

PhD EMPLOYMENT

DATA BOOK 2022

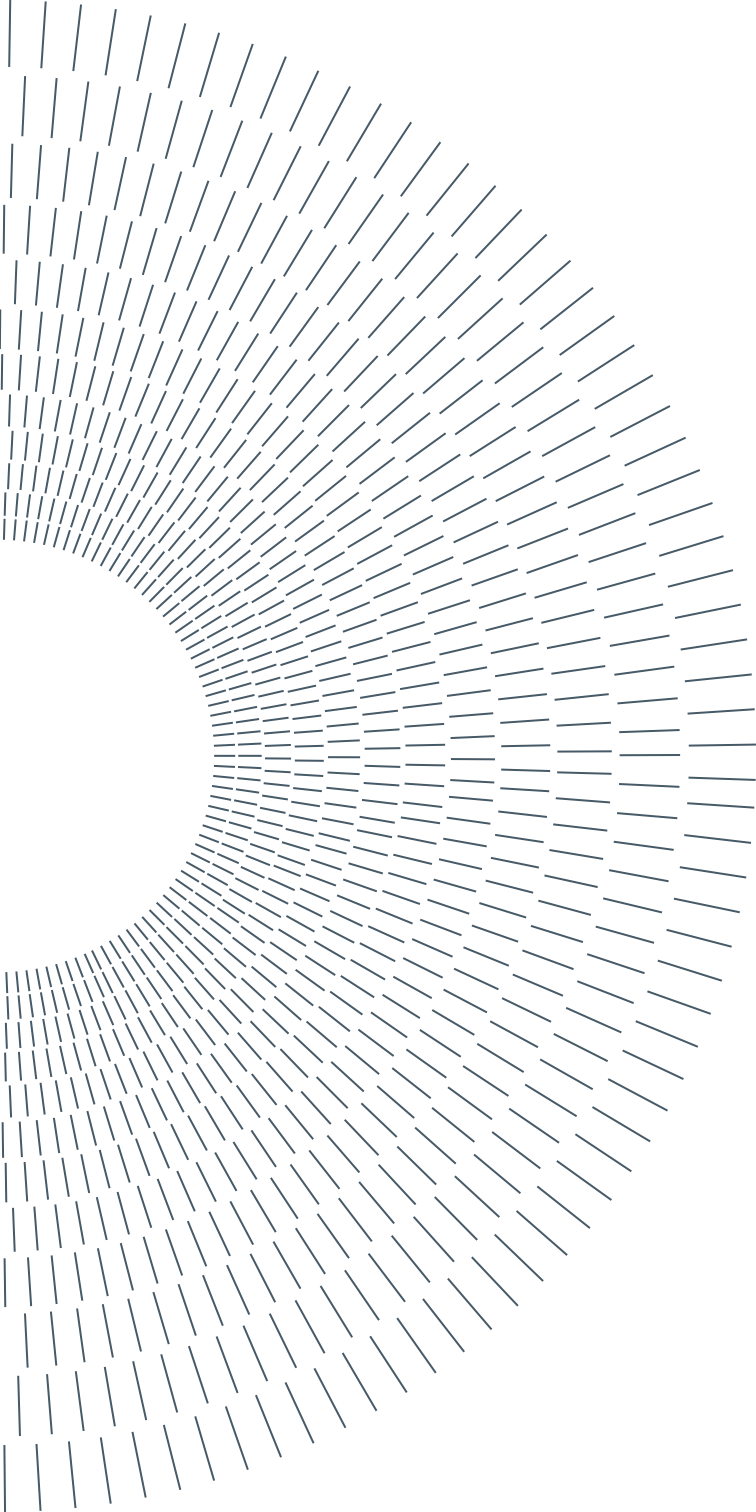


POLITECNICO
MILANO 1863



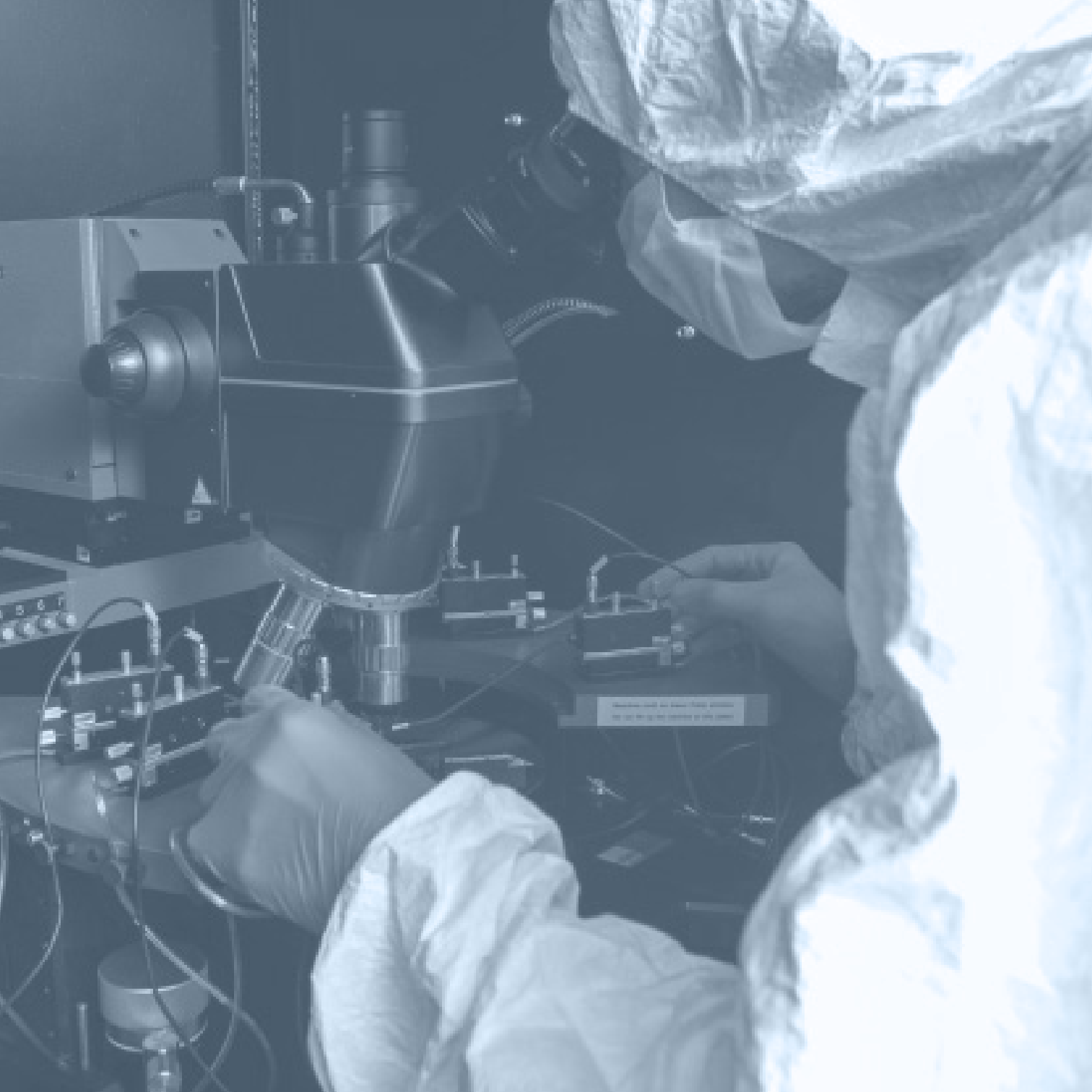
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PHD EMPLOYMENT DATA BOOK 2022

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XXX

XXX



SURVEY METHODOLOGY

Every two years Politecnico di Milano carries out an **employment survey** on **Ph.D graduates respectively one and two years after degree completion**, in order to verify the effectiveness of their educational path in the world of work and to address the right professional guidance purposes.

The present survey was conducted between January and February 2022 through mixed methodology (**CAWI**: online and **CATI**: phone). **The Ph.Ds were asked to answer a multiple -choice survey of about 20 questions.**



Employment Survey on **Ph.D graduates 1-2 years after degree completion**



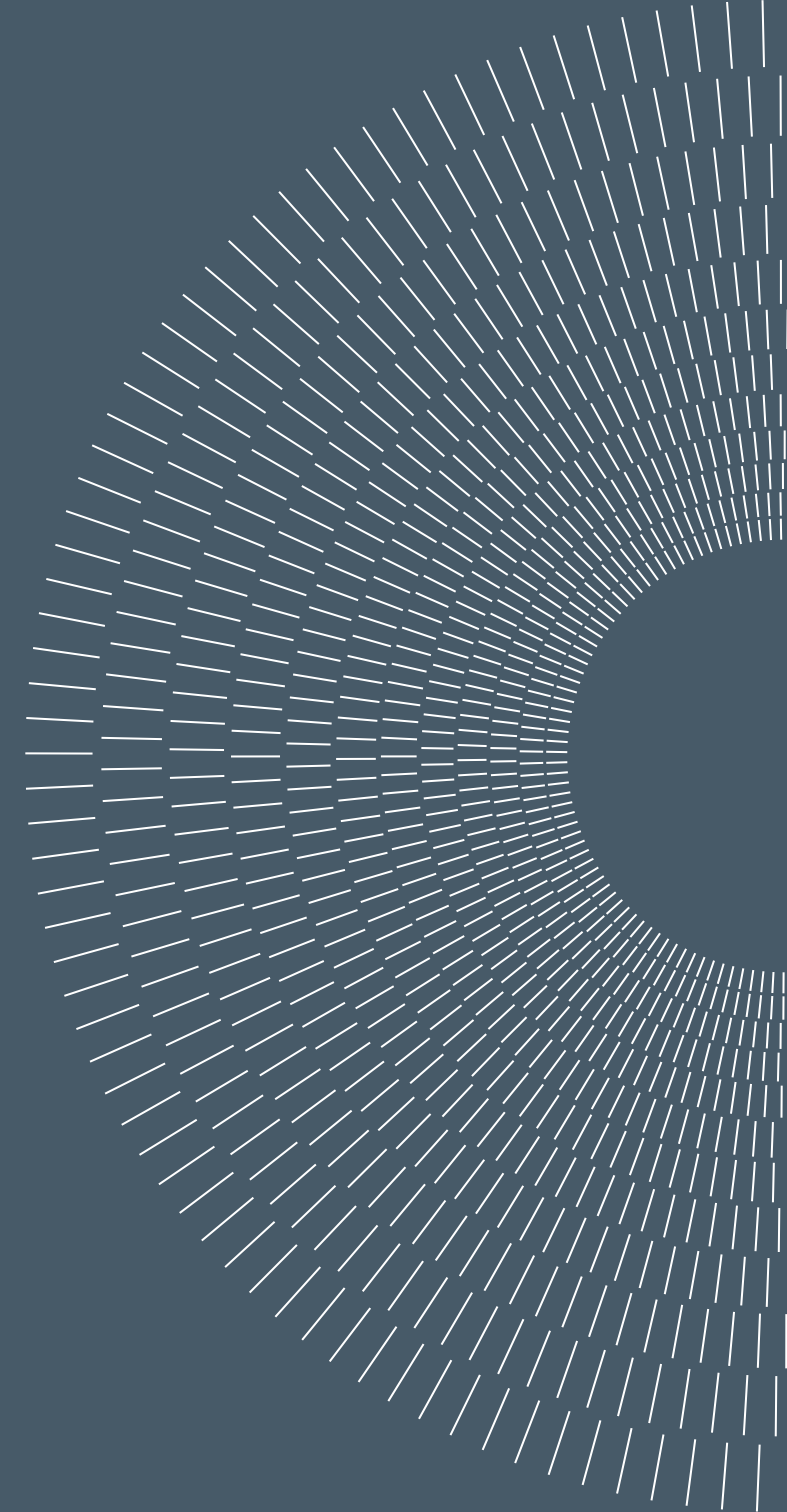
✉ **CAWI**: online
☎ **CATI**: by phone



20 QUESTION SURVEY

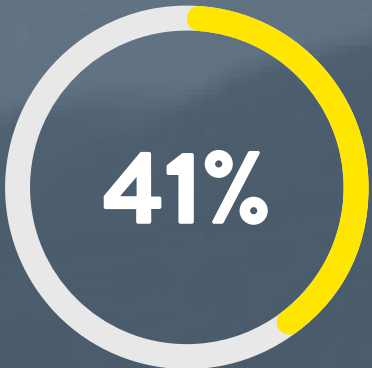
ITALIAN	SAMPLE: PHD CLASS OF 2019/2020	INTERNATIONAL
386	Obtained their Ph.D in the two-year period	161
293	Answered the survey	96
76%	Response rate	60%

