2018 VU AMSTERDAM SUMMER SCHOOL COME STUDY AND EXPLORE



WWW.AMSTERDAMSUMMERSCHOOL.NL VU AMSTERDAM SUMMER SCHOOL



VU AMSTERDAM SUMMER SCHOOL

This year VU Amsterdam Summer School celebrates its 5th anniversary! We have many new interactive courses that provide an in-depth look at your topic of interest. You study with a unique group of peers from all over the world. The small group size allows enough personal guidance by your professors and fascinating course excursions. The summer school team is there for you all the way, making sure you feel at home from the moment you arrive. Add to this the beautiful historical city of Amsterdam and you have an experience that lasts a lifetime.



AMSTERDAM FACTS

- Capital of the Netherlands
- Europe's safest city on The Economist Safe City Index
- 187 nationalities more than any other city in the world!
- 93% of the Dutch speak English
- 881.000 bicycles and 40 parks to bike through
- A total of 165 canals: Venice eat your heart out

VRIJE UNIVERSITEIT AMSTERDAM

The Vrije Universiteit Amsterdam (VU) is an internationally renowned research university. Since its founding in 1880 interdisciplinary research has been leading in its education. The university consists of nine faculties with teaching facilities for 22.000 students. With over 120 English-taught Bachelor's and Master's programmes, the university offers a wide range of study options. The campus is a centrally located hub where people feel at home and engage in innovative ways.

COURSE INFORMATION

- Multi-disciplinary and open to students and professionals from a wide variety of backgrounds.
- High academic level, 45+ contact hours (3 ECTS)
- Various levels from Bachelor to Master/PhD
- Combine sessions to create a 4 or 6 week study programme in Amsterdam!

WHAT CAN YOU EXPECT

- Various housing options for all students
- Airport pick up service
- i) Support before, during and after the programme
- Emergency assistance
- Orientation and social programme



2

COURSES 2018

SESSION 1: 30 JUNE - 14 ILLI Y

SESSION 2: 14 JULY - 28 JULY

SESSION 3: 28 JULY - 11 AUGUST

BUSINESS, ECONOMICS AND FINANCE SESSION 1

Creativity and Innovation (with Cardiff University) New Financing Models in a Changing

World The Economics of Urbanization

COMPUTER SCIENCES AND DATA ANALYSIS SESSION 1

Big Data Methods for Society **Programming in Python**

SESSION 2 **Criminal Organizations From** an Economic Perspective New Venture Creation and Entrepreneurship Organizational Behaviour Management

SESSION 2 Artificial Intelligence For a Healthy Life Data Analysis in R

HEALTH SCIENCES SESSION 1

HUMANITIES AND LANGUAGES SESSION 1

Buddhism and Psychology Decolonizing Europe: History, Memory, Redress (with Brown University)

SESSION 2

SESSION 2

Human Movement Analysis The Beautiful Mind: Global Perceptions

Design, Society and Cultures of

Display in Museums

Laws in Antiquity

1600-present

Dutch Language and Culture Essential Academic English (B2)

Succeed as a Strategist New Venture Creation and

Entrepreneurship

Foundations of Strategy, How to

SESSION 3

SESSION 3

Big Data Management and Analysis in Linux **Operations** Research A Mathematical Way to Optimize

SESSION 3

Mechanistic Explanation and

SESSION 3

LAW AND CRIMINOLOGY SESSION 1

Empirical Research Methods

SESSION 2

An Economic Perspective Laws in Antiquity: Legal Systems of

SESSION 3

Crime in Numbers: From Correlation to

SOCIAL SCIENCES SESSION 1

- **Causal Evaluation Methods in**
- **Education Research** Hands-on Anthropology and
- Ethnographic Storytelling I

SESSION 2

Feeding the Billions: Challenges and Innovation in Food and Water Security Hands-on Anthropology and

Ethnographic Storytelling II

SESSION 3

Governing Climate Change: **Theory and Practice**



I think that really once you know everything VU has to offer you can t wait to jump on a prane. And once you re there you don't want to leave. The VU has top class researchers and professors teaching very personalized courses. This gives you the opportunity to get up close with the professors, the curriculum and the technology. It is an intense learning experience all packed in a couple of weeks

