Aviation facts website by AUAS The AUAS Aviation Academy publishes the website aviationfacts.eu, a platform to share the latest knowledge and facts related to aviation, from composites to human factors in airline accidents accidents.

Come to Amsterdam and experience 360° of AUAS. amsterdamuas.com

PEEKR

oo has created a 3D anner that scans shoe e and matches it dire shoes in webshops.

73

rs at the AUA ore the effects of a e lifestyle and good diet on olde

Award 2014 Engineering student Tom Godthelp won the ENCI Study Award 2014 for his nnovative research on how to repair foundation to prevent buildings in Amsterdam from subsidi

#### Big data for clean air Amsterdam is a frontrunner in the promotion of electric vehicles. AUAS researcher are conducting data analyses of charging behaviour to help the municipality roll out an efficient charging



Amsterdam University of Applied Sciences

First VR shopping tour The AUAS has developed the first virtual reality tour through a retail space using Google Cardboard. Explore the store from anywhere in the

AMFI students design rooms Students 'dressed' the rooms of a local hotel as part of a city project to give the Damrak a creative boost.

20

- en

Wherever you look in Amsterdam, you'll find 360° of AUAS.

CREATING TOMORROW



Amsterdam is a fast-paced city – so stop and look around every once in a while. Enjoy the atmosphere, watch the bustle and explore. When you do, you'll find that the Amsterdam University of Applied Sciences (AUAS) is everywhere.

The AUAS is located in one of the world's leading cities, Amsterdam, a hotspot for business and innovation and a beautiful historic city. It is home to some 800

#### THE CITY AS CLASSROOM

For the Amsterdam University of Applied Sciences, Amsterdam is not just part of our name, it's part of our identity. The city of Amsterdam and the AUAS are intertwined in many ways, and the city truly is our classroom. A cosmopolitan city, Amsterdam is a key centre for education and research in all conceivable areas: culture and society, trade, fashion, logistics, aviation, shipping, ICT, sports, healthcare and much more. Students are encouraged to take full advantage of this wealth of opportunities and the AUAS collaborates closely with countless Amsterdam-based businesses, institutions and organisations.

#### COOPERATION WITH THE UNIVERSITY OF AMSTERDAM

The AUAS also has close ties with the University of Amsterdam, one of the oldest and largest research universities in the Netherlands. Our two institutions are governed by a joint Executive Board. Together, the AUAS and the UvA offer students a wide range of education pathways.

amsterdamuas.com/cooperation-uva.

#### **STUDENTS**

The AUAS is one of the largest higher education institutions in the Netherlands, with around 50,000 students and 3,800 employees. Our student population includes a wide range of international degreeseeking students enrolled in full-time Bachelor's or Master's programmes, as well as some 525 exchange students enrolled in a minor or one or more courses.

#### SCHOOLS

The AUAS consists of seven schools, each with its own focus:

- School of Digital Media and Creative Industries 1
- School of Social Work and Law 1
- School of Education 1
- School of Technology 1\*
- School of Economics and Management 3
- School of Health Professions 4
- School of Sports and Nutrition 2
   \* at the Amstelcampus from 2018









**Nationalities** 



178

110,000 **Students** 

1,000,000+

**Bikes** 

75

**Museums** 



165 Canals

650

**Electric** 

charging

points





**Bridges** 



 $\Delta \Gamma$ 

**Parks** 



Amsterdam is a city founded on knowledge. Apart from the AUAS and the University of Amsterdam, it is also home to many other knowledge institutions, including two academic

hospitals, another university of applied sciences and another research university. Perhaps this is one of the reasons why Amsterdam is one of the top 5 European cities in which to live and do business.

#### **BACHELOR'S** PROGRAMMES

S

Ŭ

Σ

4

R

PROG

Bachelor's programmes at Dutch universities of applied sciences generally have a duration of four years (240 ECTS credits) and focus on developing the necessary skills for a professional career. Our international website provides an overview of all programmes offered in English at the AUAS: amsterdamuas.com/education/ programmes.

#### **BACHELOR'S** PROGRAMMES **OFFERED IN ENGLISH:**

- AMFI Amsterdam **Fashion Institute** full-time
- **European School of Physiotherapy** honours, full-time
- **IBS International Business and Languages** full-time
- > IBS International Business and Management Studies full-time
- > IBS International Business and Management Studies part-time
- > IBS International Business and Management Studies fast-track, full-time
- > IBS Trade Management Asia full-time
- > International Degree in **English and Education** full-time
- International Sports, > **Management and Business** full-time

#### **MASTER'S PROGRAMMES**

The AUAS offers one English-taught Master's programme: the European MSc in Occupational Therapy (full-time, 90 ECTS credits).

#### **EXCHANGE PROGRAMMES**

All seven schools of the AUAS offer exchange programmes for students, which can span one or more semesters. Students from our partner universities can take international minors or selected courses at the AUAS, depending on the school. Our website provides an overview of all exchange programmes at the AUAS: amsterdamuas.com/exchange-programmes.