PHD EMPLOYMENT

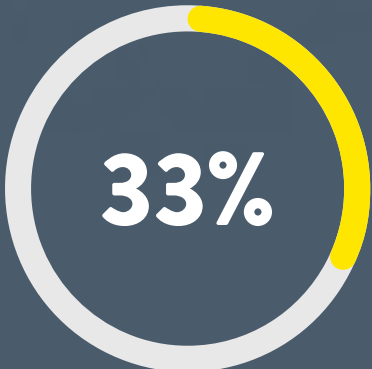


95% EMPLOYED*

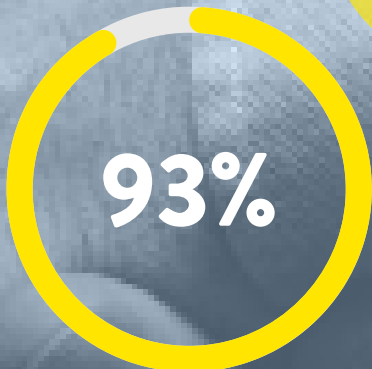
Almost all Ph.Ds interviewed were **employed within 1-2 years from degree completion (95%)** and about 40% were already working before the end of the Ph.D program. The main job market is Italy, while 37% chose to go abroad. Ph.Ds find their first employment in both the **university sector and the private sector (50% against 44%)**. Over **90%** of the sample hold an **employment contract**.



WERE EMPLOYED BEFORE DEGREE COMPLETION



FOUND A JOB IN LESS THAN ONE MONTH



ARE EMPLOYEES

ITALY 63%



WHERE DO THEY WORK?

37% ABROAD

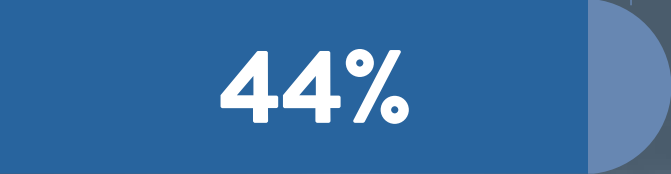
They go abroad:

For a better salary 49%

For a lack of opportunities at home 41%

For better career prospects 41%

IN WHICH SECTOR?



PUBLIC AUTHORITIES AND NON PROFIT ORGANIZATIONS

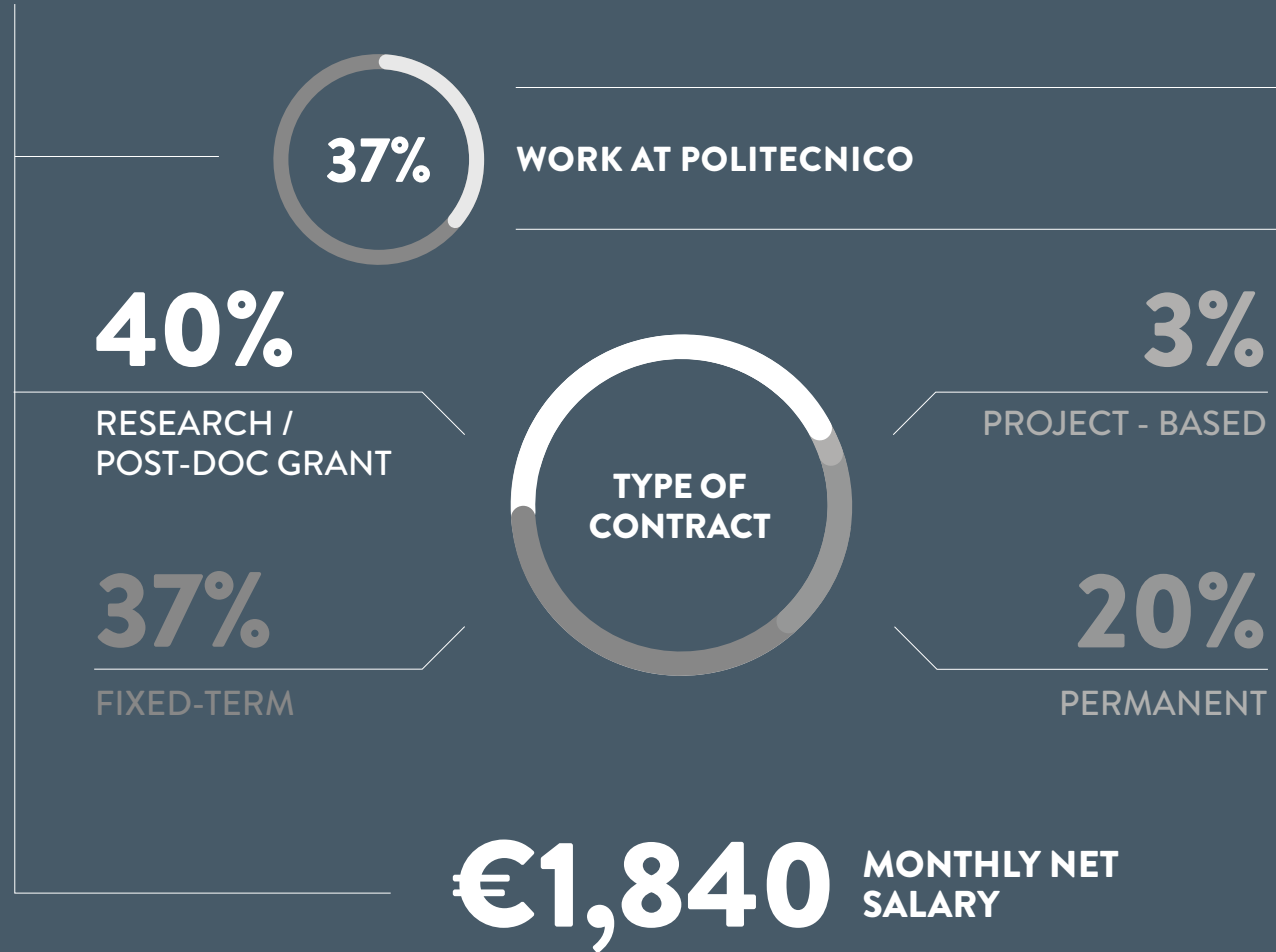
6%

* PERCENTAGE CALCULATED ON THE ACTIVE POPULATION (EMPLOYED + UNEMPLOYED IN SEARCH OF A NEW OR FIRST EMPLOYMENT)

PHD EMPLOYMENT: UNIVERSITY AND RESEARCH SECTOR



○ UNIVERSITIES AND RESEARCH INSTITUTES ● PRIVATE SECTOR ● P.A.



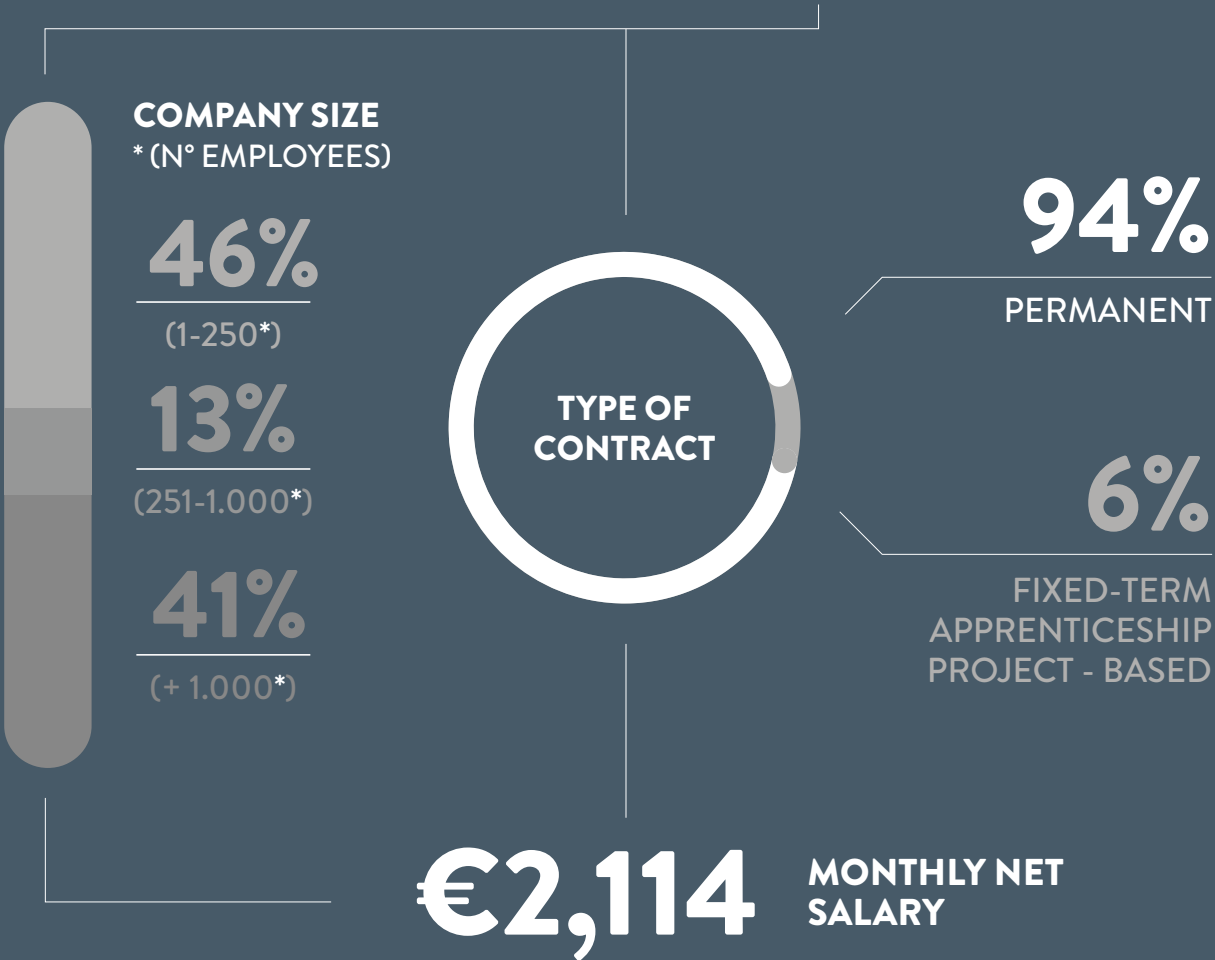
Politecnico di Milano is the main employer for those who work in universities and research institutes (37%). Contracts in the university sector are less stable than the private sector, **salaries reach 1,800 net euros per month**. Satisfaction is very high: **83%** of Ph.Ds employed in universities and research institutes **would enrol in the program again**; **96%** say to have a job that fits with the studies; 89% say that their degree is necessary to perform their job.



PHD EMPLOYMENT: PRIVATE SECTOR



● UNIVERSITIES AND RESEARCH INSTITUTES ○ PRIVATE SECTOR ● P.A.