SASKIA AUFENACKER, ARGENTINA

Amsterdam is definitely a great place to live. It has a friendly and relaxed atmosphere and everyone is always willing to help. They also speak great English! My favourife thing about Amsterdam was its central location. Because I love travelling, living here gave me the opportunity to see new parts of the world SHERISH KHOKHAR, AUSTRALIA





"I am taking away a newfound respect for European culture and education. The best part of my Human Movement Analysis course was seeing all of the new technology in the field of Exercise Science. Highlight of my Anthropology course was definitely the refugee boat excursion. We learned how to incorporate real file stories into our research. ANGELO ABIS, U.S.A.

FEES

Course Tuition	€1.000 - €1.150 per course
Accommodation	€490 - €570 per session
Social Programme	€17 - €65 depending on activity

DISCOUNTS

Early Bird	€150 apply and pay before 15 March
Partner University	€250
Combination 2 Courses	€200
Combination 3 Courses	€300

* Partner University and Early Bird Discount cannot be combined

APPLICATION DEADLINE

Enrollment opens from mid-December 2017 until 1 May 2018. Requirements differ per course. For more information on how to apply, please visit our website.

WORLD HEROES SCHOLARSHIP

We offer 10 scholarships to highly motivated students, who strive to make the world a better place. The scholarship covers the tuition fee and accommodation for one course. Visit our website for application requirements.



WWW.AMSTERDAMSUMMERSCHOOL.NL

AMSTERDAMSUMMERSCHOOL@VU.NL

+31 (0) 20 5986429

NATURE AND NURTURE: TWIN RESEARCH AND HUMAN GENETICS

30 JUNE - 14 JULY 2018



SUMMER COURSE IN AMSTERDAM

15 CONTACT HOURS

ADVANCED BACHELOR/ MASTER LEVEL

Do twins hold the key to understanding complex human traits and diseases? Can they resolve the age-old debate between nature and nurture? What is determined by our DNA, what comes from our environment? Thanks to recent technological advances, we are closer than ever to explaining where our individual differences come from. Our ability to map human DNA at high resolution in large populations is now enabling us to link genetic variation to traits and disease at the molecular level.

This interdisciplinary course puts you at the forefront of these exciting and important developments. You focus on twins to explore the interplay of genes and environment in determining behaviour, lifestyle and health.

Uniquely, you gain hands-on access to the world-renowned Netherlands Twin Register at VU Amsterdam – one of the largest longitudinal databases of its kind. Your tutors are scientists closely associated with this core asset, the people who collect the information and work with it on a daily basis to unravel the genetic etiology of a wide range of medical conditions and personal characteristics. They train you in working with twin data and information from genomics and epigenetics. You learn how to collect material on behaviour and health and how to use molecular data to better understand the path from genetics to medicine. Naturally, we also cover the theoretical and philosophical background to help you interpret genetic studies, understand effective methods and designs and increase your understanding of complex human traits.



WHO SHOULD JOIN

All students and professionals interested in the rapidly evolving field of human genetics, especially those aspiring to join its international research community. Our courses are multi-disciplinary and therefore are open to students and professionals with a wide variety of backgrounds.

LEARNING OBJECTIVES

At the end of this course the students:

- Understand and can interpret results from genetic studies of complex human behavioural traits.
- Understand the current state of human genetics research from a historical perspective and can contribute to discussions about gene-environment interaction.
- Can analyse genetically informative twin and family data.
- Understand the assessment and diagnosis of traits and phenotypes.
- Can work with multiple "-omics" data: genomics, epigenomics, transcriptomics and microbiomics.

EXCURSIONS

Visits to biobank facilities and laboratories, and twin activities in Amsterdam.

