



Few numbers and info about DII

Students: **7000**
Academic Staff: **130**
Non-Ac. Staff: **60**
PhD Candidates: **60**

Bachelor degrees:

- Aerospace Engineering
- Management Engineering
- Mechanical Engineering
- Management of Defense Aerospace Systems
- Naval Architecture and Marine Engineering

Master degrees:

- Aerospace Engineering
- Management Engineering
- Mechanical Engineering for Energy and Environment
- Mechanical Engineering for Design and Production
- Naval Architecture and Marine Engineering

Doctoral degree in Industrial Engineering: **36th cycle**

A brief history about us

The University of Naples Federico II was established in 1224 through an Imperial Charter of Frederick II Hohenstaufen, King of Sicily and Holy Roman Emperor. It was the first publicly funded university in Europe, <https://urly.it/371z1>. Nowadays, it offers courses essentially in all academic disciplines, leading to 155 graduate level degrees, enrolls about 76000 students and has more than 350 bilateral agreements, <https://urly.it/371yh>.

The Department of Industrial Engineering (DII) is one of the 26 departments and it was created in 2013 by merging five pre-existing departments: Aerospace Engineering, Energetics, Thermal Fluid Dynamics & Applied Environmental Control Systems, Mechanical Engineering, Naval Architecture, and Economics and Management Engineering.

This first issue of our international newsletter is aimed at spreading the events of our community at largest possible scale in regular and light format, as we were drinking a coffee and chatting about research, teaching and all the events of an academic community.

COVID-19

The Department together with the whole University, during the lockdown days, faced the difficult situation in order to guarantee the best possible continuation of the activities even by remote. All the useful and most popular tools for teaching, meeting and working were used: this is used to be defined as *smart working* but the limitations and problems due to the non-physical presences cannot be neglected. It was a step full of difficulties, but all our community had a strong reaction to make the transition as smooth as possible. The virtual coffees are not comparable with the real ones, but we all hope that soon all can return to a sort of normality after the summer.

Talking with the Head, Prof. Rita Mastrullo

What did it mean to you, as a woman, to become in 2019 Head of the DII?

Being the head of a department that expresses a lot of liveliness in every working environment means a lot of commitment, a lot of responsibility but also a great reason of pride. For me it is above all an opportunity on a personal level: the role allows me to be closer to each and every one, finding in this a reason for a daily enrichment.

Being a woman leads me to play this role with those sensitivities that are, on average, more typical of the female soul: the keywords on which I set the guide of the department are *listening*, *participation* and *sharing*. A pink note: I like to underline that at this moment, a department in which women are just over 20%, sees not only the role of management declined for women but also all the roles of responsibility of the administrative offices. This circumstance has very positive implications also in terms of work.

How difficult is it to play this role right now, in Italy and specifically in the South?

Taking on the role of head is very demanding; it is even more demanding at the moment and in particular it is in the South where the context works hardly as a facilitator, but precisely for this reason it is even more stimulating. I am very calm and satisfied because in the case of DII the work is carried out not by an individual but by a team that has participated in the identification of strategic objectives and works daily to achieve these objectives in a system vision.

Can you indicate 3 points of strengths and 3 of improvements of the department?

Strengths: (1) relationships with companies and research institutes at local, national and international level; (2) important research results in terms of projects and publications in all scientific fields; (3) a very wide didactic offer with great innovations in content, a strong methodological base and remarkable training experiences of company and international internships (Erasmus, joint qualifications).

Improvements: (1) to expand the audience of incoming students from abroad; (2) to strengthen initiatives towards the territory; (3) to foster multi-disciplinarity.

International Agreements: **34**

Double degrees: **3**

Research Projects: **10**
<https://urly.it/371nm>

Published Papers (at June 2020): **122**



Coffee is a lot more than just a drink; it's something happening. Not as in hip, but like an event, a place to be, but not like a location, but like somewhere within yourself. It gives you time, but not actual hours or minutes, but a chance to be, like be yourself, and have a second cup.

