor, you will learn more about yourself, your own culture, and other cultures. You will have a better understanding of how and why people behave and respond in different situations. These skills and competencies are essential for not only your own personal development, but also your professional success. In addition to this, you will make new (international) friends and have a lot of fun!

In 2021, this minor was nominated for an internal university award: <a href="https://youtu.be/OOmnfp5R5xQ">https://youtu.be/OOmnfp5R5xQ</a>

## Recommended or required reading and other learning resources/tools

**Laptop:** It is mandatory that students be in possession of a laptop that has built in camera and microphone as we will be working online with Microsoft Teams, Zoom. Blackboard Collaborative.

## Planned learning activities and teaching methods

- Tutorials and workshops
- Lectures and guest lectures
- Project group meetings (guided and unguided)
- · Practice (unguided)
- Cooking and physical activity sessions (in the THUAS kitchens and Zuiderpark campus)

Assessment methods and criteria	Written Exam: Students are examined by means of a Multiple Choice and open questions exam on various cultural, sociological and social and advertising psychology theories and concept Collaborative Project: this project involves individual and group tasks.  Minimum passing rate for all assessment methods is 5.5
Language of instruction	English

### **Volunteer Management**

Code	GVS-HMVT22-VOL
Title	Volunteer Management
Туре	Minor (10 weeks)
Year of Study	Undergraduate
Semester when component is delivered	Semester 1, Term 1
Number of ECTS credits allowed	15 ECTS
Department	International Sport Management
Learning outcomes	By the end of this minor, students will:  • have an in-depth understanding of the reasons organisations need volunteers  • be able to discuss different models of volunteer use  • demonstrate an ability to create a volunteer strategy congruent with wider organisational/sector strategies  • be familiar with, and able to apply, volunteer management practices  • conduct research to gain feedback from volunteers' experiences  • analyse likely causes of challenges in volunteer behavior and create solution-driven action plans
Name of lecturers	Dr. Gina Holmes g.l.holmes@hhs.nl
Mode of delivery	Blended Learning, both online and F2F sessions
Prerequisites and co-requisites (if applicable)	Successful completion of first year of study; adequate level of English to participate fully in the class.
Course content	Picture a volunteer. What do you see?  • A nurse, syringe in hand, administering corona-vaccines?  • A casually clothed, clipboard-holding student?  • 170,00 'ordinary people' who can give CPR in their community?  • A sports coach surrounded by little kids?  • A worship leader in church?
	Volunteers are found in every aspect of life and work. We often focus on the role of the sport-volunteer, but healthcare, community life, education, and conservation are equally as reliant on volunteers. Nearly 50% of the Dutch population takes part in voluntary activities at least once per year (cbs.nl. 2019).  This minor introduces you to this fascinating world. We will look at how and why
	organisations utilise volunteers, how they manage them and how they ensure that the volunteers are satisfied, productive and useful. Delivered in a mix of face-to-face, online and self-managed formats, we will look at case studies of real organisations, visit some voluntary organisations and hear from guest speakers. Whether you are hoping to work in the sport industry or something entirely different, there will come times when you need to motivate and manage people in ways that cannot be driven by money. This minor will draw on your interests, experience and knowledge to help you gain a new perspective on how and why organisations act as they do in terms of strategy and practice. By the end of the Volunteer Management minor, you will have developed credibility as