The private sector offers stable contracts (**94%** hired **permanently**) and good salaries to new Ph.Ds (about monthly 270 euros more than in Research and University sector). They tend to **find employment** either in **small companies (46%)** or **big multinationals (41%)**. Good results in term of satisfaction: **88% have a job that fits with the studies** and over 50% say that their degree a Ph.D is necessary to perform their job.



50% UNIVERSITIES AND RESEARCH INSTITUTES

TYPE OF CONTRACT	40%	RESEARCH / POST-DOC GRANT	37%	FIXED - TERM
MONTHLY NET SALARY	€1,840			
WOULD CHOOSE TO DO THEIR PHD AGAIN	83%			
HAVE A JOB THAT FITS WITH THEIR STUDIES	96%			
HAVE A JOB THAT REQUIRES A PHD	89%			

44% PRIVATE SECTOR

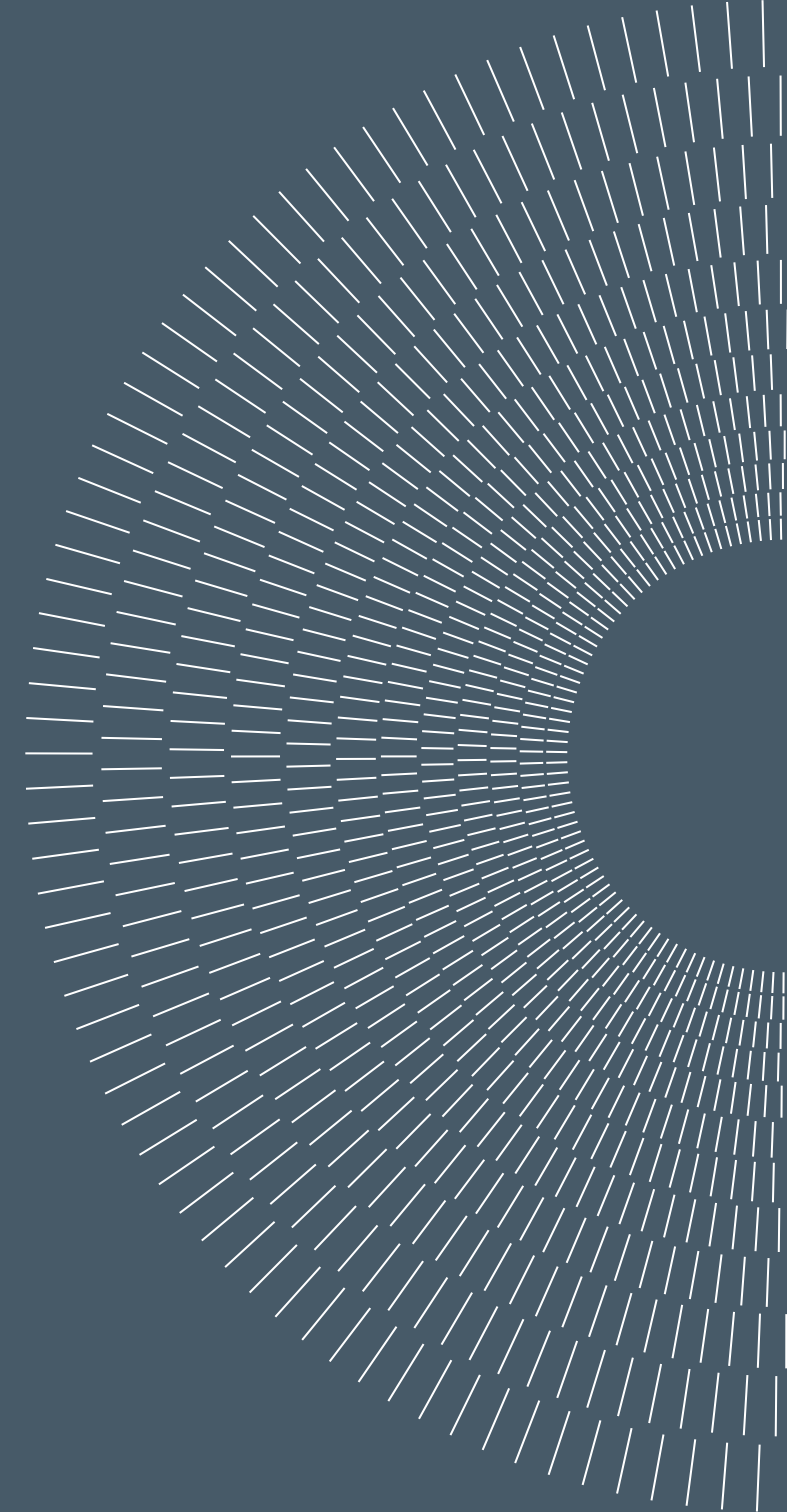
94%		PERMANENT	TYPE OF CONTRACT
€2,114		MONTHLY NET SALARY	
79%		WOULD CHOOSE TO DO THEIR PHD AGAIN	
88%		HAVE A JOB THAT FITS WITH THEIR STUDIES	
53%		HAVE A JOB THAT REQUIRES A PHD	

