

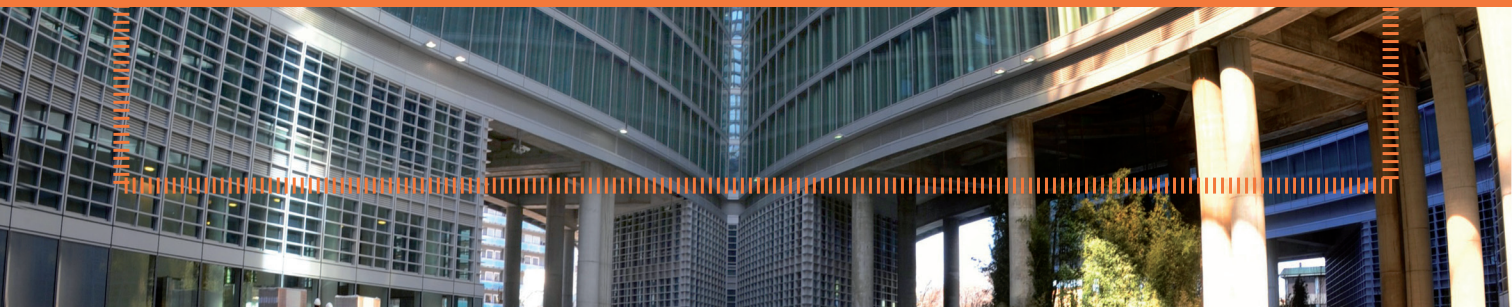


POLITECNICO
MILANO 1863

SCHOOL OF CIVIL, ENVIRONMENTAL
AND LAND MANAGEMENT ENGINEERING



CIVIL ENGINEERING



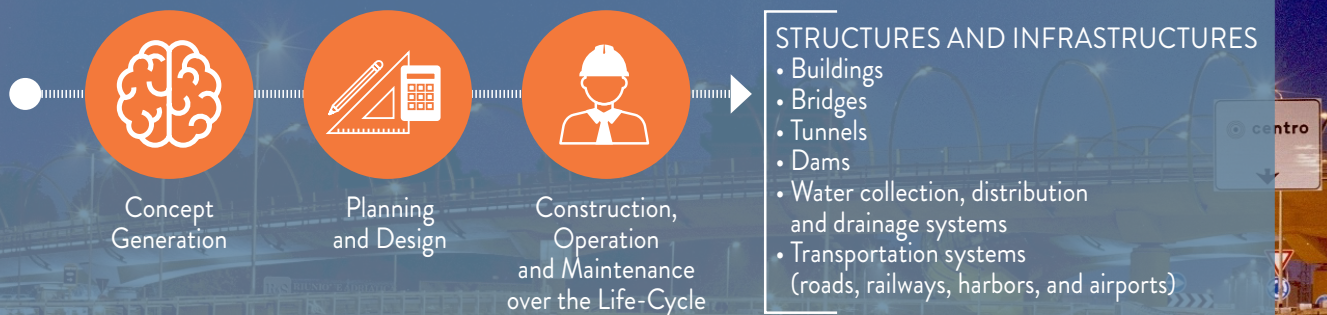
THE DEGREE PROGRAM IN CIVIL ENGINEERING

Civil Engineering deals with the planning, design, construction, assessment, monitoring, maintenance and management of structures and infrastructures, including buildings, bridges, tunnels, dams, water collection, distribution and drainage systems, transportation systems such as roads, railways, harbors, airports, and other engineering works that play a fundamental role for the economic growth and sustainable development of the modern society and resilient communities.

The realization of these civil engineering systems requires the capability to face complex challenges related to the rapid change of global socio-economic processes. This implies the fulfillment of continuously increasing safety and functionality requirements and the sustainable usage of natural resources, which may significantly affect both the economy and environment over time, involving future generations.

The Bachelor programme (BSc) in Civil Engineering aims at providing future professionals with sound theoretical principles of mathematics, physics, chemistry and computer science, together with the fundamentals of the core subjects of Civil Engineering (including surveying, mechanics of fluids, solids, soils and structures, structural design, hydraulic engineering works, transportation, infrastructures).

WHAT DOES A CIVIL ENGINEER DO?



EDUCATIONAL PROGRAM: LAUREA (BACHELOR OF SCIENCE)



TOPICS

BASIC DISCIPLINES

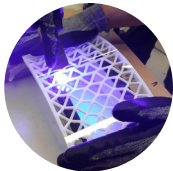
- > Mathematics
- > Geometry
- > Physics
- > Computer science
- > Chemistry
- > Rational mechanics

CORE DISCIPLINES

- > Surveying and data processing
- > Structural mechanics
- > Hydraulics
- > Geotechnics
- > Structural design
- > Hydraulic engineering
- > Construction of roads, railways, and airports



1st YEAR
(7 Exams)



2nd YEAR
(6 Exams)



3rd YEAR
(7 Exams, including
2 elective courses)



DEGREE



ENTERING
THE JOB
MARKET



MASTER OF SCIENCE
EDUCATIONAL
PROGRAM

LAUREA MAGISTRALE (MASTER OF SCIENCE)



1st YEAR
(5 Tracks)



2nd YEAR
(5 Tracks)



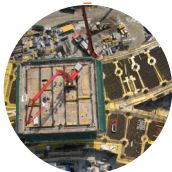
MASTER
OF SCIENCE
DEGREE



DOCTORAL
PROGRAMS




POST-GRADUATE
MASTER
PROGRAMS





ENTERING
THE JOB MARKET


5 TRACKS

The 2-year Master of Science program offers five tracks which allow graduate students to specialize in different sectors.

