

Director Patrizia Trovalusci Sapienza Università di Roma PhD Program in Structural and Geotechnical Engineering

April 8, 2024 – 3:00pm-6:00pm April 9, 2024 – 10:00am-1:00pm

## Prof. Nicholas Fantuzzi

Associate Professor, Department of Civil, Chemical, Environmental and Materials Engineering (DICAM), Alma Mater Studiorum - University of Bologna

## Random Vibrations in Offshore Structures

In the course, elements for random vibrations in the context of structural modeling and design will be given. The course is divided into two main parts. First, fundamentals of stochastic processes in time and frequency domain are given. For instance, random variables and processes are discussed together with Fourier transforms and Spectral Density Function definitions. Second, design to avoid structural failures due to random vibrations will be discussed such as level crossing analysis and fatigue criteria. Each course section will provide theoretical as well as practical aspects of the topics with reference to current design regulations.

Program: https://phd.uniroma1.it/web/course---random-vibrations-in-offshore structures\_nS6066EN\_EN.aspx

Registration form: https://forms.gle/EtaKPxEg4BVDLUHQ8