#### MINORS

All seven schools offer one or more minors in English. The full list can be found on our website: amsterdamuas.com/minors

#### **EXCELLENCE AND HONOURS**

For ambitious, motivated and talented students who want to go above and beyond their regular programme, the AUAS offers excellence programmes and honours programmes. Any student can enrol in an excellence programme if they wish; we believe that everyone is talented and should have the chance to explore their capabilities. Honours programmes are open to selected students who have demonstrated the motivation and capability to take on this additional challenge.

#### **AMSTERDAM TALENT SCHOLARSHIP**

Excellent students from outside Europe/the EEA can take part in our Amsterdam Talent Scholarship programme. This €3,000 scholarship is awarded to gualifying students at the end of each academic year upon successful completion of their degree programme requirements at the AUAS.

amsterdamuas.com/scholarship.

#### **AUAS SUMMER SCHOOL**

The AUAS Summer School offers summer courses for both Dutch and international students. Each summer course consists of a challenging academic programme combined with a programme of social activities in and around Amsterdam. The AUAS Summer School offers students the chance to acquire skills that will last an entire career. amsterdamuas.com/summerschool.

#### **ONLINE LEARNING**

The AUAS believes that online learning is fundamental to accessible and open education, enabling us to cater to a diverse student population. The AUAS is offering students increasing flexibility to study anywhere and anytime. Alongside traditional classroom learning, lecturers now also interact with their students via new media.

#### professional practice. This practical, scientific research has a number of different functions, including the development of knowledge and the application of that knowledge in professional practice and society. Knowledge developed at the AUAS also provides valuable input for our degree programmes.

amsterdamuas.com/research/ research-and-cooperation.

Research at the AUAS is rooted in

# PROFESSORSHIPS AND RESEARCH PROGRAMMES

The AUAS launched its first professorship in 2003. Nowadays, we have 42 research groups and are still growing. Our professorships span a wide range of research programmes geared towards issues in Amsterdam and the surrounding region and the local employment market.

#### **CENTRES FOR APPLIED RESEARCH**

Professorships and research programmes are organised within centres for applied research at the AUAS. Each school has its own centre:

- > CREATE-IT applied research
- > Amsterdam Research Institute for Social Innovation
- Centre for Applied Research in Technology
- > Centre for Applied Research in Health Professions
- Centre for Applied Research in Economics and Management
- > Centre for Applied Research in Education
- Centre for Applied Research on Sports, Exercise and Nutrition

amsterdamuas.com/ centres-for-applied-research

#### **PRIORITY AREAS**

The AUAS has established four priority areas for research:

- Amsterdam Creative Industries
- Urban Management
- Urban Technology
- Urban Vitality

The seven schools of the AUAS work together in these research priority areas, cooperating across all disciplines to resolve metropolitan and societal issues. Our specific expertise in these fields distinguishes the AUAS from other universities of applied sciences. Alongside these four priority areas, the AUAS also has two additional themes of focus: Urban Education and Entrepreneurship.

The AUAS has also founded two Centres of Expertise: the Knowledge Distribution Centre for Logistics and Amsterdam Creative Industries.

#### HIGH TECH SOLUTIONS FOR SUSTAINABILITY

S

4

ш.

S

ш

2

4

X

The Urban Technology Research Programme focuses on the research, design and marketing of sustainable technologies. Students, lecturers and researchers work together on projects that have included a solar-powered boat, the H2A hydrogen car and technologies such as vertical farming. The H2A hydrogen car, built entirely by students, won the Shell Eco Marathon in 2013 and 2014, driving 3,829 kilometres on just one litre of petrol, and set the world record for the most sustainable hydrogen car.

#### PREVENTION AND TREATMENT

Each year, sports injuries cost Dutch society a staggering €2 billion – twice as much as traffic accidents. As professor of Sports Care, Janine Stubbe investigates ways to prevent sports injuries and treat them more efficiently. Collaborating with several partners – including sports organisations, physiotherapists and sports physicians – Stubbe monitors specific high-risk situations. At field labs such as the Amsterdam Indoor Sport Halls, researchers observe and track professional and recreational athletes using smart camera systems.

#### **VIRTUAL FASHION DESIGN**

The Amsterdam Fashion Institute (AMFI) is a leader in international fashion. The Fashion Research & Technology group performs applied research in smart garments, fashion identity and virtual fashion design. By developing garments in 3D using virtual prototyping, designers can experiment more freely, reduce costs and work more sustainably. The research group investigates how data from 3D body scans can inform these designs, how brands can offer bespoke garments using this data, and how fit data can help consumers shop online.

#### KNOWLEDGE MILE – TOMORROW'S KNOWLEDGE FOR TODAY'S STREETS

The Knowledge Mile is a neighbourhood in Amsterdam that has been made available for research on smart solutions to urban problems. Its potential as a test environment is well illustrated by the Measuring Amsterdam project, with an app that allows residents to help to improve their neighbourhood by collectively mapping local nuisances. The data they collect can then be used to develop local solutions.