FOCUS BY AREA

ARCHITECTURE

DESIGN

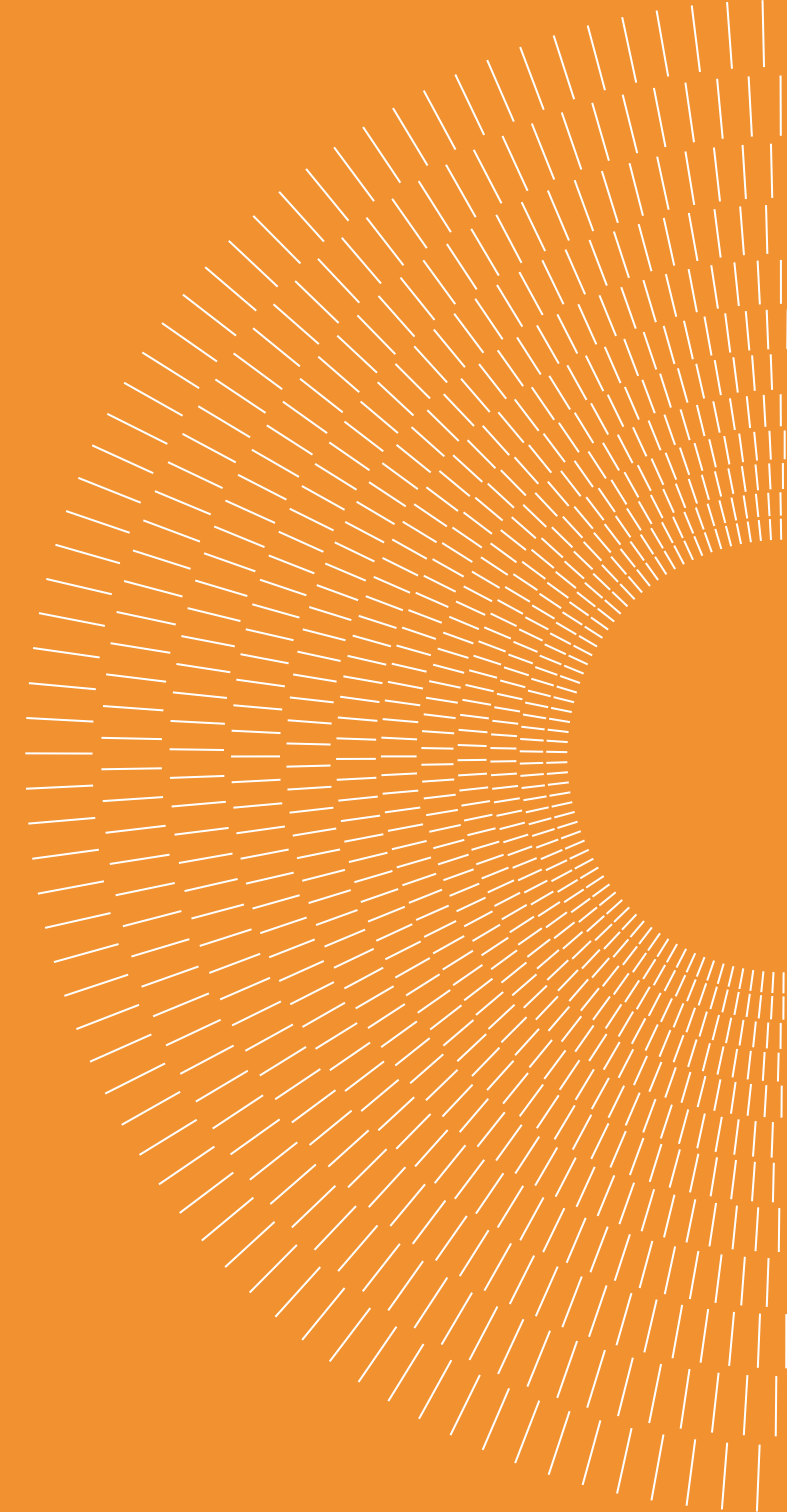
ENGINEERING

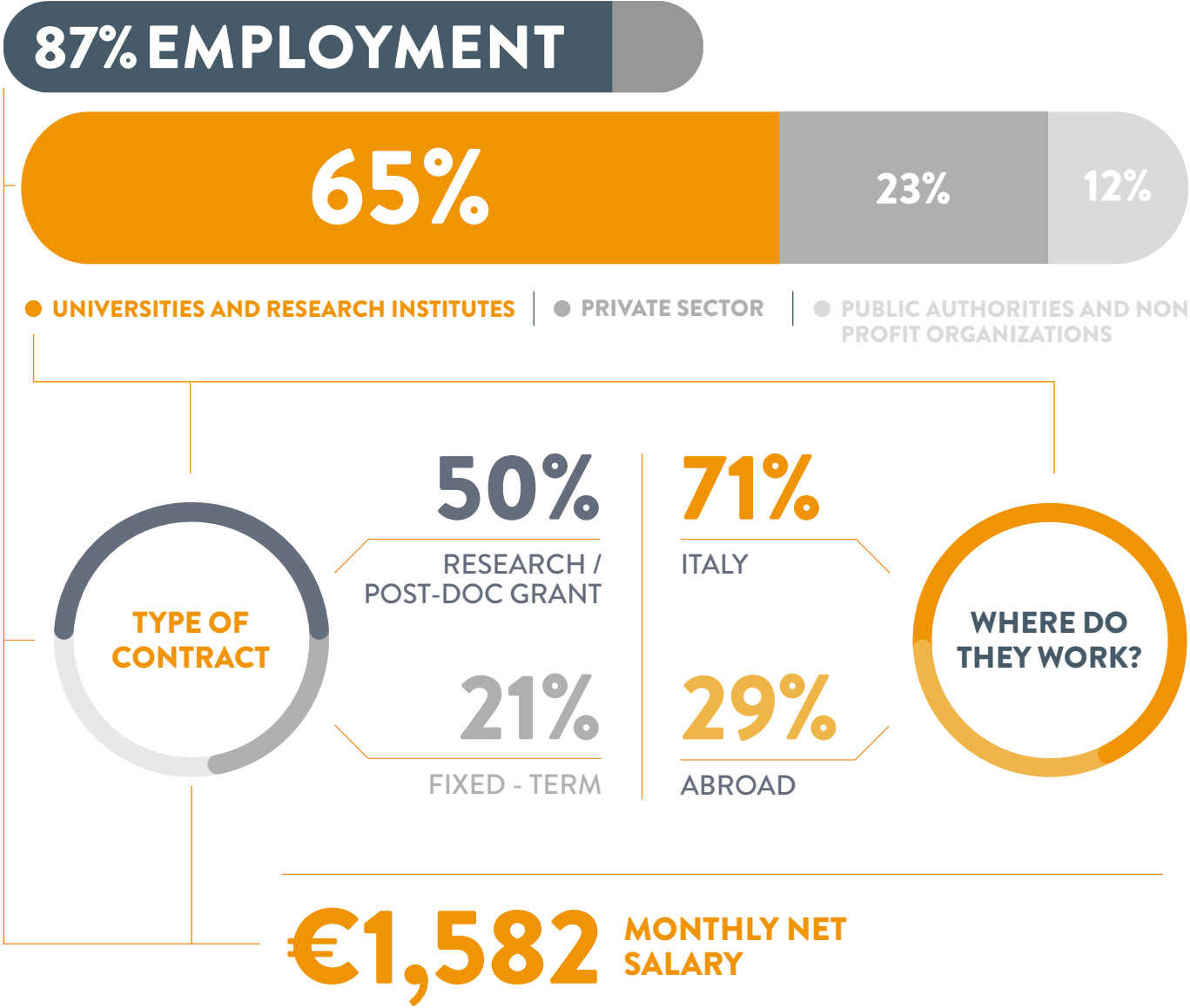


ARCHITECTURE

PHD COURSES

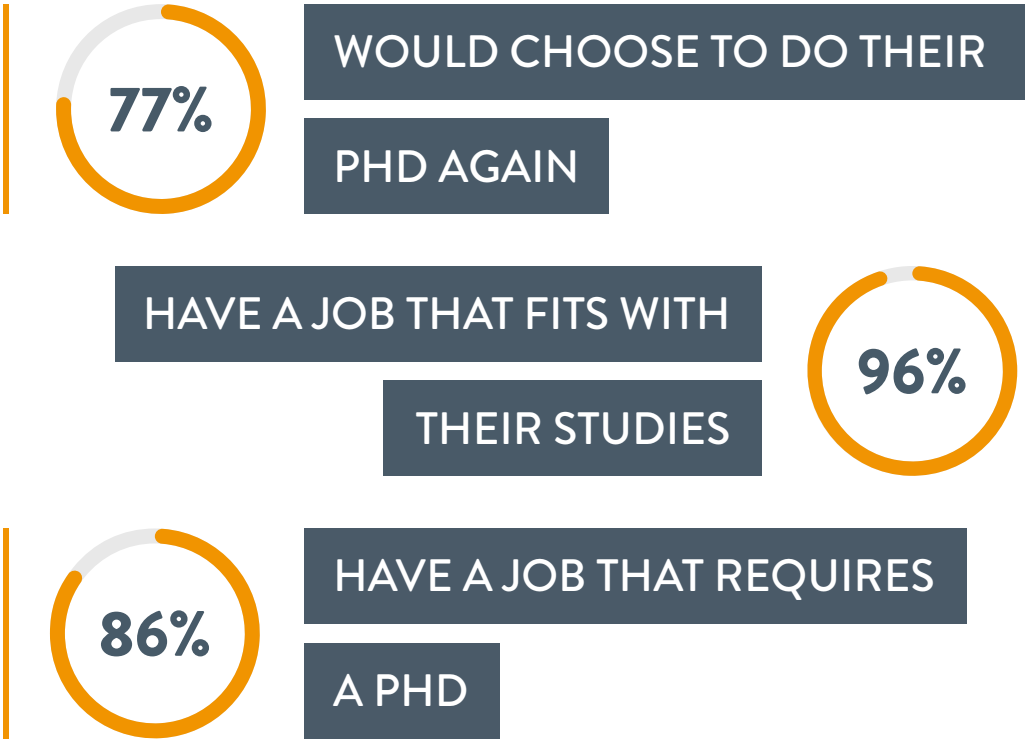
- **Architecture, Built Environment and Construction Engineering**
- **Architectural, Urban and Interior Design**
- **Preservation of the Architectural Heritage**
- **Urban planning, Design and Policy**





SAMPLE FOR ARCHITECTURE: 62 people interviewed, of which 52 employed.

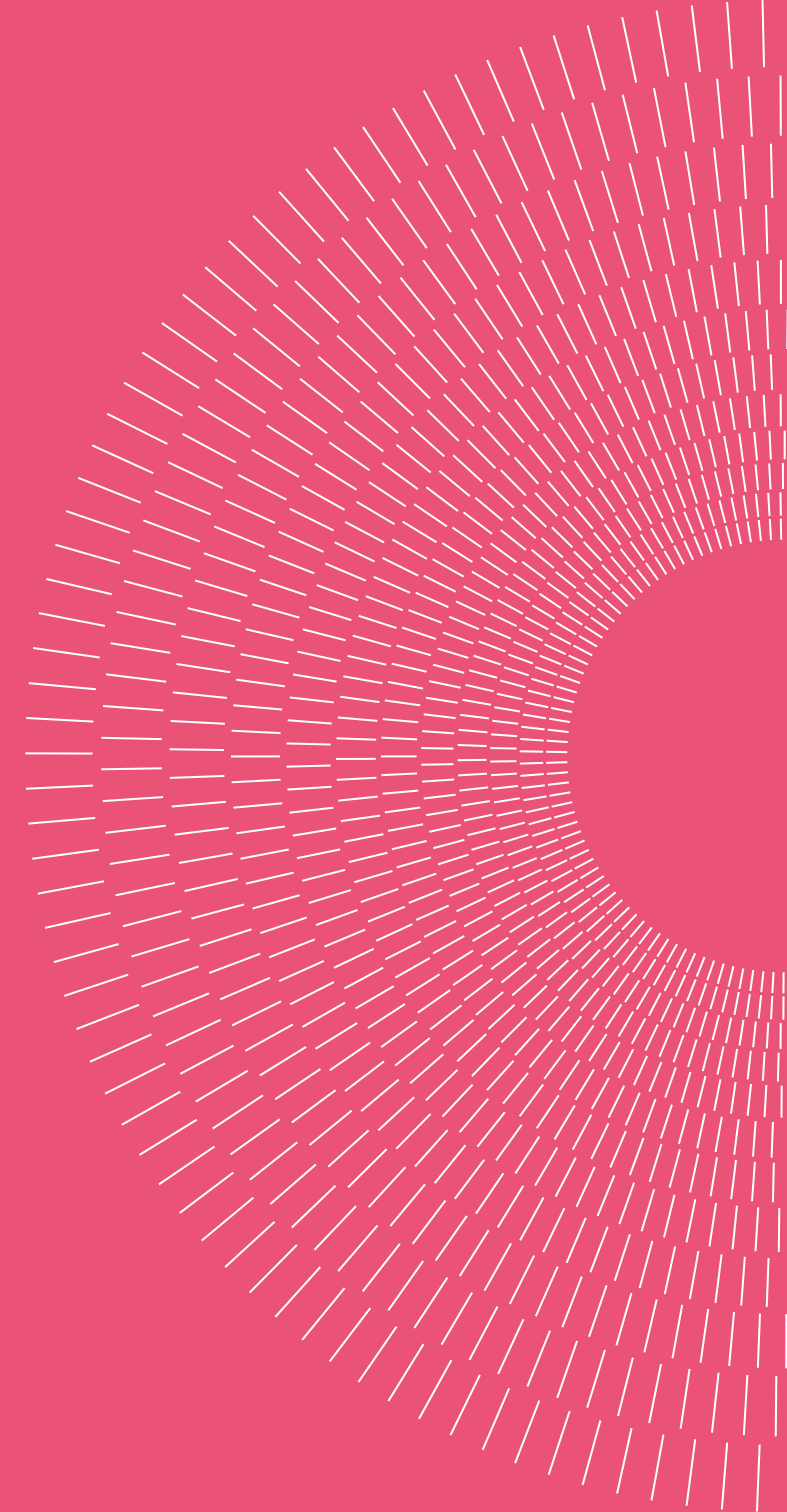
Most Ph.Ds in the Architectural Area (**65%**) work in **Universities or Research Bodies** (of which 43% at the Politecnico) in Italy (71%). Their contracts are not as stable and salaries low. They are generally satisfied with their path: **77% would enrol in the program again**; **96% have a job that fits with the studies** and **86%** declare that a **Ph.D is necessary for their work**.

