

## **SHORT CURRICULUM VITAE OF PROF. FILIPPO UBERTINI, PHD PE**

### **ACADEMIC CAREER**

Full Professor of Structural Design at the Department of Civil and Environmental Engineering of University of Perugia since October 1<sup>st</sup> 2018 to today.

Associate Professor of Structural Design at the Department of Civil and Environmental Engineering of University of Perugia, since March 9<sup>th</sup> 2015 to September 30<sup>th</sup> 2018.

Assistant Professor of Structural Design at the Department of Civil and Environmental Engineering of University of Perugia, since December 31<sup>st</sup> 2008 to March 8<sup>th</sup> 2015.

Tenured as Assistant Professor of Structural Design, December 2011.

First classified in the competitive evaluation exam for the admission to the PhD course in Civil Engineering at University of Pavia, Italy, October 2008.

### **EDUCATION**

Ph.D. in Civil Engineering, University of Pavia, Italy, February 2009.

M.Sc. in Civil Engineering, cum laude, University of Perugia, Italy, October 2005.

B.S. in Civil Engineering, cum laude, University of Perugia, Italy, October 2003.

High School Diploma, Scientific Lyceum "Galeazzo Alessi" in Perugia, with 100/100 final marks.

### **OTHER PROFESSIONAL TITLES**

Registered as Professional Engineer in the Association of Engineers of the Province of Perugia (qualification achieved with 240/240 final marks), since 2006 to today.

Registered as Technical Consultant for the Tribunal of Perugia, Italy, since 2006 to today.

### **TEACHING ACTIVITY**

"Advanced Structural Design" (responsible, 12 CFU), Master Degree in Civil Engineering, University of Perugia, Italy, A.Y. 2017-2018 - 2020-2021.

"Elements of Structural Engineering for Industrial Design" (responsible, 6 CFU), Bachelor Degree in Industrial Design, University of Perugia, Italy, A.Y. 2019-2020-2020-2021.

"Earthquake Resistant Structures" (co-teaching, 12 CFU), Master Degree in Civil Engineering, University of Perugia, Italy, A.Y. 2017-2018 - 2020-2021.

"Structural Design II" (responsible, 10 CFU), Master Degree in Civil Engineering, University of Perugia, Italy, A.Y. 2015-2016 and 2016-2017.

"Theory and Design of Bridges" (responsible, 8 CFU), Master Degree in Civil Engineering, University of Perugia, Italy, A.Y. 2012-2013, 2013-2014 and 2014-2015.

"Experimental Diagnosis of Structures" (responsible, 6 CFU), Master Degree in Civil Engineering, University of Perugia, Italy, A.Y. 2010-2011 and 2011-2012.

"Laboratory of Structural Design" (responsible, 5 CFU), Master Degree in Building and Architectural Engineering, University of Perugia, Italy, A.Y. 2010-2011 and 2011-2012.

"Structural Repair II" (responsible, 3 CFU), Master Degree in Civil Engineering, University of Perugia, Italy, A.Y. 2009-2010.

### **SCIENTIFIC ACTIVITY**

Prof. Ubertini's Research focuses in the fields of structural health monitoring, with emphasis on historic structures and bridges, with applications in earthquake engineering, based on vibration measurements and on the use of smart multifunctional construction materials (self-sensing concretes and bricks). Research topics also cover experimental structural dynamics, vibration structural control and wind effects on structures.

Bibliometric indexes, as defined by the Italian regulation for Professorship Qualification and compared to the values requested to take part to the Evaluation Committee for Structural Design (SC 08/B3). Values are referred to the Scopus database.

<i>Index</i>	<i>Value</i>	<i>Requested</i>
Number of Journal Papers (10 years)	90	19
Number of Citations (15 years)	2710	374
H index (15 years)	30	11

Editorial Board member of:

- Mechanical Systems and Signal Processing
- Frontiers in Built Environment, Earthquake Engineering Section
- Sensors
- Advances in Civil Engineering
- Shock and Vibrations
- Mathematical Problems in Engineering
- Engineering Research Express
- Modeling
- Engineering Proceedings

#### **SUPERVISION OF POST-DOC FELLOWS, GRADUATE AND MASTER STUDENTS**

6 PhD Students (ongoing)

2 PhD student (graduated)

4 Post-doc fellows (ongoing)

70 Master Students

#### **INSTITUTIONAL RESPONSIBILITIES**

Representative of University of Perugia with the FABRE Consortium "for research, assessment and monitoring of bridges, viaducts and other types of structures" since 2020.