	a volunteer manager and have gained key skills to help you find satisfying work
	after your programme.
Recommended or required reading and other learning resources/tools	<ul> <li>Hoye, R., Cuskelly, G., Auld, C., Kappelides, P., &amp; Misener, K. (2019). Sport Volunteering (1st ed.). Routledge. https://doi.org/10.4324/9780429292323</li> <li>Robinson, L., &amp; Palmer, D. (Eds.). (2010). Managing Voluntary Sport Organizations (1st ed.). Routledge. https://doi.org/10.4324/9780203881354</li> <li>Anheier, H.K. (2014). Nonprofit Organizations: Theory, Management, Policy (2nd ed.). Routledge. https://doi.org/10.4324/9781315851044</li> <li>Rochester, C., Ellis Paine, A., &amp; Howlett, S. (2012) Volunteering and society in the 21st century. London: Palgrave Macmillan https://doi.org/10.1057/9780230279438</li> <li>Hallman, K., &amp; Fairley, S. (ed) (2018) Sports volunteers around the globe: meaning and understanding of volunteering and its societal impact, Springer Nature, Cham, Switzerland, pp.7-20, https://doi: 10.1007/978-3-030-02354-6</li> <li>And others</li> </ul>
Planned learning activities and teaching methods	Interactive classroom lectures, online sessions, feedback sessions, guest lectures, excursions
Assessment methods and criteria	There will be two assignments, as detailed below.  Each assignment carries 50% of the total mark, and each must achieve a minimum mark of 5,5. Resit is possible and will take the form of a further individual assignment.  Individual report: develop a volunteer strategy for a named organisation. This will take into account the wider organisational strategy, sectoral and environmental issues and cultural drivers for change within the organisation.  Individual presentation (recorded, voice over slides + face-to-camera)
Language of instruction	evidencing involvement in either recruitment of volunteers or gaining feedback from volunteers, discussion of major outcomes and recommendations for action for the organisation.  English

## **International Sport Law & The Role of the Sport Agent**

Code	GVS-HMVT20-ISL		
Title	International Sport Law & The Role of the Sport Agent		
Туре	Minor (10 weeks)		
Year of Study	Undergraduate		
Semester when component is delivered	Semester 1, Term 2		
Number of ECTS credits allowed	15 ECTS		
Department	International Sport Management		
Learning outcomes	<ul> <li>recognize key stakeholders in international sport law</li> <li>understand the basic legal construct of sport and the EU, free movement of players and sport and competition law in the EU</li> <li>explain the structure of U.S. Professional Sports Leagues</li> <li>understand mediation and other ADR methods in international sport disputes</li> <li>demonstrate competent communication and negotiation skills</li> <li>evaluate the financial and legal consequences of sport endorsements, media and image rights</li> <li>apply key Public Relations theory to high profile cases from the world of sport</li> <li>understand the dynamics of the relationship between client and principal in sport agency activities</li> </ul>		
Name of lecturers	Tarek Raad (t.i.raad@hhs.nl)Roberto Branco Martins (guest lecturer)		
Mode of delivery	Blended Learning, both online and F2F sessions		
Prerequisites and co-requisites (if applicable)	Successful completion of first year of study; adequate level of English to participate fully in the class.		
Course content	Topic 1: Introduction to International Sports Law Topic 2: International Sports Agency – The Role of the Sports Agent Topic 3: International Stakeholders and Sport Policy Topic 4: Employment and Contract Law – The Transfer System and Contracts Topic 5: Jurisdiction / Conflict of Jurisdiction in Sports Disputes and Arbitration Topic 6: Emerging Markets, Trends and Analysis, Scouting and Player Data Topic 7: Sports Marketing, Finance Topic 8: Negotiation Skills, Ethics and Integrity		
Recommended or required reading and other learning resources/tools	Relevant academic articles and study workbooks to be provided on Brightspace.		
Planned learning activities and teaching methods	<ul> <li>Face-to-face teaching</li> <li>Guest Lectures</li> <li>Group Tasks</li> <li>Online lectures</li> </ul>		

	Interviews		
	Watching documentaries and videos		
Assessment	1. Individual written exam: 50%		
methods and	2. Group case study: 50%		
criteria			
	Minimum of 5.5 needs to be obtained to pass the minor.		
Language of	English		
instruction			