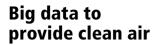
No rights can be derived from the information provided in this document

 Amsterdam University of Applied Sciences amsterdamuas.com



# RESEARCH





Amsterdam is a world leader in the field of electric vehicles, with more than 1.100 charging stations. With local authorities aiming to further expand the network to 4,000 charging stations in 2018. AUAS researchers are investigating how this electrical network can be rolled out in the most efficient way possible. For example, where should additional charging stations be located and what types of stations should they be? To decide this, the researchers are analysing all of the big data from the charging stations. The information they provide will enable the authorities to see how often and in what way the charging stations are used, all the way down to street level. The researchers are also creating a model to predict charging behaviour and use. Called **CHIEF** (Charge Infrastructure Efficiency Model), this model will enable every city in the world to roll out electric vehicles.

### Exact shoe size thanks to 3D scan

How frustrating is it to have a half size in shoes? For online shoppers, it often means ordering two pairs of shoes to find the right size. AUAS Engineering, **Design & Innovation student Daan** Veeloo saw a gap in the market and designed a 3D scan to determine exact shoe size and match this to shoes in online shops.

#### How frustrating is it to have a half size in shoes always having to order two pairs of shoes online, just to be sure.

Using the scanner, you can measure your exact size in the shop. Online shops, in turn, measure their shoes in 3D so that customers can see online whether a shoe will fit them. Daan is currently building a prototype for the 3D scanner, which he will shortly be making available.

# **ENCI Study Award**

In 2014, former AUAS Engineering student Tom Godthelp won the ENCI Study Award - an award for a final project in which concrete plays a prominent role. Tom investigated a problem common in Amsterdam: the subsidence of old buildings in the city. These buildings are built on piles that have weakened with age. For his final project, Tom studied a subsiding canal-side house and came up with a solution using steel fibres. As an alternative to the standard reinforcement of concrete. Tom realised that it was possible to add steel fibres to the concrete in the factory as an alternative to the standard method used to reinforce concrete. This is both cheaper and stronger. Tom explains, 'A factory in Amsterdam has recently started producing this kind of concrete. I now have an integrated physical environment permit from the Amsterdam city centre district. This means the centre of Amsterdam is ready to start working with this steel fibre concrete.'



# **VR** Cardboard tour

AUAS has launched the world's first virtual tour of a store for Google Cardboard, Cardboard brings virtual reality to anybody with a smartphone, with a foldable holder containing special lenses to help create a fully immersive VR experience.

#### Take the interactive virtual reality tour through the **byAMFI Statement Store**

The byAMFI Statement Store on Spui square is the first retail space with an app on the platform. Take the interactive virtual reality tour through six scenes by downloading the app from http://bit.ly/virtualtourbyAMFI.

# **Aviation facts website** by Aviation students

The AUAS Aviation Academy publishes the website aviationfacts.eu, a platform to share the latest knowledge and facts related to aviation. The website was created by AUAS students at the Aviation Academy in cooperation with a KLM pilot and the Netherlands Aerospace Group, and was prompted by the need for clear, objective information on aviation. The students placed the information in a clear structure, for example in a 'Human Factors' factsheet which reveals that 80 per cent of aviation accidents are related to human error. Within the Aviation Academy, students are also researching questions such as how to detect damage to composite materials, which are widely used in modern aircraft construction.

# Growing older actively

The number of people aged over 55 is set to increase in the near future. The AUAS is carrying out research into the effects of an active lifestyle and good diet on people's functional capacities as they age. A national fitness programme has already been set up to enable seniors to go to the gym once a week, but such group training is proving insufficiently effective. For this reason, the AUAS initiated the VITAMINE research programme, in which a group of older people will be given an additional fitness programme to do at home alongside a protein-rich dietary supplement. The first step will be to identify the needs and requirements of the users and then develop and evaluate the home training, after which the researchers can start measuring the effects on participants over periods of 6 and 12 months.

# **Fashion Hotel** The Exchange

Damrak is one of the oldest and liveliest streets in the city. Here, a once ordinary hotel has been transformed into an inspiring and award-winning experience.

Imagine sleeping inside a Rembrandt-style collar, a crinoline hoop skirt or an elegant evening gown

Working in collaboraton with industry experts, students at the Amsterdam Fashion Institute (AMFI) created designs for 30 of the rooms based on their own fashion perspective. Each room is unique and many contain specially developed textiles. Imagine sleeping inside a Rembrandt-style collar, a crinoline hoop skirt or an elegant evening gown!

# **Financial** Independence

In the 'Financial Independence' project, the AUAS and the local authorities are working together to enable residents of Amsterdam's Nieuw-West neighbourhood to better handle their money. Many of the residents of the Nieuw-West area of Amsterdam live on the guaranteed minimum benefit income and have debts. Professor Roeland van Geuns and a team of researchers and students are first identifying in which areas residents are already financially independent, and where they need a helping hand. The team will then investigate what resources are already available to provide help and which of these work best, before finally developing, implementing and evaluating new approaches together with the various actors and residents.

More information: amsterdamuas.com/research.