Coordinator of the International and Industrial Doctoral Program in "Civil and Environmental Engineering" of University of Perugia since 2019.

Member of the Council of the Department of Civil and Environmental Engineering of University of Perugia since 2020.

Member of the "Steering Committee" of the project of the Department of Civil and Environmental Engineering of University of Perugia funded within the program for the "Department of Excellence 2018-2022", 2018-today.

Representative of the Area of Civil Engineering and Architecture in the Committee for Scientific Evaluation of University of Perugia, 2015-2017.

Delegate for Scientific Research of the Department of Civil and Environmental Engineering, University of Perugia, 2014-today.

Member of the Erasmus Committee of the Department of Civil and Environmental Engineering, University of Perugia, 2014-today.

## **COORDINATION AND PARTICIPATION IN RESEARCH PROJECTS**

Co-PI of Partner institution (UNIPG) within the research project "Eco-Earth: Shot –earth for an eco-friendly and human-comfortable construction industry" (protocol FISR2019\_00245) funded by the Italian Ministry for University and Research within the 2019 FISR call, since November 2020.

PI of Partner institution (UNIPG) in "DETECT-AGING: Degradation Effects on sStructural safety of Cultural heriTAGE constructions through simulation and health monitorING", Project of Relevant National Interest (PRIN) funded by the Italian Ministry for University and Research (MIUR, protocol No 201747Y73L), 2017-2020.

PI of Partner institution (UNIPG) and WP Leader in "SAFERUP!: Sustainable, Accessible, Safe, Resilient and Smart Urban Pavements", MSCA-International Training Network project funded by European Commission (grant agreement No 765057), 2018-2022.

PI of "SMART-BRICK: Novel strain-sensing nano-composite clay brick enabling self-monitoring masonry structures", Project of Relevant National Interest (PRIN) funded by the Italian Ministry for University and Research (MIUR, protocol No 2015MS5L27), 2017-2020.

PI of Partner institution (UNIPG) in "HERACLES: Heritage Resilience Against CLimate Events on Site", Research and Innovation Action project funded by European Commission (grant agreement No 700395), 2016-2019.

PI of "DELPHI: innovative technologies for monitoring and preventive conservation of monumental buildings exposed to earthquake hazard: application to Fontana Maggiore and Torre degli Sciri in Perugia", funded by Fondazione Cassa di Risparmio di Perugia (project code 2016.0028.021), 2016-2017.

Task Manager in "ZERO - PLUS: Achieving near Zero and Positive Energy Settlements in Europe using Advanced Energy Technology", funded by European Commission, 2015-2020.

PI in "Structural Health Monitoring for the Preservation of the Architectural Heritage: the Bell-Tower of the Basilica of "S. Pietro" in Perugia and the Dome of the Basilica of "S. Maria degli Angeli" in Assisi", funded by Fondazione Cassa di Risparmio di Perugia, 2014-2016

Participant in "PhD on Innovation Pathways for TES", funded by European Commission, 2015-2018.

Participant in "DPC-RELUIS 2014", funded by the Italian Department of Civil Protection, 2014-2015.

Participant in "Innovative Sustainable Rural Building with Energy Autonomy", funded by Italian Ministry of Agricultural, Alimentary and Forest Politics, 2012-2016.

Participant in "Development of active response control systems and techniques for the seismic protection of structures", funded by Fondazione Cassa di Risparmio di Perugia, 2010-2012.

## **MEMBERSHIPS IN NATIONAL AND INTERNATIONAL SCIENTIFIC ORGANIZATIONS**

Member of the Italian Association for Earthquake Engineering (ANIDIS), 2017-today.

Member of the International association for bridge maintenance and safety (IABMAS), 2012-today.

Member of the Group of Dynamics and Stability, Italian Association of Theoretical and Applied Mechanics (AIMETA), 2013-today.

Member of the Italian Association for Wind Engineering (ANIV), 2008-today.

## **PRIZES AND AWARDS**

Plenary/semi-plenary/keynote speaker at the following international conferences: Eurodyn 2020, CBPAT 2020.

International Operational Modal Analysis Conference (IOMAC) 2019, 13-15 May, co-author winner of "Best Paper Award".

4th International Electronic Conference on Sensors and Applications (ECSA4), 15-30 November 2017, online: "Best Paper Award" as keynote speaker.

Fourth International Conference on Experimental Vibration Analysis for Civil Engineering Structures (EVACES): "Best Paper Award", Forum for the young engineers, 2011.

Italian Association for Wind Engineering: "Award for a scientific paper by a young researcher on the themes of wind engineering", 2010.