## **Sport and Sustainable Development**

Code	GVS-HMVT22-SPSD
Title	Sport and Sustainable Development
Туре	Minor (10 weeks)
Year of Study	Undergraduate
Semester when component is delivered	Semester 1, Term 2
Number of ECTS credits allowed	15 ECTS
Department	Sport Studies
Learning outcomes	Students will become more aware of how sport can be used to tackle (and make people aware of) a wide range of social, economic and environmental issues, such as climate change, plastic waste, inequality, poverty, inclusion, human rights, and peace and justice. Students will learn how sport could be an enabler of sustainable development, and will demonstrate this by applying knowledge gained to the wicked problems within the domain of sport and sustainable development.
Name of	Andrea Emara a.emara@hhs.nl
lecturers Mode of delivery	Blended Learning, both online and F2F sessions
Prerequisites and co-requisites (if applicable)	Successful completion of first year of study; adequate level of English (B2) to participate fully in the class.
Course content	It is becoming increasingly clear that our current way of life is destroying our planet and favours the few. The sports industry's negative impact on both the environment and society cannot and should not be ignored. Not only is sport waking up to the fact that changes are needed in the way it operates, environmental problems such as climate change and pollution also threaten the future of many sports, spurring many sports organisations into action. However, whether these initiatives are truly beneficial for people and the environment is debatable. This minor investigates all of the above, but also suggests that sport could play an important role in tackling (and making people aware) of environmental and social issues. This minor would be of great interest to people who really care about making the world a fairer and healthier place to live in, for both present and future generations. Sports managers, indeed, all managers should have a good grasp of sustainability. This brand new minor, will combine both critical thinking with the creative skills necessary for finding solutions to the complex problems our world is facing today. Come and join us, be a change agent, and contribute your creativity, skills and knowledge so that we can all live in a healthier, fairer, more sustainable world.
Recommended or required reading and other learning resources/tools	<ul> <li>Sport, Development and Environmental Sustainability, Edited By Rob Millington and Simon C. Darnell, Copyright Year 2020, ISBN 9780815356134, Published September 12, 2019 by Routledge,https://www.routledge.com/Sport-Development-and-Environmental-Sustainability/Millington-Darnell/p/book/9780815356134 Routledge</li> <li>Handbook of Sport and the Environment, Edited By Brian P. McCullough, Timothy B. Kellison, Copyright Year 2018, https://www.routledge.com/Routledge-Handbook-of-Sport-and-the-Environment/McCullough-Kellison/p/book/9780367896867 Routledge</li> </ul>

	Handbook of Sport for Development and Peace, Edited By Holly Collison, Simon C. Darnell, Richard Giulianotti, P. David Howe
	And others articles as required.
Planned learning	Interactive F2F classroom lectures, online sessions, feedback sessions and guest
activities and	lectures, excursions, forums
teaching	
methods	
Assessment	<ul> <li>individual case study 1000 words, 20%, 5,5 pass rate</li> </ul>
methods and	<ul> <li>group proposal - 2000 words, 20%, 5,5 pass rate</li> </ul>
criteria	<ul> <li>event, 30%, 5,5 pass rate</li> </ul>
	<ul> <li>documentary, 30%, 5,5 pass rate</li> </ul>
Language of instruction	English

## **Esports, Gaming & Gamification**

Code	GVS-HMVT22-ESPO
Title	Esports, Gaming & Gamification
Туре	Minor (10 weeks)
Year of Study	Undergraduate
Semester when component is delivered	Semester 1, Term 2
Number of ECTS credits allowed	15 ECTS
Department	International Sport Management
Learning outcomes	Throughout this course, the main learning objectives in which the students will be assessed are:  - Students are able to create a proposal and/or analysis of esports and gamification products  - Students are able to identify the different types of exergames, their advantages and disadvantages  - Students successfully network with various stakeholders within the gaming ecosystem  - Students successfully execute gaming events
Name of lecturers	Raphael Prifti E.Prifti@hhs.nl
Mode of delivery	Blended Learning, both online and F2F sessions
Prerequisites and co-requisites (if applicable)	Successful completion of first year of study; adequate level of English to participate fully in the class.
Course content	The video game industry is currently the larger entertainment industry in the world, surpassing that of music and movies combined. It is predicted that global gaming market value by 2025 will be of over US\$ 260 billion (Statista, 2021). Therefore, it is paramount that future sport managers learn about the world of games, from the gamification of real sports, to accessibility, inclusion, and the world of competitive esports. The Netherlands is home to top organizations such as Team Liquid, Team Gullit, and the H20 esports campus. But differently than larger markets such as Asia and the US, the Netherlands focuses on talent development and grassroots, creating an unique environment in a fast growing landscape. Business such as the House of Esports are at the forefront of this niche. There are many opportunities and challenges to be tackled in this industry and that will be the focus of this minor.  Topics:  GAMING & DIGITAL MEDIA ESPORTS BUSINESS ESPORTS & TECHNOLOGY ESPORTS & SOCIETY GAMIFICATION & EXERGAMES
Recommended or required reading and other learning resources/tools	Included but not limited to Books' texts: Scholz, T. M. (2019). eSports is business. Management in the World of Competitive Gaming.Palgrave MacMillan:Switzerland. (ebook) Ströh, J. H. A. (2017). The ESports Market and ESports Sponsoring. Baden- Baden Szablewicz, M. (2020). Mapping Digital Game Culture in China. From Internet

