

## Goal

Interested to become an expert in genetic diagnosis of human diseases? Would you like to use stem cells to reconstruct missing parts of the body? Or may be you are thinking in using animal models for understanding how genes work? Perhaps you would like to discover hidden gems in complex genomes? In this master you will receive up-to-date, in-depth training based on the latest genomics and genetics advances.

## Specialization

You may choose the **Human Genetics and Genomics** specialization that will train you in genomic medicine and personalized diagnosis for health, clinical and research institutions. You may choose the **Genetics and Genomics of Development** specialization, which will train you in the analysis of genes and genomes for research studies of development, stem cell research, regeneration and evolution.. You will be able to do your master thesis in a research laboratory (5 to 8 months research work). Several laboratories, hospitals, companies and facilities, national and international are involved in this program.

## Basic Information

Degree level  
**Master**

Specialties  
**Human Genetics and Development**

School (Lectures)  
**School of Biology Campus Pedralbes University of Barcelona**

Research project (Master Thesis)  
**Choice of over 50 research laboratories national or international**

Language of instruction  
**English**

Duration  
**1 year**

Credits  
**60 ECTS**

Start Studies  
**September 27th 2022**

Pre-enrolment period  
**From February to June 2022.**

Open on-line pre-enrolment in the web starting on February 2022  
**[www.ub.edu/estudis/mastersuniversitaris/geneticagenomica/](http://www.ub.edu/estudis/mastersuniversitaris/geneticagenomica/)**

Resolution of Admissions  
**Last week of June 2022**

Enrollment  
**July and September 2022.**

Eligibility  
**Eligibility to apply for a master's program requires an applicable bachelor's degree or other equivalent qualification (see web)**

## Contact

Contact information:

Send us a message and we will get back to you as soon as possible  
**[master.genetica@ub.edu](mailto:master.genetica@ub.edu)**

Follow us on twitter  
**@MasterGeneUB**

Get this QR for further information



# Master in Genetics and Genomics

10 ECTS

## Mandatory Module

Advanced Genetic Analysis and Functional Genomics  
Epigenetics and Cellular Memory  
Human Genome

15 ECTS

## Speciality Modules

### Genetics and Genomics of Development

Developmental Genetics and Genomics  
Evolution and Development  
Stem Cells and Regeneration  
Fluorescence and Image Analysis

### Human Genetics and Genomics

Mendelian and Complex Genetic Diseases  
Genetic Diagnosis  
Seminars in Genetics Research  
Forensic Genetics

5 ECTS

## Elective Module

Advanced Bioinformatics  
Advanced Techniques in Genetic Engineering  
High Throughput Analysis of Genomic Data  
Differentiation during Fetal and Neonatal Development  
Comparative Genomics  
Organogenesis and Aging  
Bioethics  
Or choose any from the other specialities

30 ECTS

## Research Project and Master Thesis / TFM

Choose research project and laboratory for your Master Thesis from the list on this QR or in the Master's web page.



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BARCELONA

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