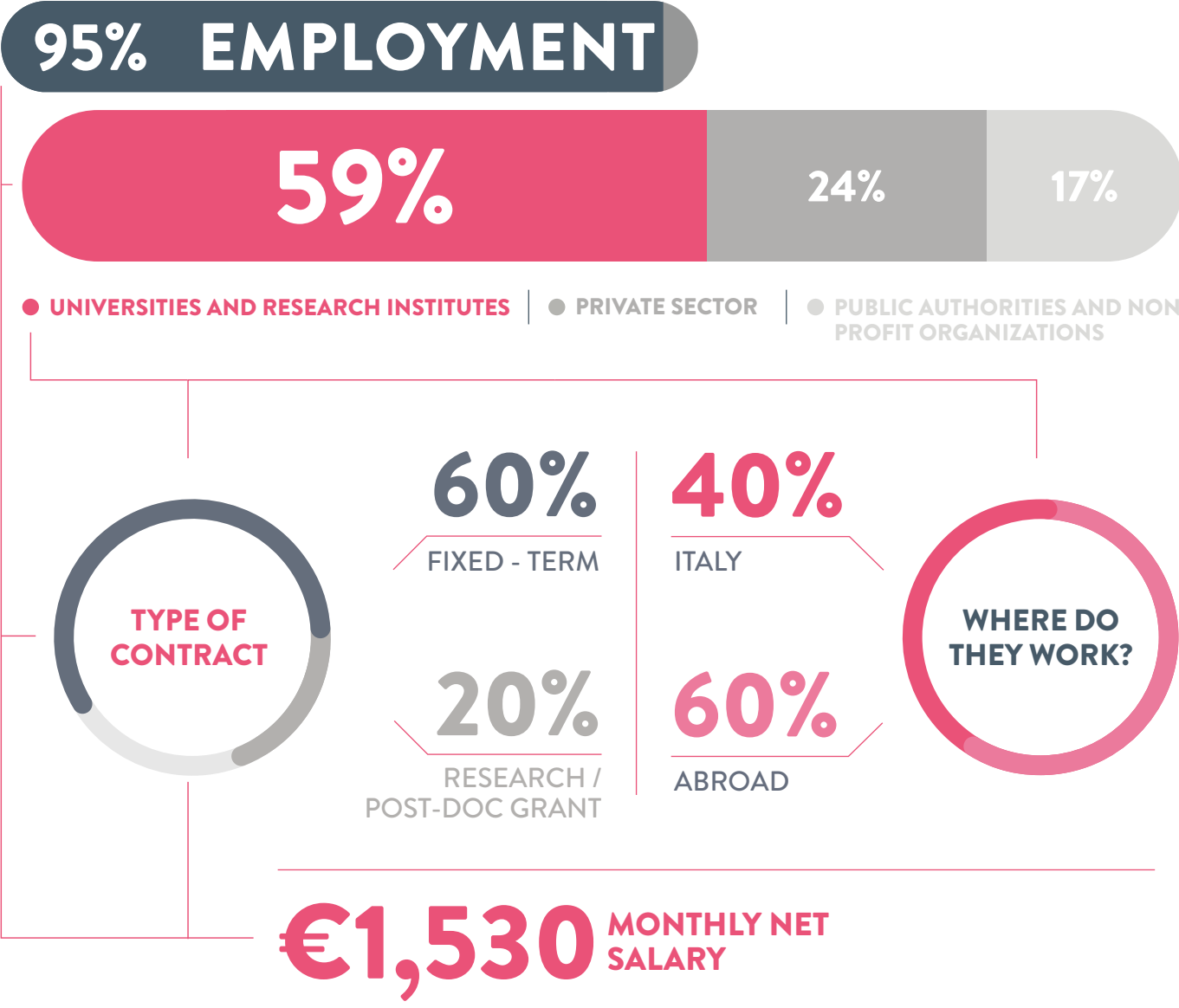


DESIGN

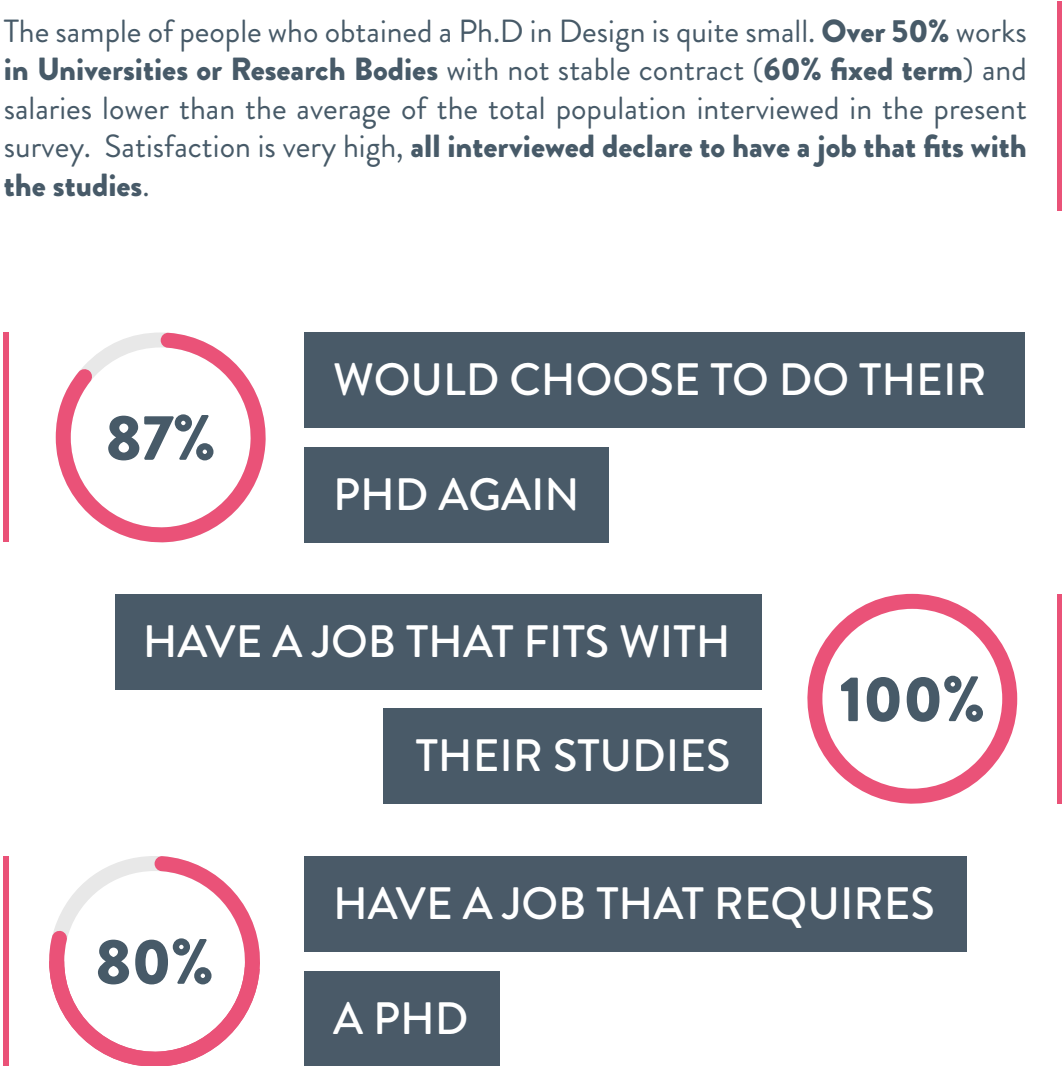
PHD COURSE

- Design





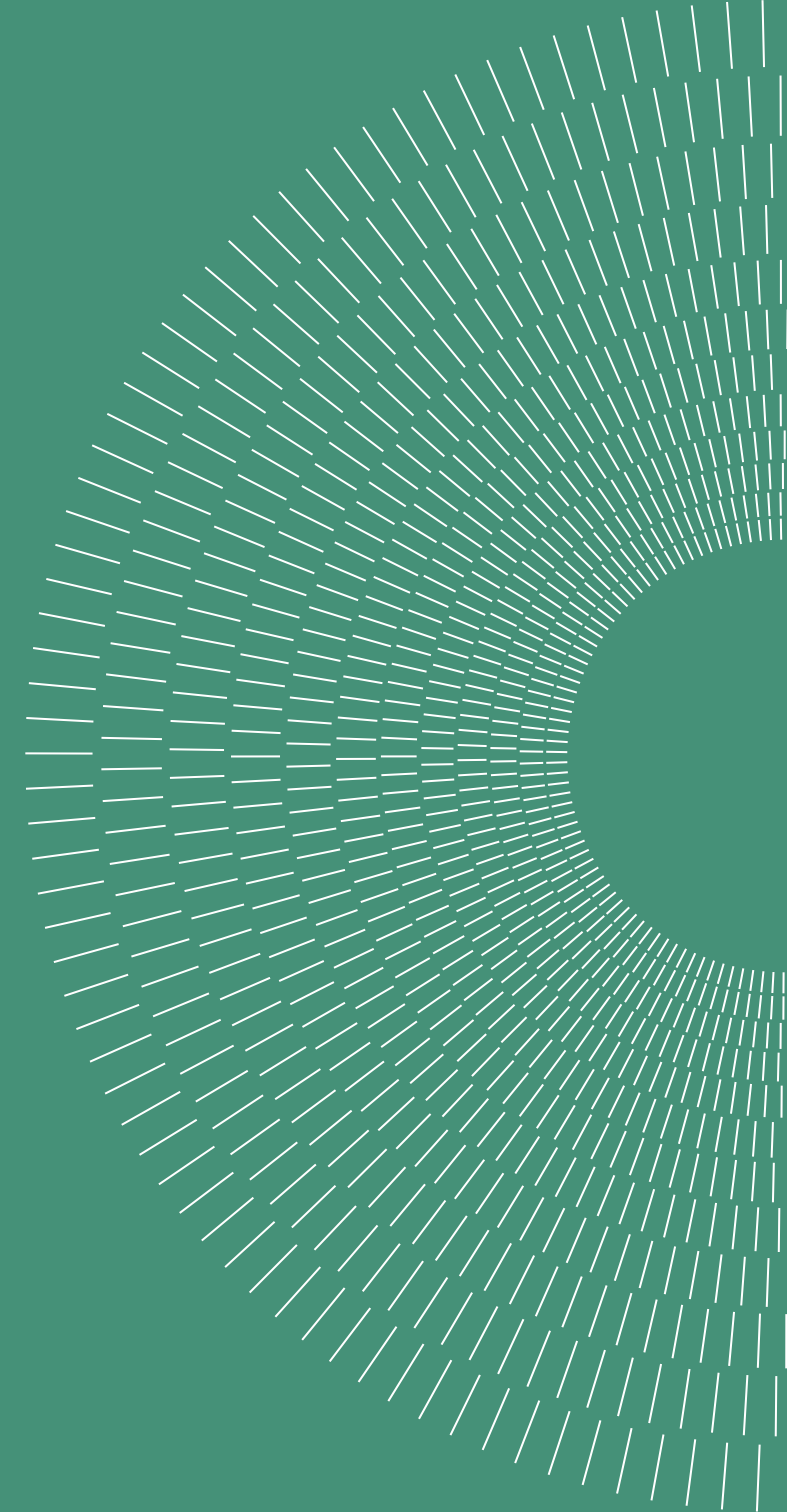
SAMPLE FOR DESIGN: 23 people interviewed, of which 20 employed.