	Addicts to Esports Athletes. Palgrave MacMillan: Switzerland
	de la Hera, T. (2019). Digital Gaming and the Advertising Landscape.
	Amsterdam University Press: Amsterdam
	Kim, S. Song, K., Lockee, B. & Burton, J. (2018 )Gamification in Learning and
	Education. Springer: Switzerland
	Journals:
	Gaming Research & Review Journal
Planned learning	Interactive classroom lectures, online sessions, feedback sessions, guest
activities and	lectures, excursions
teaching methods	
Assessment	GROUP Written paper: Esports bid book/Gamification analysis 30% (5.5)
methods and	INDIVIDUAL Elements of the written paper: Esports bid book/Gamification
criteria	50% (5.5)
	GROUP Execution: Esports event execution 20% (5.5)
Language of	English
instruction	

## Science & Technology in (adaptive) Sports

Code	GVS-HMVT23-SPT
Title	Science & Technology in (adaptive) Sports
Туре	Advanced Minor (10 weeks – optional 20 weeks)
Year of Study	Undergraduate
Semester when component is delivered	Semester 1, term 1 (& optional term 2)
Number of ECTS credits allowed	15 ECTS with optional extension to 30 ECTS
Department	Human Kinetics Technology
Learning outcomes	By the end of this course students will:  Be aware of current developments in sports technology  Have acquired an in-depth knowledge and skills in research, project management and design.
Name of lecturers	Aad Lagerberg (a.lagerberg@hhs.nl) Rienk van der Slikke (r.m.a.vanderslikke@hhs.nl)
Mode of delivery	Blended Learning
Prerequisites and co-requisites (if applicable)	General entry requirement: Have followed at least one or two years of higher education at bachelor level or more. Have a b2 level of English or more. TOEFL Level  Theoretical entry requirement: students who have demonstrable knowledge of the Matlab software program and mechanics. Please contact minor coordinators for an interview to discuss if your knowledge meets the required level.  • Demonstrates ability to discuss and formulate new ideas based on new skills developed, theories and research.  • Awareness of and respect for the norms, values and assets of people from different nationalities or cultural backgrounds  • The attitude (open, respectful, curious), skills (observing, listening, analysing and reflecting) and knowledge (of own and other cultures) to interact and communicate effectively and show proper behaviour in culturally or linguistically diverse contexts.  • Knowledge of and concern for global issues; and  • A global and an international perspective in their discipline.  Taken from "Global Citizens in a Learning Society Internationalisation at THUAS 2015-2020"
Course content	This minor is a comprehensive and systematic study of human kinetic movement designed to increase the depth of knowledge and research capabilities of exercise science, physical education and leisure studies professionals. In doing this, students will be aware of current developments in sports technology and sports biomechanics. They will also develop skills in research, human movement registration skills, project management, measurement system development and project management.  This minor will consist of  Lectures in human motion analysis, sports biomechanics, measurement system development (arduino) and project management.  Guest lectures on current developments in sports technology.

	<ul> <li>Practical lab classes on registration skills and on building arduino based systems.</li> <li>Weekly assignments (group and individual) on different sport related topics.</li> </ul>
	<ul> <li>Peer review meetings (interim presentations on the progress of the project).</li> <li>Interim reports: The students present their work to the client in the interim. The clients provide their feedback, which the students can process and apply (3 lesson hours).</li> <li>Final presentation (3 lesson hours).</li> <li>Trips/conferences.</li> <li>InnoSportLab in Den Bosch.</li> </ul>
Recommended or	<b>Laptop:</b> It is not mandatory, but it is recommended that students be in possession
required reading	of a laptop that has built in camera and has Skype installed on it.
and other learning	
resources/tools	T to Sale and a state and
Planned learning activities and	Tutorials and workshops
teaching methods	Lectures and guest lectures
teaching methods	Company visits     Project group meetings (quided and unquided)
	<ul><li>Project group meetings (guided and unguided)</li><li>Practice (unguided)</li></ul>
	• Fractice (unguided)
	Study load 15 ECTS = 420 hours
	Optional additional internship, full-time 15 ECTS
Assessment	Assignments (Passed/Failed)
methods and	Theoretical exam (50%)
criteria	Project (50%)
	The minor can be extended with <b>15 ECTS</b> (to 30 ECTS) by an additional <b>internship</b> in one of the Dutch sports field-labs. Since there is only limited availability of internship places, please contact the coordinators in advance to discuss the options.
Language of instruction	English