Gertrude Stein

Coffee should not be drunk in a hurry. It is the sister of time, and should be sipped slowly, slowly. Coffee is the sound of taste, a sound for the aroma. It is a meditation and a plunge into memories and the soul.

Mahmoud Darwish

The mainstay of Italian coffee lore, la tazzina di caffè, or an espresso, as served by one's local bar and during the day consumed - generally - standing up, is another one of those things about which Italians have very strong feelings. The purists want it very dense, ristrettissimo, which is the way they serve it in Naples.

Sari Gilbert

How many coffees do you have per day?

For me, coffee is the sharing of a small pleasure; for this, the number of coffees depends on how many people I meet in the day with whom "I have the pleasure of sharing a pleasure".

From our Labs: the Towing Tank (by Prof. Ermina Begovic)

During COVID-19 lockdown, Marine Hydrodynamics group focused on the development of new software for data acquisition and numerical activities. From the 15th May, academic and technical staff started occasionally working onsite at Hydrodynamic Laboratory Towing tank (135 m. x 9 m. x 4.2 m.) fitted with wavemaker and Qualisys optical motion tracking system. Complying with the AntiCovid safety rules, they are back again performing experimental activities.



Conferences and Workshops 2020-2021

- MEDYNA, 3rd Euro-Mediterranean Conference on Structural Dynamics and Vibroacoustics 17-19 February 2020, medyna2020.sciencesconf.org
- Entrepreneurship, Innovation, Internationalization: A Multidisciplinary Perspective 3rd AEM and TIM PhD Programs, 25-26 May 2020, <https://Urly.It/3721y>
- IEEE RTSI 2020 - 6th Forum on Research and technology for Society and Industry Innovation for a smart world, 7-10 September 2020, <https://urly.it/372jn>
- HSMV 2020, 12th Symposium on High Speed Marine Vehicles, 15-16 October 2020, online edition, <http://www.hsmv.unina.it/>
- RENT 2020, Research in entrepreneurship and small business, November 19-20, 2020, <https://urly.it/3721a>
- SAE 2020: Big Data for Small Area Estimation / postponed to 5-7 July 2021 / <https://sae2020.org>
- IEEE MetroAerospace 2021, 21-23 June 2021, Piazzale Tecchio, www.metroaerospace.org

Visiting Friends

Dr. Camelia Delcea and Dr. Liviu-Adrian Cotfas, both from the Department of Economic Informatics and Cybernetics, Bucharest University of Economic Studies (Bucharest, Romania) have conducted a research mobility stage from 19th Oct until 31st Dec 2019 and have attended to the research activities related to CLOD (Computational Laboratory of Organizational Design), under the supervision of prof. Cristina Ponsiglione. Camelia and Liviu have also cooperated in the development of a Master thesis project (Managerial Engineering) aimed at building an agent-based simulation model for the simulation of evacuation processes in emergency conditions from cruise ships. Dr. Constantinos Vassiliades from University of Cyprus, Visiting Researcher from 01 Oct 2019 to 30 Jun 2020 (in presence until March), has conducted a collaborative research activity under the supervision of prof. Annamaria Buonomano on the sustainable integration of solar energy devices in buildings. Clearly, The COVID-19 blocked almost all the foreseen visits for the next 2020. Luckily, two visits were held before the lockdown days:

- Prof. Alessandro Simeone (Shantou University, Dept. of Mechatronics Engineering, China) was in Naples from 20th Jan to 8th Feb 2020 for working with Prof. Alessandra Caggiano on the development of a cloud manufacturing platform based on intelligent decision-making.
- Dr. Romain Rumpler (KTH, Royal Institute of Technology, Stockholm, Sweden) visited us from 31st Jan to 9th Mar 2020; he was collaborating with [pastalab group](http://pastalab.group) on the themes of the vibroacoustic acoustic and the similitudes; he was also one of the invited speakers (*Talented Researchers Session*) at MEDYNA2020.