



UNIVERSITÀ
degli STUDI
di CATANIA

DEPARTMENT OF ELECTRICAL, ELECTRONIC AND
COMPUTER ENGINEERING

Bachelor's Degree in Industrial Engineering

Academic Year 2019/2020 - 1° Year - Ingegneria Industriale
Curriculum

FISICA I P - Z

FIS/01 - 9 CFU - 2° Semester

Teaching Staff

GIULIO MANICO'

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Office Hours: Lunedì dalle ore 15:00 alle 17:00 e Martedì dalle ore 15:00 alle 17:00. E' gradita una email di prenotazione al fine di ottimizzare il servizio per gli studenti.

LEARNING OBJECTIVES

The student is required to achieve the following training objectives:

- physical quantities and dimensional analysis;
- vector calculation and applications;
- static and dynamic of the material point and of the rigid body;
- fluidostatic and fluid dynamics;
- thermodynamics

COURSE STRUCTURE

Traditional lessons on Mechanics and Thermodynamics and on strategies of problem solving.

DETAILED COURSE CONTENT

MECHANICS

Physics and measurement. Vectors. Kinematics. Dynamics. System Dynamics. Rigid bodies. Fluids.

TERMODYNAMICS

Thermodynamic systems. First law of thermodynamics. Second law of thermodynamics.

TEXTBOOK INFORMATION

Halliday, Resnick, Walker: "Fundamentals of Physics: Extended. 10th Edition." (Wiley)