## Design Thinking: Globesity and Metabolic Syndrome Not offered in 23-24

Code	GVS-HMVT22-GLO
Title	Design Thinking: Globesity and Metabolic Syndrome
Туре	Minor (20 weeks)
Year of Study	Undergraduate
Semester when component is delivered	Semester 1, Term 1 & 2
Number of ECTS credits allowed	30 ECTS
Department	Nutrition and Dietetics
Learning outcomes	Orientation Phase:  • demonstrate knowledge and understanding of metabolic syndrome and its consequences on quality of life and society;  • demonstrate knowledge and understanding of the pathophysiology and the treatment of metabolic syndrome;  • critically analyse national and international guidelines relating to prevention and management of metabolic syndrome;  • critically appraise the evidence to support strategies available to promote behavioural change.
	<ul> <li>Empathize Phase:</li> <li>do fieldwork, for instance: prepare and conduct open and semi-structured interviews with the target group and stakeholders about personal values and perspectives on health;</li> <li>to select the best available evidence (from scientific literature) and use relevant information to gain insights and understand the needs of the specific target group.</li> </ul>
	Define Phase:  • demonstrate how choices are made for the design of a practice based study and explain the choice for the most suitable (research) instruments;  • to show understanding of the problem and formulate a clear problem statement.
	Ideate Phase: • gather diverse solutions by using different brainstorming techniques to facilitate concept creation; • phrase several different perspectives with regard to a formulated solution and communicate possible dilemma's which go along with the chosen solution'
	Prototype Phase:
	Testing and Implementation Phase:  • test a prototype on the target group, evaluate the intervention and draw conclusions

	T
	<ul> <li>use insights gathered by testing the prototype by the target group and develop an implementation plan</li> <li>demonstrate understanding of the needs of the end user in relation to implementation of the product/service in the organisation of the client/stakeholder.</li> </ul>
Name of lecturers	Inge Audenaerde c.m.audenaerde @hhs.nl
Mode of delivery	Blended Learning
Prerequisites and co-requisites (if applicable)	Have followed at least one year of higher education at bachelor level or more.  Have a b2 level of English or more.
Recommended or	In the first part of the minor students will explore the problem from different perspectives, for example from the point of view of different MS target groups and MS stakeholders. Students will empathize and define the problem experienced by the target groups and stakeholders. In the second part of the minor students will describe different solutions, build a prototype (e.g., a product or a service) and test it for specific target groups and stakeholders.  During the minor students will work according Design Thinking principles. But first (week 1-3) they will start an orientational phase by studying the general aspects of the problem MS: What is the problem on (inter)national level, for who is it a problem, why is it a problem and how big is the problem?  At the end of these three weeks students will chose a line of research¹ and an assignment/client. Students will search for solutions within the themes of the Research Lines.  Students will become part of a team of 6-8 students. To complete the assignment student will work on the phases of Design Thinking.  Students will work on each phase for 3 weeks, before continuing to the next phase.  Phases of Design Thinking:  Empathize: gain insights and needs of the target groups/users  Define: defining the specific problem  Ideate: create solutions from different perspectives  Prototype: designing a physical solution for the problem  Test: testing, improving and retesting the prototype within the team and with future users  NB: the last phase in Design Thinking 'the implementation phase' is a small part of the minor: students have to make an advice for implementation and disseminate it to the client/stakeholder.  Required reading will be communicated with the students in the minor.
required reading and other learning resources/tools	Troquired reading will be continuincated with the students in the million.
Planned learning activities and teaching methods	In general, every phase of the minor will contain the following teaching methods:  • Students will prepare themselves for every lesson by making preparation assignments. Besides reading or watching literature/information, every assignment consists an active learning component: e.g., student will make a mind map, instructional video or do an interview.

