



# VUW - ZHAW Double Degree Program Master of Computer Science

The Double Degree program in Computer Science allows outstanding Bachelor graduate students to acquire a Master of Computer Science from the <u>Victoria University of Wellington</u>, <u>New Zealand</u> a Master of Science in Engineering degree from the <u>Zurich University of Applied Sciences</u>, <u>Switzerland</u>.

The program lasts two years in total and offers different options, which are described below in more details. However, for every option one year is spent at the home university, and one year at the partner university. The master thesis is co-supervised by academics from both universities.

Program duration: 2 academic years

**Eligible students:** BSc or BA graduates in computer science or related subjects, with a minimal average GPA of B.

# **Degrees after graduation:**

VUW: Master of Computer Science (MCompSc)

ZHAW: Master of Science ZHAW in Engineering, with Specialization in Computer Science (MSE ZHAW)

**Tuition Fees:** Students pay the tuition at their home university for the entire program duration. Fees at the partner university are waived.

**Scholarships:** For VUW students a scholarship of 3 kCHF is available for their stay at ZHAW, for ZHAW students a 2.5 kCHF scholarship is available for their stay at VUW. The scholarship is provided by the ZHAW School of Engineering and the application will take place during the registration process for the stay at the partner university.

## **Application deadlines:**

Interested students can either apply before they start the master program at the home university, or during their first semester. Applications are accepted on a rolling basis (no fixed deadlines) but need to be targeted at the next forthcoming semester or trimester.

# **Application procedures:**

Send the following documents as one single pdf file to the academic contacts of your home university. A selection committee will review your application and send you the decision letter within max 4 weeks.

- CV, max 2 pages
- > BSc or BA diploma
- > BSc or BA grade transcript
- Motivation letter with career intentions
- Support letter of a lecturer or advisor

#### **Academic Contacts:**

VUW: Prof. Aaron Chen, Programme Director Postgraduate Science, <a href="mailto:aaron.chen@vuw.ac.nz">aaron.chen@vuw.ac.nz</a> ZHAW: Prof. Konrad Stadler, MSE Programme Study Director, <a href="mailto:konrad.stadler@zhaw.ch">konrad.stadler@zhaw.ch</a>

## **Administrative Contacts:**

VUW: Angie Serrao, Internationalisation Programmes Senior Adviser, angie.serrao@vuw.ac.nz

ZHAW: Patricia Heuberger, Head International Relations, patricia.heuberger@zhaw.ch

## Different options of structuring the program:

#### **VUW**

Option 1: First academic year at VUW, second academic year at ZHAW

Option 2: One trimester at VUW, one academic year at ZHAW, final trimester at VUW

## **ZHAW**

Option 1: First academic year at ZHAW, second academic year at VUW

ZHAW students must enroll for the Master of Science in Engineering (MSE) programme and can apply to the double degree programme during semester one. If the student passes the exams of semester one with good to excellent grades, he or she will be admitted to the double degree programme. Selection of candidates is competitive.

## Compulsory modules to fulfill the double degree study requirements:

#### **ZHAW Switzerland**

A selection of the below mentioned modules, depending whether the student is at ZHAW during spring (trimester 1) or fall semester (trimester 2)

- Analysis of Sequential Data
- Machine Learning and Data in Operation
- Applied Statistics and Data Analysis
- Management of Complex Processes
- Smart Services
- Advanced Network Security
- Cloud Computing
- Theoretical Computing Science
- Privacy and Law
- Al seminar
- Spcialisation project

## **VUW New Zealand**

A selection of the below mentioned modules, depending whether the student is at VUW during spring (trimester 1) or fall semester (trimester 2)

- Artificial Intelligence
- Evolutionary Computation and Learning
- Current Topics in Artificial Intelligence
- Offensive and Defensive Security
- Cybercrime Investigations
- Malware Analysis
  - Simulation & Stochastic Models
- Digital Forensics
- Probabilistic Machine Learning
- Offensive and Defensive Security
- Applications and Implications of Artificial Intelligence
- Human Computer Interaction
- Protocols and Architecture for the Internet of Things
- Advanced Programming Languages
- Advanced Database Design and Implementation
- Database System Engineerin
- Directed Individual Study
- Big Data
- Text Mining and Natural Language Processing
- Neural Networks and Deep Learning

## **Master Thesis**

The master thesis (Research Project) can be conducted at ZHAW or VUW, but is cosupervised from faculty of each of the university in any case.

## Quotes from participants of the program



Thamena, VUW Joël, ZHAW

**Thamena, VUW student:** "I highly appreciate the applied approach at ZHAW and the many exciting projects I can work on during my project modules. I can directly apply my theoretical skills, which is hugely rewarding."

**Joël, ZHAW student:** "I am looking forward to the more theoretical and basic science approach at VUW and I hope it's not too much math."

## **FAQ**

## Do you offer this program also for other profiles and degrees?

Not at the moment, but it is planned to expand it to other engineering fields, such as Electrical Engineering.

## Can I apply to the program one year or earlier before starting my masters degree?

No. Please submit your application around 4-6 months before starting the masters program.

## Can I apply if I have a lower mark than B in my BSc/BA diploma?

No, your application will not be accepted.

## Is there anything I need to take into account for my stay abroad?

Switzerland is rather expensive country. The scholarship mitigates the cost, but it is advisable if you have additional financial aid, a loan or some savings.

## How long takes the visa application process?

To receive your student visa for your stay at the partner university, it can take up 12 weeks. Make sure you apply well in advance to the visa.