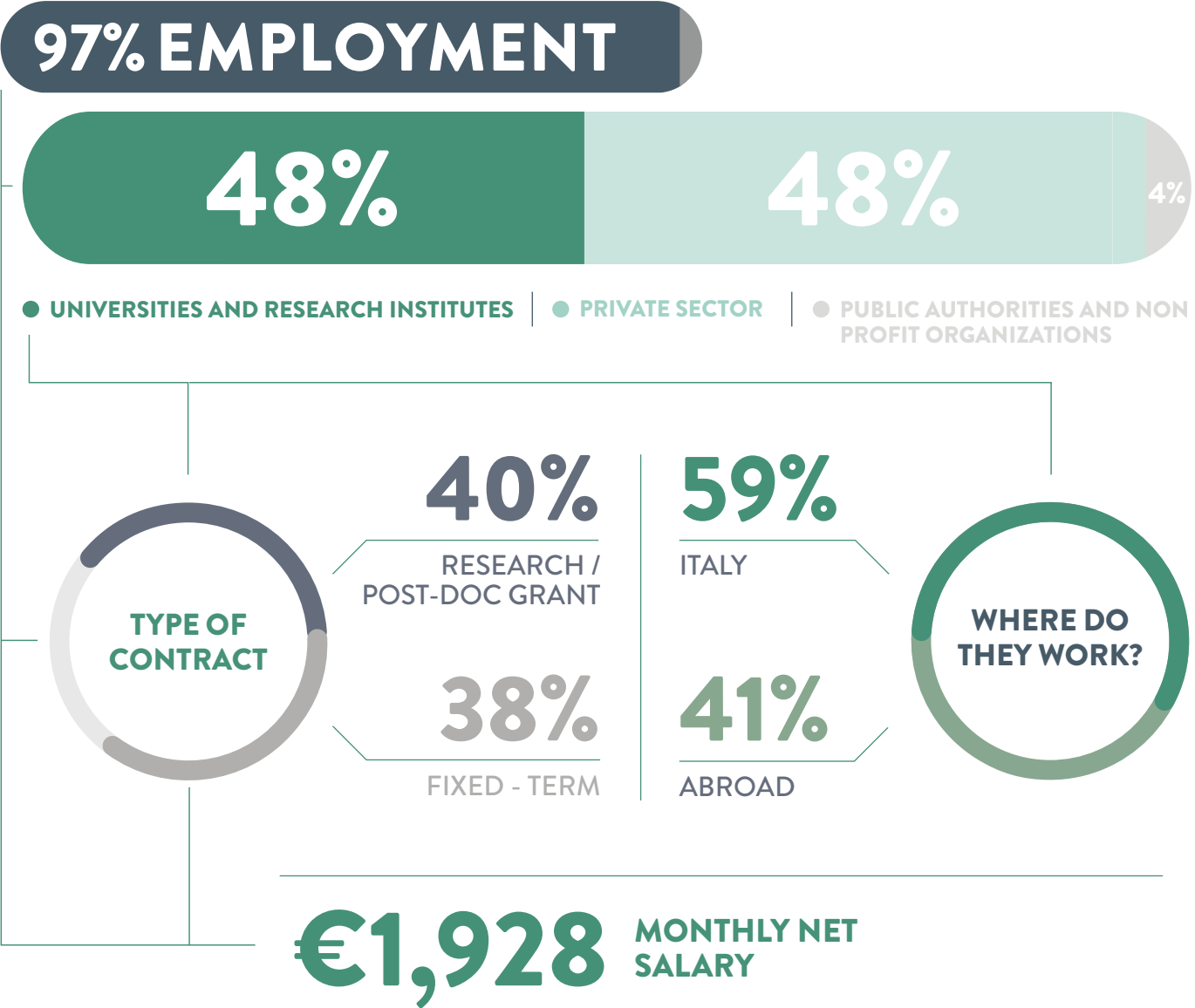


ENGINEERING

PHD COURSES

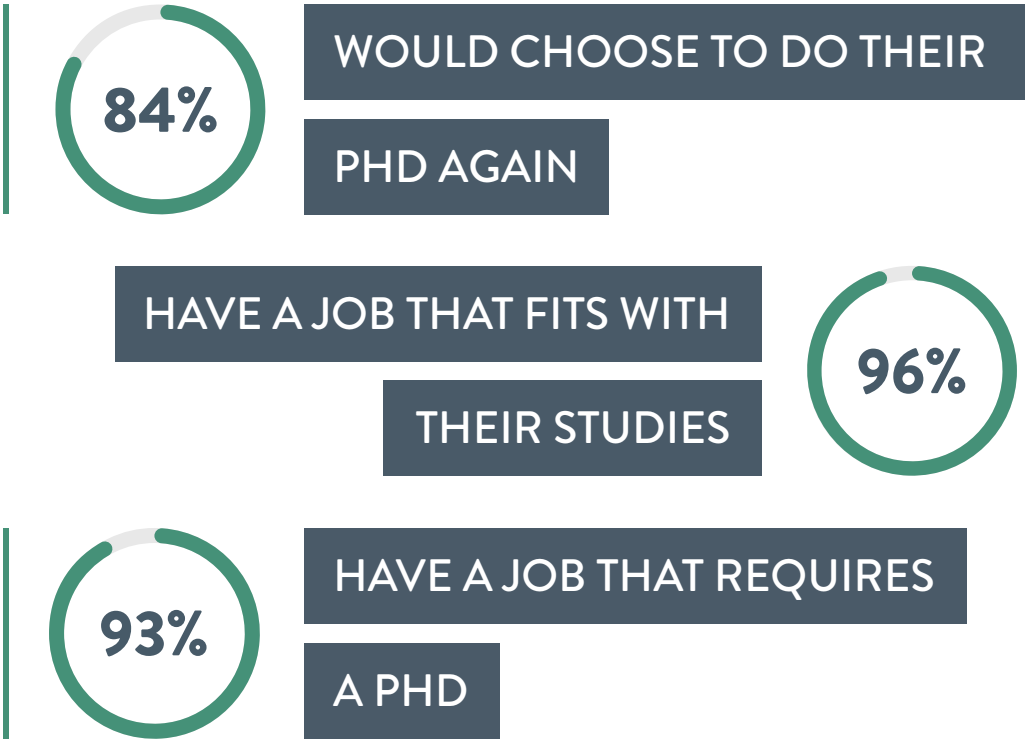
- Aerospace Engineering
- Bioengineering
- Electrical Engineering
- Energy and Nuclear Science and Technology
- Environmental and Infrastructure Engineering
- Industrial Chemistry and Chemical Engineering
- Information Technology
- Management Engineering
- Materials Engineering
- Mathematical Models and Methods in Engineering
- Mechanical Engineering
- Physics
- Structural Seismic and Geotechnical Engineering





SAMPLE FOR ENGINEERING: 304 people interviewed, of which 289 employed. 131 are employed in the university and research sector.

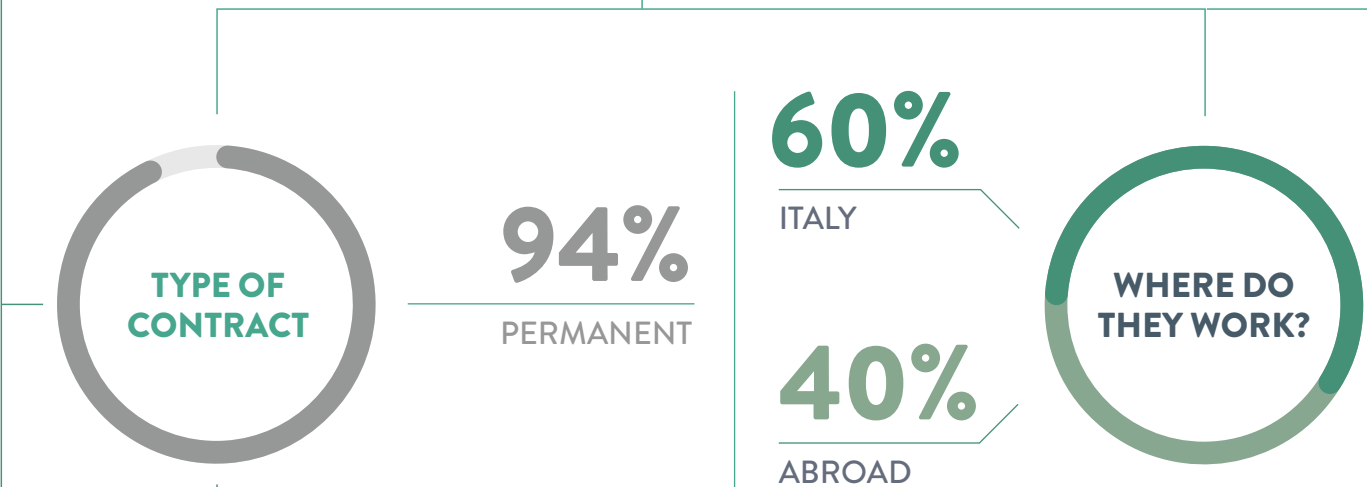
97% of Ph.D graduates in engineering disciplines find **employment**, equally spread in the **University and Research Sector (48%)** and in the **private sector (48%)**. In Universities and Research Bodies, although contracts are less stable (mainly fixed - term contract and post-doc), Ph.Ds are very satisfied with the professional outcome and studies. In the private sector contractual conditions are better (permanent contract for 94%) and salaries are higher (161 euros more per month).



97% EMPLOYMENT



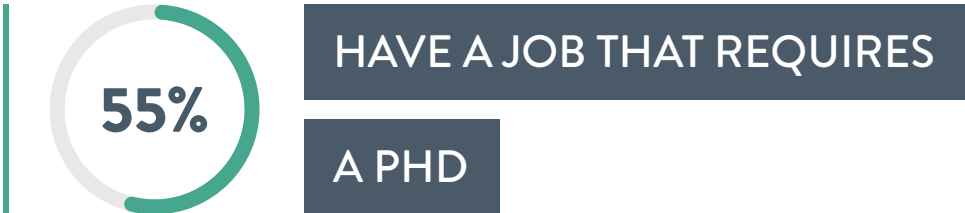
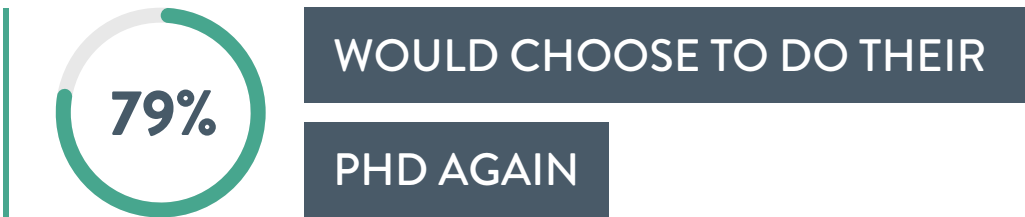
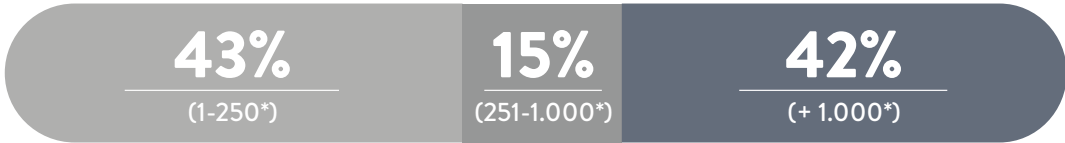
● UNIVERSITIES AND RESEARCH INSTITUTES | ● PRIVATE SECTOR | ● PUBLIC AUTHORITIES AND NON PROFIT ORGANIZATIONS