Course level	Advanced Bachelor/Master
Session	1
Co-ordinating lecturer	Dr Camelia Minica & Dr Hamdi Mbarek
Other lecturers	prof. Dr Meike Bartels, Dr Abdel Abdellaoui, prof. Dr Dorret I. Boomsma, prof. Dr Eco J. C. de Geus, prof. Dr Conor Dolan, Dr Michel Nivard, Dr Jenny van Dongen, Dr Dennis van 't Ent, Dr Elsje van Bergen, Dr Gonneke Willemsen, Dr Jouke-Jan Hottenga, Dr Rick Janssen. Guest lecturers to be announced
Form(s) of tuition	Lectures, practicals, workshops, excursions
Form(s) of assessment	Attendance, presentations, assignments
ECTS	3 credits
Contact hours	45
Tuition fee	€1000

COURSE INFO

AMSTERDAM FACTS

- Capital of the Netherlands
- Europe's safest city on The Economist Safe City Index
- 187 nationalities more than any other city in the world!
- 93% of the Dutch speak English
- 881.000 bicycles and 40 parks to bike through
- A total of 165 canals: Venice eat your heart out

VRIJE UNIVERSITEIT AMSTERDAM

The Vrije Universiteit Amsterdam (VU) is an internationally renowned research university. Since its founding in 1880 interdisciplinary research has been leading in its education. The university consists of nine faculties with teaching facilities for 22.000 students. With over 120 English-taught Bachelor's and Master's programmes, the university offers a wide range of study options. The campus is a centrally located hub where people feel at home and engage in innovative ways.

WHAT CAN YOU EXPECT

- Various housing options for all students
- Airport pick up service
- Support before, during and after the programme
- Emergency assistance
- Orientation and social programme

APPLICATION DEADLINE

Enrollment opens from mid-December 2017 until 1 May 2018. Requirements differ per course. For more information on how to apply, please visit our website.

DISCOUNTS AND SCHOLARSHIP

Early bird discount of €150 for anyone who applies before 15 March 2018. €250 discount for students from partner universities. For more info please check our website.

CONTACT

www.amsterdamsummerschool.nl





GENES IN BEHAVIOUR AND HEALTH (RESEARCH MASTER)

WWW.VU.NL/GENES



TO UNDERSTAND BEHAVIOUR AND HEALTH, WE NEED TO UNDERSTAND THE INFLUENCE OF OUR GENES

While the 20th century was the century of physics, we have now entered the century of the genome. Twin studies and molecular genetic studies have highlighted the influence of our genetic code on our behaviour and health. To understand and influence behaviour and health, we need to increase our understanding of the way our genes play their part, by itself and in interaction with our environment.

This master will equip you with the knowledge and understanding of the relevant research methods to design and carry out high-quality research within the field of behaviour genetics and genetic epidemiology.

Opting for this programme brings you into an inspiring research environment. The department of Biological Psychology is famous for its Netherlands Twin Register, an unique data repository, containing genetic and environmental information for more than 50,000 twin families, who are followed longitudinally.

WHY STUDY AT VU AMSTERDAM?

- Unique study program
 The research master is unique in the
 Netherlands and one of the few
 programmes worldwide to offer such a
 comprehensive master program in
 behaviour genetics.
- Active research environment The teaching staff regularly publish in leading international journals, and are actively involved in large international collaborations.

International orientation

All courses are taught in English and the programme aims to prepare students for an international (academic) career.

CAREER PROSPECTS

As a young researcher with knowledge of behavioural sciences, genetic epidemiology, statistical genetics and omics you will have excellent career perspectives. Most graduates will continue to pursue a career in science and do their PhD at a university. Outside academia, jobs may be found in biotechnology oriented top sectors focused on health or medical technology where graduates can work as consultants, researchers or big data analysists.

ADMISSION REQUIREMENTS

- A relevant Bachelor's degree in the field Psychology, Health Sciences, Biomedical Sciences, Bioinformatics, Educational Science or a closely related subject area
- Average grade: 7.5 or higher (NL) or equivalent
- An active interest in research
- Proficiency in English

ANGUAGE, ENGLISH URATION: 2 YEARS/ FULLTIME DMISSION DEADLINE: DUTCH STUDENTS UNE 1, FOREIGN STUDENTS, APRIL 3, DR UNE 1 ICONSULT OUR WEBSITET

MORE INFORMATION?

WWW VU NL/GENES For more details on the programme admission and application