<sup>1</sup> The Nutrition and Dietetics programme has three research lines: Health Assessment Technology, Digital Behaviour Change and New Tech Foods

	,
	<ul> <li>Thematic lessons. In these lessons relevant expertise will be integrated in specific themes (e.g., the prevention or treatment of MS). The assignments during the lessons always have an active component (learning by doing). Preparation assignments are discussed.</li> <li>Guest lectures: real-life or using Skype.</li> <li>Visiting the client. Aim: to discuss the assignment.</li> <li>Project groups: the project groups will work during guided (supervised by a tutor) and unguided project groups on the different phases of Design Thinking and the different products.</li> <li>Workshops: for example, a workshop Business Canvas Model.</li> </ul>
Assessment	In each phase of the Design Thinking method student teams (approximately 6
methods and	students) will deliver a professional product
criteria	The first 3 weeks will be tested individually:
	<ul> <li>position paper (5 ECTS); result of the orientation phase (tested individually)</li> <li>empathy map (5 ECTS); result of empathize phase</li> <li>problem statement (5 ECTS): result of the define phase</li> <li>design alternatives (5 ECTS): result of the ideate phase</li> <li>prototype (5 ECTS); result of the prototype phase</li> <li>evaluation and definite design (5 ECTS); result of test/implementation phase Each product consists of three different parts:</li> <li>product</li> <li>evidence</li> <li>reflection</li> <li>Each product will be assessed with a rubric.</li> <li>Student will hand in their products at the end of each phase. Resits will be handed in in week 10 or 20 of the minor.</li> <li>The final mark is given only when the assessments are all at least 5,5 and is</li> </ul>
	calculated as a weighted average of the assessments, where the weight corresponds to the study load.
Language of	English
instruction	Lingiion
manuchon	

## **Design thinking: Child Nutrition in Sickness and Health**

Code	GVS-HMVT22-CHIL
Title	Design Thinking: Child Nutrition in Disease and Health
Туре	Minor (20 weeks)
Year of Study	3rd or 4th year
Semester when component is delivered	Semester 2, Term 3 & 4
Number of ECTS	30 ECTS
credits allowed	Nutrition and Distotion
Department	Nutrition and Dietetics
Learning outcomes	Orientation Phase:  • demonstrate knowledge and understanding of the impact of nutrition its consequences on quality of life for children;  • demonstrate knowledge and understanding performing assessment of nutritional status, growth and nutritional requirements of children in different age ranges  • demonstrate knowledge and understanding of different ways supporting children learning to eat;  • demonstrate knowledge and understanding of aetiology of common nutrition related diseases which origin in childhood;  • demonstrate knowledge and understanding of pediatric formulas in the clinical setting  • critically analyse national and international guidelines relating to prevention and management of health and disease of children;  • critically appraise the evidence to support strategies available to promote behavioural change;  Empathize Phase:  • select the best available evidence (from scientific literature and uses the relevant information to gain insights and need of the specific target group;  • prepare and conduct open and semi-structured interviews with the target group and stakeholders about personal values and perspectives on health;  Define Phase:  • demonstrate how choices are made for the design of a practice based study and demonstrate the choice for the most suitable (research) instruments;  • communicate their understanding of the problem;  Ideate Phase:  • phrase several different perspectives regarding a formulated solution and can communicate possible dilemma's which go along with the chosen solution'  • use brainstorming as an ideation technique to facilitate concept creation;  Prototype Phase:  • analyse and use data gained from the ideate phase to design a prototype;  • use physical and paper prototypes and storyboard to make their design vision tangible and visual;  • explain why the prototype has to be tested by the end-user;  • use insights gathered by testing the prototype by the target group;