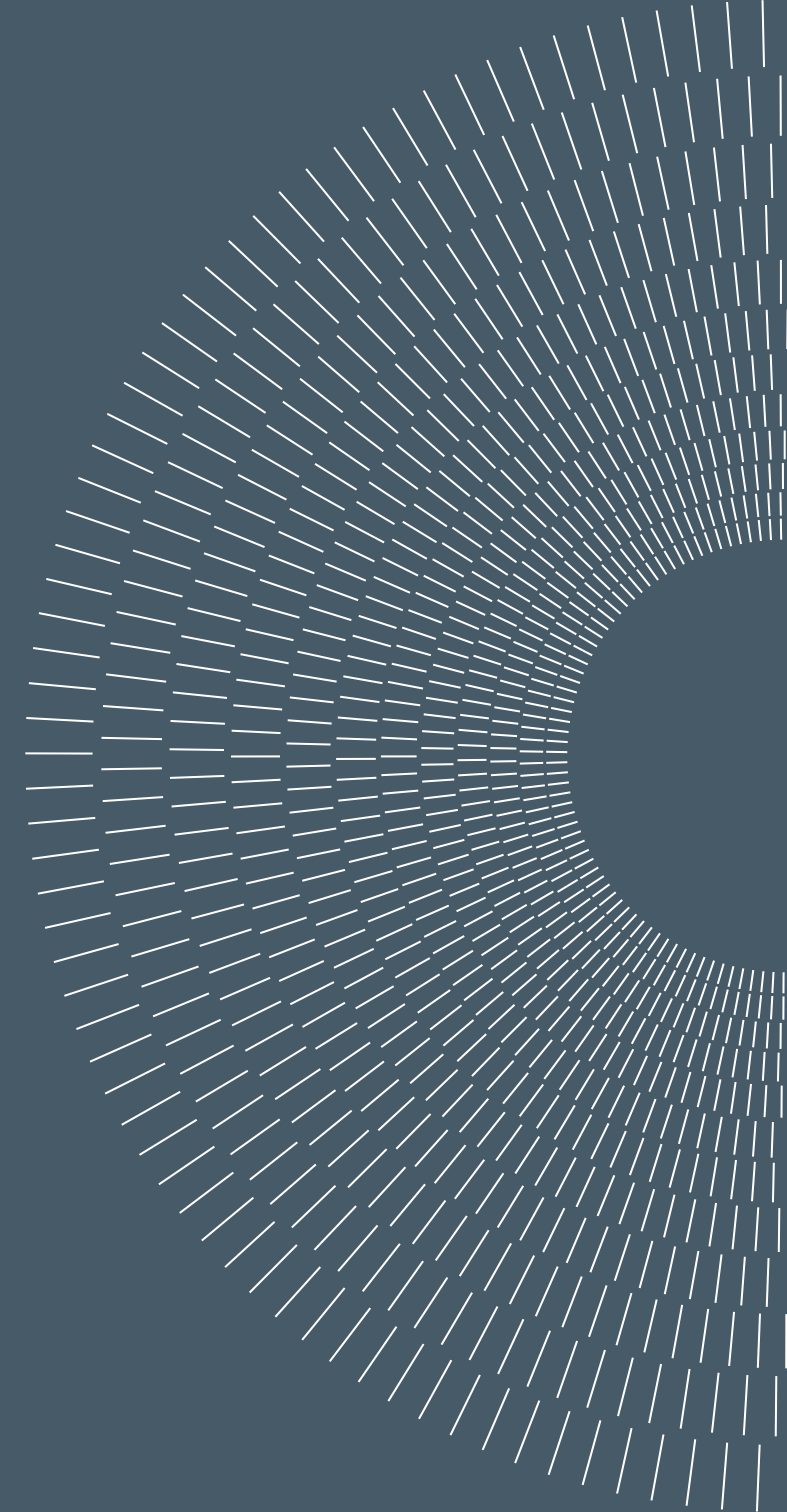
€2,089 MONTHLY NET SALARY

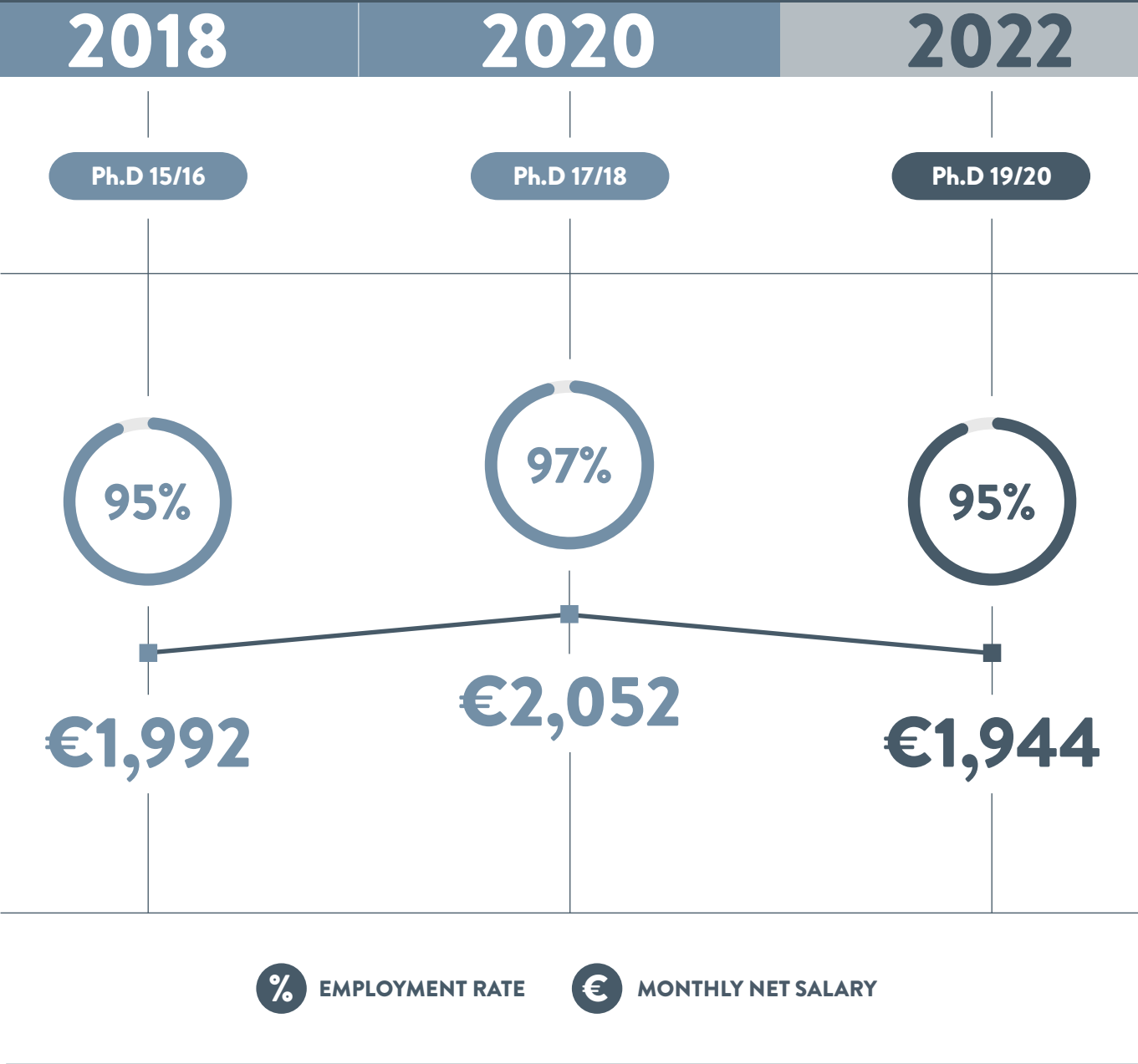
SAMPLE FOR ENGINEERING: 304 people interviewed, of which 289 employed. 131 are employed in the private sector.

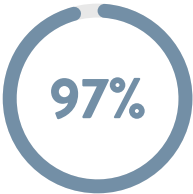
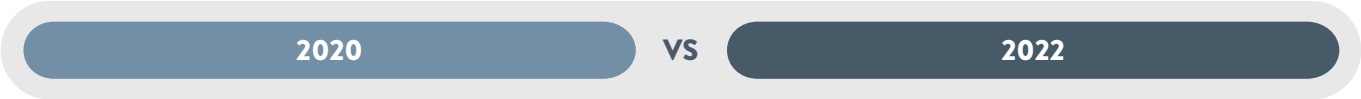
COMPANY SIZE * (N° EMPLOYEES)



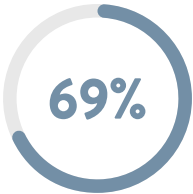
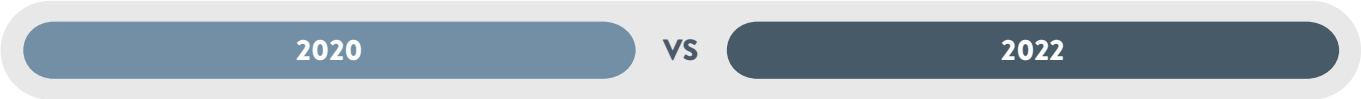
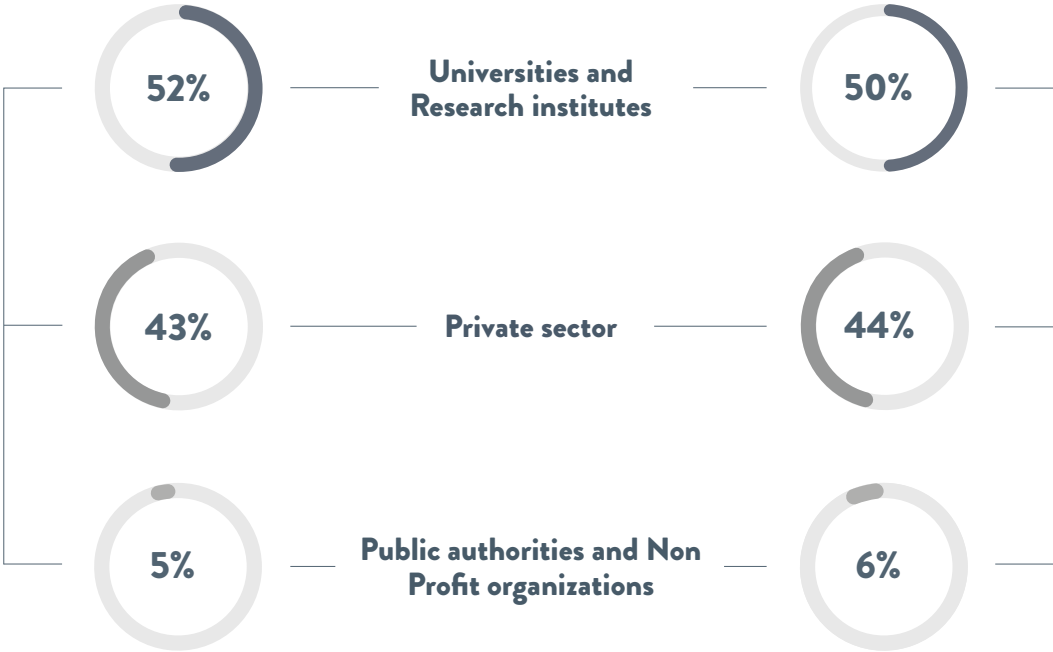
TREND ANALYSIS



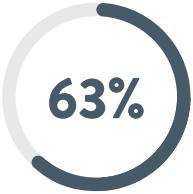




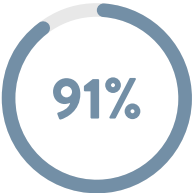
EMPLOYMENT



WORK IN ITALY



EMPLOYEES



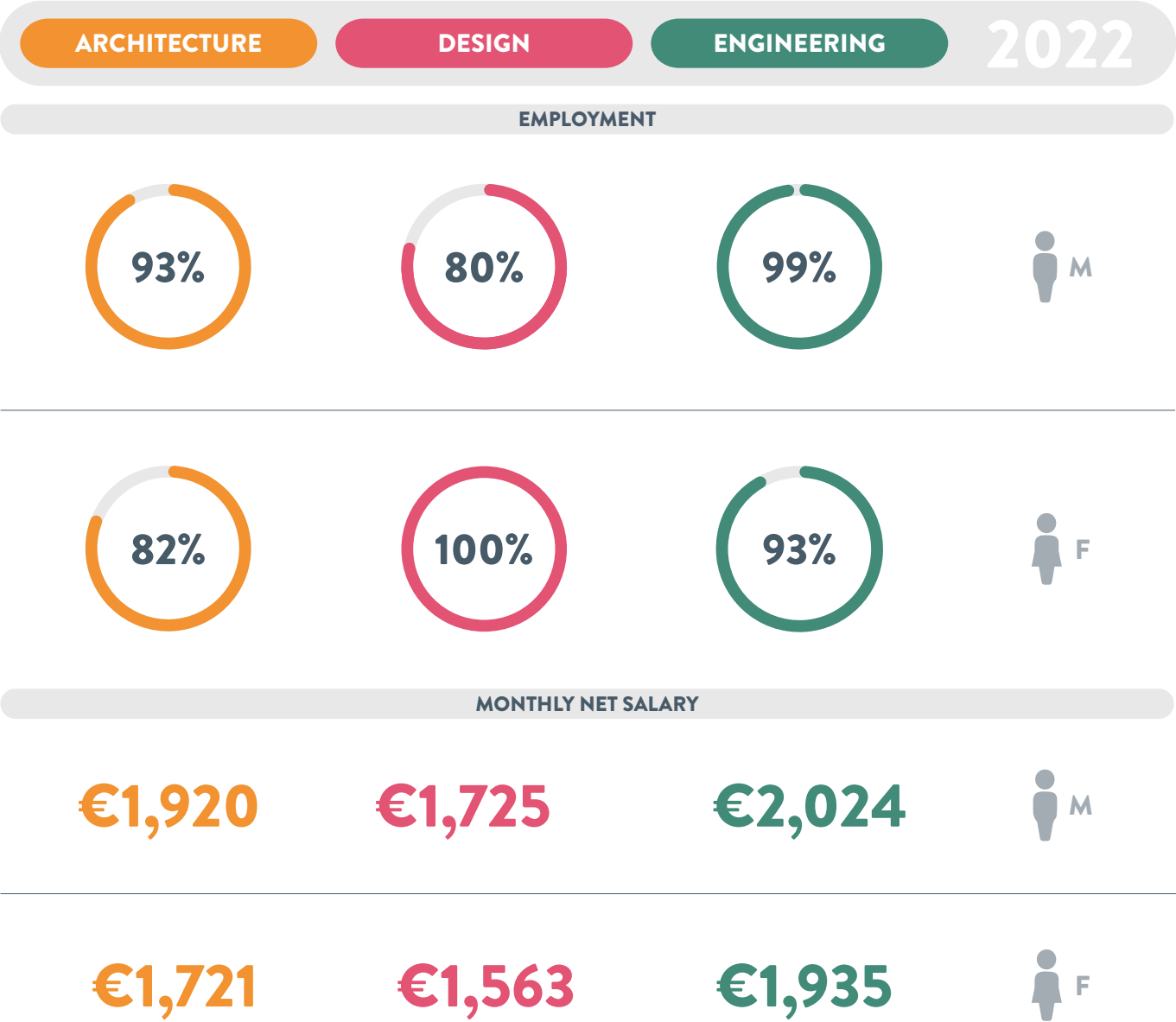
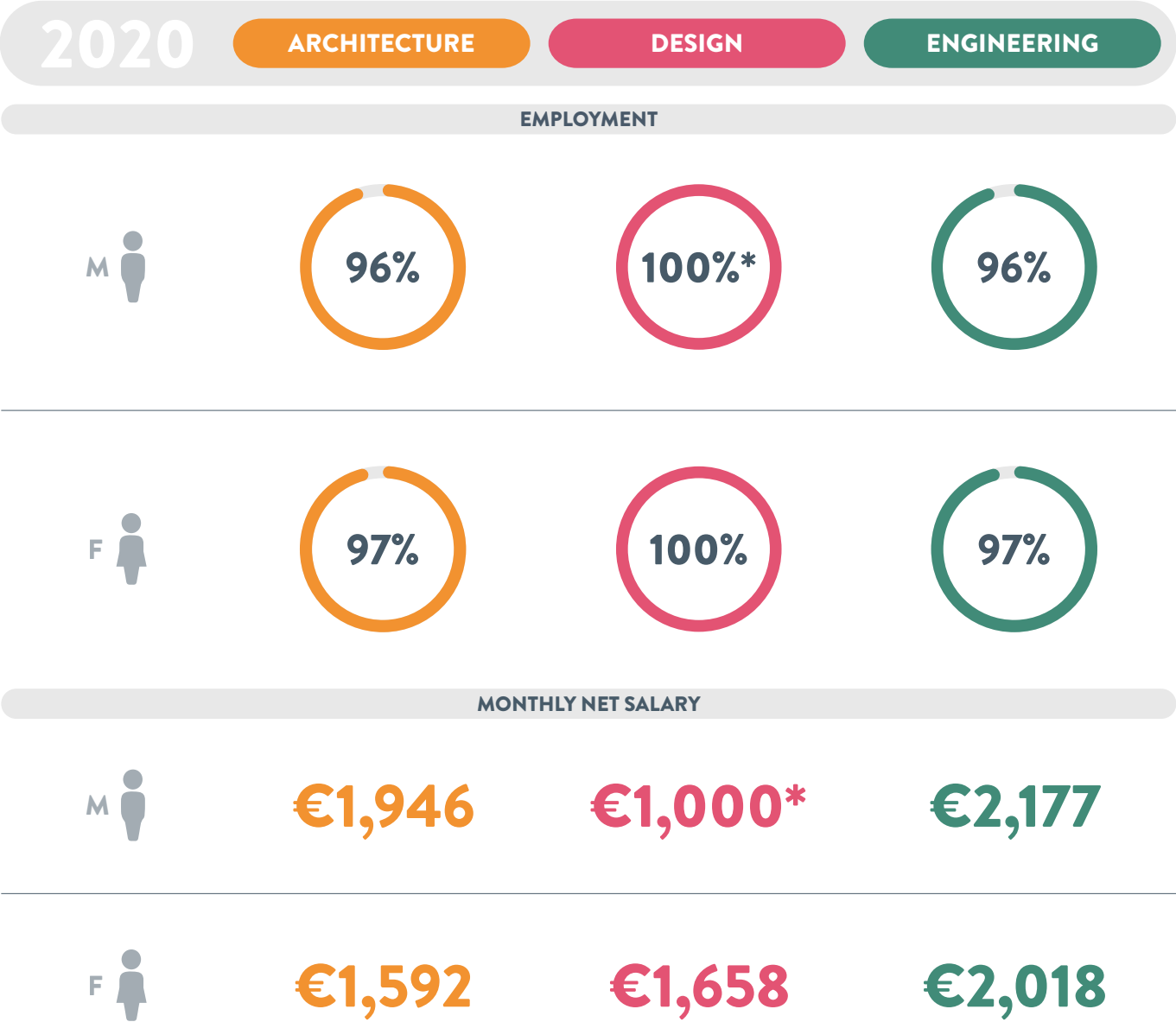
PERMANENT CONTRACT IN THE PRIVATE SECTOR



