

MATHEMATICAL METHODS AND MODELS FOR ENGINEERING

Courses Catalogue 2023

Elements of Functional Analysis in Banach Spaces

Lecturer: Prof. [Hynek Kovarik](#), 20 hours, [syllabus](#), [course description](#), [schedule](#)

Shock waves in Fluid Dynamics

Lecturer: Prof. [Paolo Secchi](#), 20 hours, [syllabus](#), [course description](#), [schedule](#)

Partial Differential Equations

Lecturer: Prof. [Alessandro Giacomini](#), 21 hours, [syllabus](#), [course description](#), [schedule](#)

Numerical Methods for Partial Differential Equations

Lecturer: Prof. [Lucia Gastaldi](#), 20 hours, [syllabus](#), [course description](#), [schedule](#)

Some Nonlinear Models for the Extensible Beam: Dynamic and Steady States Analysis

Lecturer: Prof. [Maria Grazia Naso](#), 8 hours, [syllabus](#), [course description](#)

An Introduction to the Controllability of Partial Differential Equations and some Applications

Lecturer: Prof. [Maria Grazia Naso](#), 10 hours, [syllabus](#), [course description](#)

Suspension bridges: modelling, steady states and buckling

Lecturer: Prof. [Elena Vuk](#), 10 hours, [syllabus](#), [course description](#)

Elliptic functions and their applications in mathematical physics

Lecturer: Prof. [Federico Zullo](#), 9 hours, [syllabus and description](#)

NOTE: For further details please contact the lecturers.