	Implementation Phase: • demonstrate understanding of the needs of the end user in relation to implementation of the product/service in the organisation of the client/stakeholder
Name of lecturer	Annelies Rotteveel: a.rotteveel@hhs.nl
Mode of delivery	Blended Learning
Prerequisites and co-requisites (if applicable)	Some nutritional background is required. Preferably students of the programme Nutrition and Dietetics.
Course content	In this minor, we'll focus on the needs of children in the age of 0 till 16 years. Topics are growth, development, composition of the diet, and food habits and behaviour in healthy children and management of food related diseases in children.  Proper nutrition is a key factor for growing up healthy. The composition of the daily diet of a child has a great impact on its physical, mental and social development. Children have specific nutritional requirements in healthy situations and, even more, during diseases.  In approximately 20 weeks you will learn a new and creative, user-centered, way to solve problems, which will provide you skills useful in many aspects of your professional work. You'll explore a problem, about nutrition in children, from different perspectives and will empathize and define the problem.  In the second part of the minor, you'll describe different solutions, build a prototype and test it for specific target groups and stakeholders.
	During the minor, you'll work according to 'design thinking' principles. The minor will start with an orientation phase by studying the general aspects of nutrition for children with or without health problems.  After the orientation phase, you'll chose a target group, provided by stakeholders in the work field. Perspectives of different stakeholders will be examined. What is the problem, for whom is it a problem, why is it a problem and how big is the problem? To solve this problem, you work together with a team of approximately 6 students.
	To complete the assignment, you'll work through the phases of Design Thinking. Each phase last for 3 weeks. Phases of Design Thinking: • Empathize: gain insights and needs of the target groups/users • Define: define the specific problem • Ideate: create solutions from different perspectives • Prototype: design a solution for the problem, this has to be made visible even if it is an intervention or app. • Test: test, improve and retest the prototype within the team and with future users
Recommended or required reading and other learning resources/tools	Guidelines and (scientific) articles will partly be provided by the lecturers. Students are motivated to search for evidence based information themselves or collect information by talking to experts or interviewing target groups.
Planned learning activities and teaching methods	In general every phase of the minor contains the following teaching methods:  • Thematic lessons. In these lessons relevant expertise will be integrated in specific themes (for example the prevention or treatment of food allergy). The assignments during the lessons always have an active component (learning

by doing). Preparation assignments are discussed. Guest lectures • interviewing the client / target group. Aim: to discuss the assignment. • Project groups: the project groups will work during guided (supervised by a tutor) and unquided project groups on the different phases of Design Thinking and the different products. • Workshops: for example a workshop Business Canvas Model. Students will prepare themselves for every lesson by making preparation assignments. Besides reading or watching literature/information, every assignment consists of an active learning component. Students will make an empathy map, a problem statement, a prototype of the solution The minor consists of 6 phases (orientation, empathize, definition, ideate, **Assessment** methods and prototype and test phase) according to the design thinking cycle. Each phase criteria ends with an individual or a project group assignment for the students. Assessment: Students/student teams (approximately 6 students) will deliver professional products The first 3 weeks (Introduction) will be tested individually: 1) position paper (5 ECTS); result of the introduction phase In other phases of the Design Thinking method group products need to be handed in at the end of each phase: 2) empathy map (5 ECTS); result of empathize phase 3) problem statement (5 ECTS): result of the define phase 4) design alternatives (5 ECTS): result of the design phase 5) prototype (5 ECTS); result of the prototype phase 6) evaluation and definite design (5 ECTS); result of test phase Each product consists of three different parts: • product evidence reflection Each product will be assessed with a rubric. The final mark is given only when the assessments are all at least 5,5 and is calculated as a weighted average of the assessments where the weight corresponds to the study load. Students will hand in their products at the end of each phase. Resits will be handed in in week 10 or 20 of the minor. Language of English instruction

## **Nutrition, Sports and Exercise**

Code	GVS-HMVT23-NSE
Title	Nutrition, Sports and Exercise
Туре	Minor (20 weeks)
Year of Study	Undergraduate
Semester when component is delivered	Semester 2, Term 3 & 4
Number of ECTS credits allowed	30 ECTS
Department	Nutrition and Dietetics, The Hague Academy for Physical Education and Sports Science.
Learning outcomes	•
Name of lecturers	Gwendell Foendoe Aubèl g.a.j.foendoeaubel@hhs.nl
Mode of delivery	
Prerequisites and co-requisites (if applicable)	Have followed at least one year of higher education at bachelor level or more.  Have a b2 level of English or more.
Course content	Do you want to work in a multidisciplinary way to give (recreational) athletes good nutrition and exercise advice? Have you ever thought: "I would like to advise athletes about nutrition or exercise, but I don't know what the steps are to draw up substantiated advice and offer customized coaching?". Then this minor is for you! In this minor you learn to respond to questions about sports nutrition and exercise for your own target group in collaboration with professionals. Your assignment is to improve the sports performance of an individual athlete and a sports team. To this end, you will conduct research into lifestyle factors that influence diet and exercise behaviour. Subsequently, you will learn to make an appropriate design for an intervention to actually change behaviour. After implementation, testing and evaluation of the intervention, you can achieve a sustainable change in your target group that improves sports performance  Contents:  - Nutrition for energy balance, sport and performance - Nutrition for energy balance, sport and performance - Nutrition for strength sports and training adaptation - Nutrition for team and game sports - Sports supplements and ergogenic agents - Sport and nutrition: theory and practice - Designing evidence based interventions  Goal:  Creating clarity in the scientific state of affairs in the field of nutrition, sport & exercise. Students acquire sufficient knowledge and skills to be able to give the athlete sound advice. The strength of this minor lies in the integral collaboration between and with professionals from different disciplines and professions, with (the own direction and preference of) the athlete as the focal point.
Recommended or required reading	