 **EARTHQUAKE ENGINEERING:** seismic design of new structures, assessment and retrofit of existing structures, effect of surface geology on earthquake ground motion.

 **STRUCTURES:** structural design and assessment of civil and industrial buildings, large structures, bridges, structural components for industrial plants.

 **GEOTECHNICS:** foundations, retaining walls, tunnels, underground pipelines, stability of slopes and excavations.

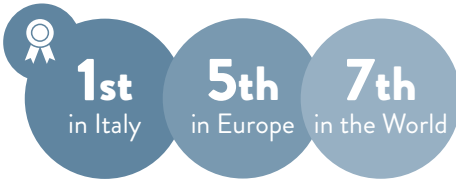
 **HYDRAULICS:** free surface water and groundwater, use and management of water resources, hydraulic protection of land, civil and industrial plants.

 **TRANSPORTATION INFRASTRUCTURES:** design, construction, and management of roads, railways, harbors, airports.



CIVIL ENGINEERING AT POLITECNICO DI MILANO

EXCELLENCE IN EDUCATION AND RESEARCH



CIVIL & STRUCTURAL
ENGINEERING

OVERALL SCORE **92,8 %**

ACADEMIC REPUTATION **88,4 %**

EMPLOYER REPUTATION **99,1 %**

CITATIONS PER PAPER **89,1 %**

H-INDEX CITATIONS **95,6 %**

2nd
in the
World

EMPLOYMENT
RATE

95%

1 year after graduation,
net of students

EMPLOYED WITHIN
6 MONTHS

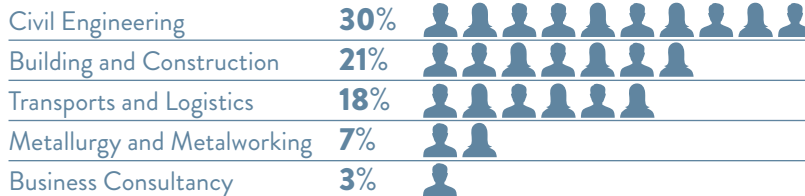
89%

Calculated on employed
after 1 year from graduation

NET MONTHLY
SALARY

€ 1.587

TOP 5 SECTORS



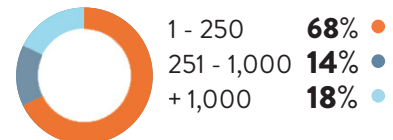
EMPLOYMENT STATUS



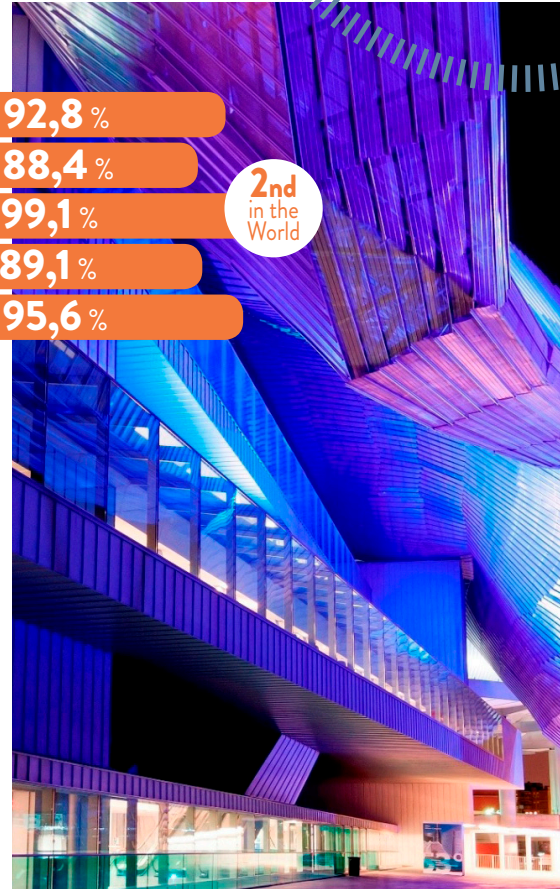
CONTRACT TYPE



COMPANY SIZE



Source of employment data: CareerService - Politecnico di Milano (2019)



REQUISITES AND APPLICATION PROCEDURE

In order to enter the degree program, an entrance test (Test On Line) shall be carried out during sessions predefined by Politecnico di Milano. Alternative tests accepted by Politecnico di Milano include SAT-GRE or GMAT above the minimum required.

<https://www.polimi.it/en/international-prospective-students/>
<https://www.poliorientami.polimi.it/come-si-accede/ingegneria>



<http://www.ingciv.polimi.it/en/>



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