

MASTER'S DEGREE IN STRUCTURAL AND CONSTRUCTION ENGINEERING

ESCOLA DE CAMINS

Barcelona School of Civil Engineering



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

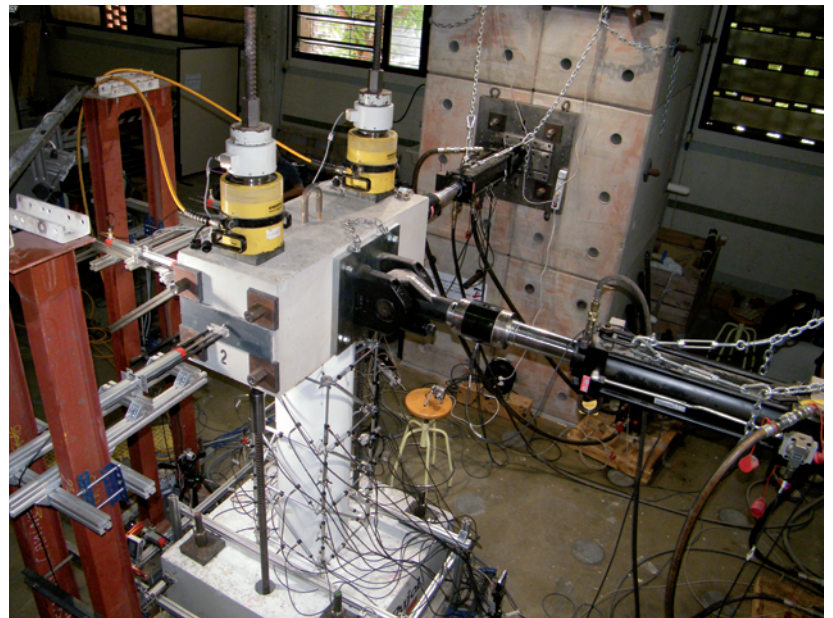
International Campus of Excellence

MASTER'S DEGREE IN STRUCTURAL AND CONSTRUCTION ENGINEERING

1 international reference laboratory
for innovation and experimentation
in structures and materials

The master's degree in Structural and Construction Engineering provides comprehensive training in the field of structural and construction engineering. Students conduct detailed study of topics such as the resistance mechanisms of structures, construction materials and processes, materials-related durability and technology, construction processes and organisational methods, the effective management of construction projects, the environmental and socioeconomic impact of construction work, safety, quality, and sustainability.

The master's degree, which has the International Master's Programme distinction, is aimed at candidates with an academic or professional background in structural and construction engineering, including but not limited to graduates in civil engineering, public works engineering, geological engineering, industrial engineering, architecture, technical architecture and equivalent fields in Europe and across the globe.



54%
international
students

3
research groups recognised by
the Government of Catalonia

39th
in the QS Ranking in civil and
structural engineering

Professional opportunities

Graduates of the master's degree may find employment in structural analysis, structural design and technology and construction engineering, primarily in the fields of civil engineering and building construction. They may also work in project and process development engineering firms; companies carrying out project and works management and site supervision; construction companies; companies dealing with infrastructure management and use; public administrations and companies carrying out planning, design, execution and operation of civil engineering works and buildings; technological and research centres; and universities.

Languages

Face-to-face teaching is in Spanish or Catalan, although some subjects may be taught in English.

Work placement

You can go on work placement at national or international companies and institutions to gain professional experience.

International recognition

The QS World University Rankings by Subject ranks the top 200 universities in

the world according to their reputation and scientific output and impact. In the fields of civil and structural engineering, the UPC is first in Spain, and 39th worldwide, according to the 2016 edition of the ranking.

Research

All of the lecturers have PhDs, and they have all published their work in international journals and received awards and distinctions for their research. They also act as advisors on structural and constructive issues related to landmark buildings and large-scale infrastructure. Lecturers carry out their research through research groups and laboratories. A large part of the work they carry out consists in applied research with a strong emphasis on technology transfer to the construction industry.

Master's thesis

The master's thesis is oriented towards professional practice or research on a subject of the degree. The student must make an original contribution to the subject or devise a new application for an aspect of it. If your master's thesis has an experimental component, you will carry it out in laboratories, which promotes the acquisition of knowledge in experimental techniques and structural monitoring.

Specific requirements

To gain admission to the master's degree, you will need previous training in basic sciences, as well as basic training in areas directly related to civil engineering, structural engineering and building and public works construction.

The master's degree is aimed to graduates of bachelor's degrees in civil engineering, public works, geological, industrial technology, mechanical, architecture, architectural technology and building construction. For further information on these requirements, visit the master's degree website:

www.camins.upc.edu/estudis

90
ECTS

Which subjects will you choose?

SUBJECT AREA 1. Compulsory subjects Structural Engineering / Fundamentals of Structural Design / Construction Management / Seminars and Workshops	22,5
---	-------------

SUBJECT AREA 2. Analysis, Technology and Construction subjects All credits must be taken from a single academic pathway	27,5
---	-------------

SUBJECT AREA 3. Analysis, Technology and/or Construction subjects Credits can be taken from any of the three academic pathways	10
--	-----------

MASTER'S THESIS	30
------------------------	-----------

Consult the curriculum on the master's degree website: www.camins.upc.edu/estudis

MASTER'S DEGREE IN STRUCTURAL AND CONSTRUCTION ENGINEERING

Acquire
a solid grounding
in structural and
construction
engineering

You can carry out
the master's thesis on
an innovative and
creative subject in one
of the areas of
knowledge



Your talent, leading your future

Further information:
www.camins.upc.edu
area.academica@upc.edu
www.upc.edu/sri/en/students



UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

Barcelona School of Civil Engineering