and other learns:	
and other learning	
resources/tools	
Planned learning	Teaching methods:
activities and	Task groups
teaching methods	Tutorials
	Lectures
	Guest lectures
	Practicals
	Intervision meetings
	Work in practice
	Working visits in the world of sport and industry
	Changing activities such as workshops on specific topics
Assessment methods and	Delivered product (100%), minimum requirement: 5,5.
criteria	- Individual assignment: athlete coaching plan (30%)
	- Group assignment: Intervention for sports team (40%)
	- Group assignment: Factsheet sports nutrition/supplement (30%)
	Tests:
	- Individual supervision plan – semester 2.14
	- Intervention for sports team - semester 2.18
	- Making a factsheet – semester 2.7
Language of	English
Language of instruction	English

## Research opportunities in Department of Nutrition and Dietetics – 15 ECTS

#### Research at the Senselab

Technological innovations increasingly enter our normal daily lives. Think about your smartphone which enables you to put on the heater at home while still being at work, cars which "decide" to slow down in dangerous situations or devices which continuously measure our heartbeat. Such new technological developments also impact our food production and consumption of the future. Within "Future Foods", a research line, led by Patricia Bulsing (P.J.Bulsing@hhs.nl), we focus on sustainability of our food system and the related transition to a healthy sustainable diet, the application of technology in the production, preparation and consumption of food, and people's attitudes towards change related to both technology and sustainability, 3D-food printing and its potential medical applications is an example of studies in this research line.

#### Research at the Healthpoint

Technology is evolving rapidly and transforming our health care and dietetic practise. Industry is focussing on how technology can be used to keep people healthy and therefore an increasing number of monitoring apps and devices are entering the market. We are still in the early stages and for many of the apps and devices currently developed it is not clear how they will impact someone's behaviour, who will benefit from them and if they are useful tools in dietary practice. These are some of the questions we want to answer with our research. Within "Health/Nutritional assessment technology", a research line led by Machteld van Lieshout (M.vanLieshout@hhs.nl), we focus on - acceptance and application - of technology for assessing nutritional intake, status and needs – both by consumers and healthcare professionals.

#### Digital tools in behaviour change

People often have the best intentions to eat (or drink) healthily. Unfortunately, what people intend is often not in line with how they act. People may aim to lose weight but fall for tempting high calorie snack foods at the canteen. Or, people may want to drink more water, but somehow forget to do so in their busy lives. In instances like these, digital tools may help in reminding people about healthy eating goals, in planning and monitoring their eating behaviour, or in making healthy food choices at point-of-purchase settings. Within digital tools in behaviour change, a research line led by Sofie van Rongen (S.vanRongen@hhs.nl), we aim to investigate how digital tools, such as applications on mobile phones or other devices, may be of use in maintaining a healthy diet, aiming to close the gap between healthy eating intentions and actual eating behaviour. We focus on - acceptance and application - of technology in lifestyle behaviour change.

Exchange students have the possibility to do research internships at these research labs. Students, lecturers, health organizations and businesses work together at these labs in a practical environment to carry out research and assessments on issues related to the nutritional status of people. In doing so, the Senselab, Healthlab, Healthpoint contribute to the education of our students, by giving them the opportunity to develop their skills in the field through evidence-based practice and research. Places are limited within the research labs to 8 students per semester (4 per block; max 2 per research line). If you would like more information on placements or internships, please contact the programme coordinator for Nutrition and Dietetics (email listed in above section).