



## Master's programme

# Biofabrication



### IS THIS PROGRAMME FOR YOU?

Biofabrication combines advanced fabrication techniques with biological systems to prepare designed tissue constructs. These can be applied for tissue engineering, as 3D in vitro biological models or as medical therapeutic products.

This programme is interesting for students with a background in biomedical sciences or engineering but also from many other disciplines. However, strong affinity with both technology and biology are prerequisites, as well as the ability to quickly grasp concepts from new fields of study.

### WHY SHOULD YOU STUDY BIOFABRICATION IN UTRECHT?

Students enrolled in the Biofabrication programme at Utrecht University get the opportunity to complete their coursework required for the degree in Utrecht at Utrecht University / UMC Utrecht, as well as a research project that fills the first year.

### DURING YOUR STUDIES

Biofabrication is a truly multidisciplinary area of research. It requires an understanding of chemistry, physics, biology, medicine, robotics and computer science. In this respect, few researchers entering the biofabrication field have been trained in such a diverse range of subjects.

The structure of the master's programme offers the opportunity to design a tailor-made programme, by choosing elective courses and research projects that suit your background and interest, and instruct you in the areas in which you are less knowledgeable.

- **World's first degree in biofabrication**
- **Research project(s) in renown international research groups**
- **International community**

### PROGRAMME OUTLINE

**Duration:** 2 years

**EC:** 120

**Language:** English

**Start:** September

**Application deadline EU/EE students:** 1 April

**Degree:** Master of Science

This Master's programme is registered under the name Biomedical Sciences (code 66990) and is organised by the Graduate School of Life Sciences, Utrecht University.

### CAREER PROSPECTS

As a Biofabrication student you will be part of an international community. Due to the interdisciplinary nature of biofabrication, scientists in the field will require collaborations throughout their professional career. This programme therefore plans to establish a culture of excellence and cooperation within the research programme. Students completing this programme are expected to help shape the biofabrication and 3D printing industries and research landscape.

### ADMISSION

A Dutch or equivalent foreign BSc in a biofabrication-related field (biomedical sciences or engineering, materials science, chemistry, biology, biotechnology etc.) is required. Proficiency in written and spoken English is essential, as well as an above-average track record, strong motivation and interest. For up-to-date information, please check [www.uu.nl/masters/biofab](http://www.uu.nl/masters/biofab)

### STUDY PROGRAMME

The student creates his or her own Master's programme of 120 ECTS credits. The components of the programme, as presented in the table below, can be followed in any given order, except for the obligatory introductory course.



### ... the opportunities are quite unique ...

"Utrecht's Master's in Biofabrication offers excellent preparation for a career in the biofabrication area. A clear highlight is the two internships, which are a chance to experience working in a lab, getting a feel for what is involved in a career in research, exploring different areas of interest and developing all-important skills and knowledge in conducting experiments. I gained an international network and a well-rounded knowledge of research techniques and topics. The internships were very good preparation for a smooth transition into a PhD position: I gained experience in state-of-the-art institutes and learned how to independently navigate the academic work environment."

**Madison Ainsworth, alumnus**

Read the full interview on [www.uu.nl/masters/biofab](http://www.uu.nl/masters/biofab)

## Programme scheme

51 EC	Major Research Project	33 EC	Minor Research Project
15 EC	Mandatory theoretical courses	12 EC	Elective component
7.5 EC	Writing assignment	1.5 EC	Life Sciences Academy



**MASTER  
YOUR  
FUTURE**  
AT UTRECHT UNIVERSITY

[www.uu.nl/masters](http://www.uu.nl/masters)

### More information

Programme coordinator

Paulina Núñez Bernal, MSc

Email: [p.nunezbernal@umcutrecht.nl](mailto:p.nunezbernal@umcutrecht.nl)

Dept. of Orthopaedics

Regenerative Medicine Center Utrecht

[www.uu.nl/masters/biofab](http://www.uu.nl/masters/biofab)