€2,052

MONTHLY NET SALARY

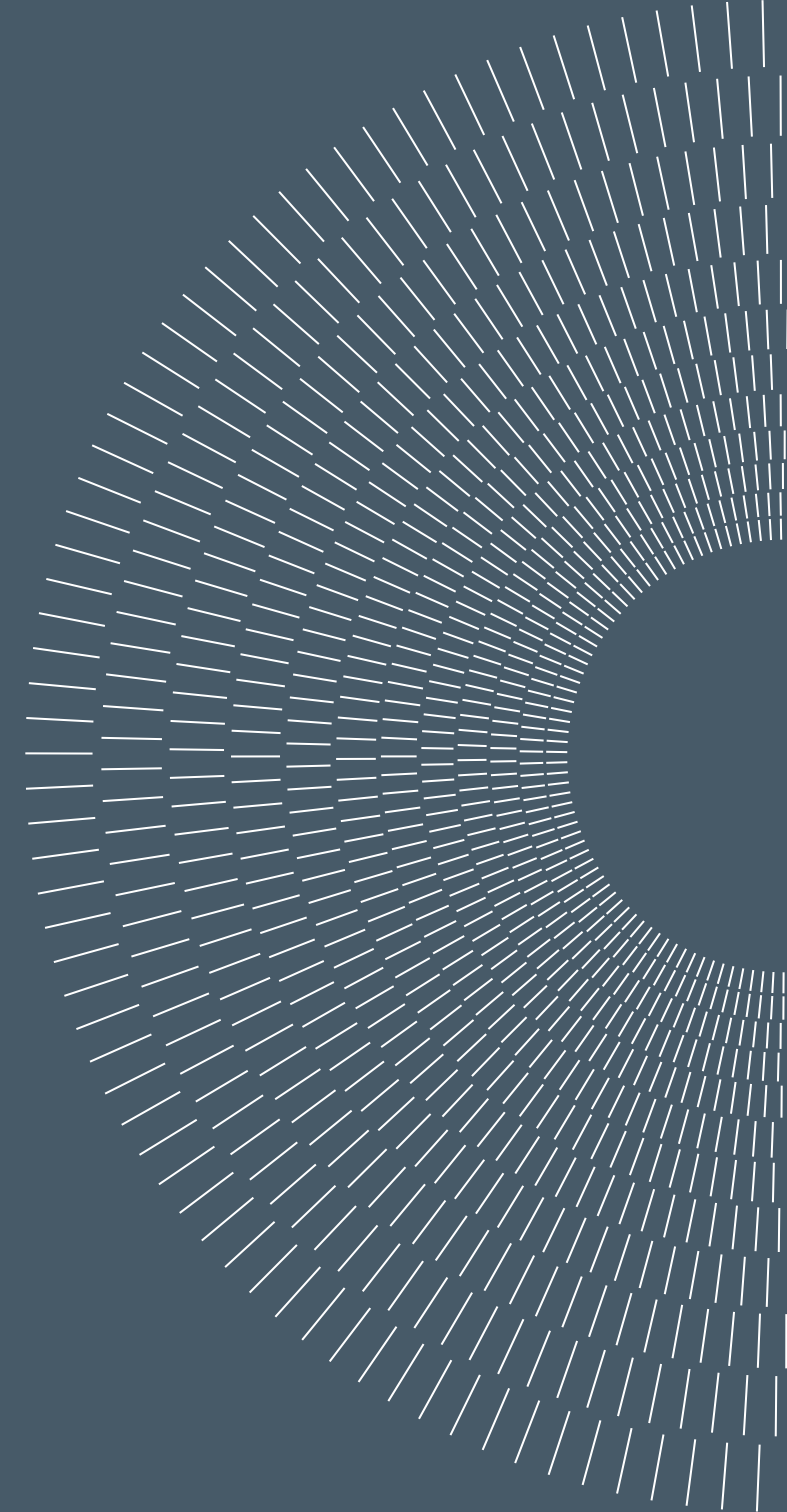
€1,994



* Only 3 respondents who represent 50% of the initial target. The sample is too small for this data to be considered representative.

WHO ARE THE PHD

GRADUATES ?



547

Ph.D GRADUATES IN 2019 - 2020



65% 35%

29% INTERNATIONAL

MASTER OF SCIENCE GRADUATES IN 2019

3,923

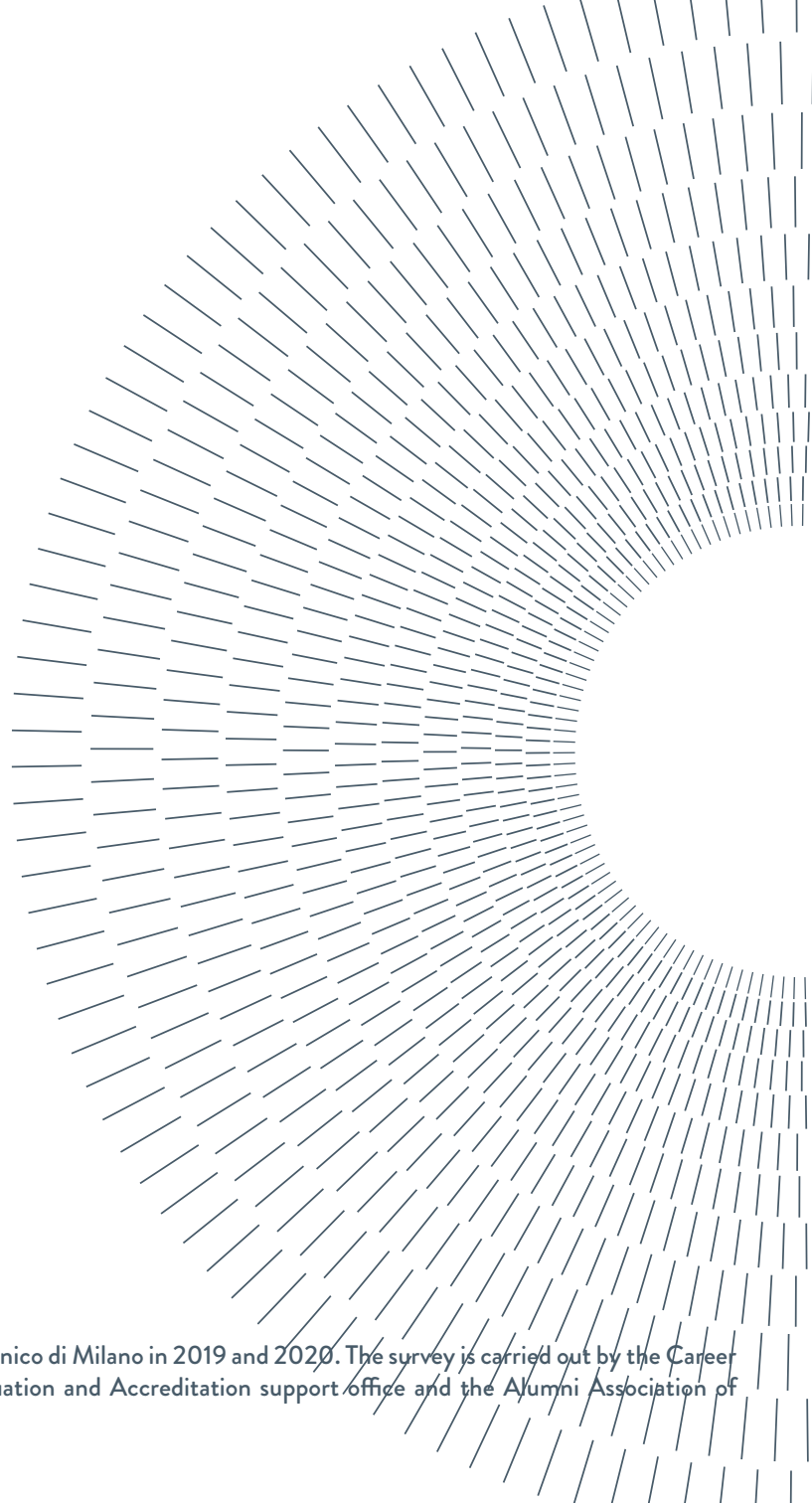


€1,570 MONTHLY NET SALARY

63% 37%

28% INTERNATIONAL



An abstract graphic on the right side of the page, consisting of numerous thin, parallel lines that form a series of concentric, semi-circular arcs. The lines are dark gray and their density increases towards the right, creating a sense of depth and movement.

2022 Employment survey on PhDs who graduates at Politecnico di Milano in 2019 and 2020. The survey is carried out by the Career Service in collaboration with the Statistical Analysis, Evaluation and Accreditation support office and the Alumni Association of Politecnico di Milano

