



The University of Trieste

a brief introduction....

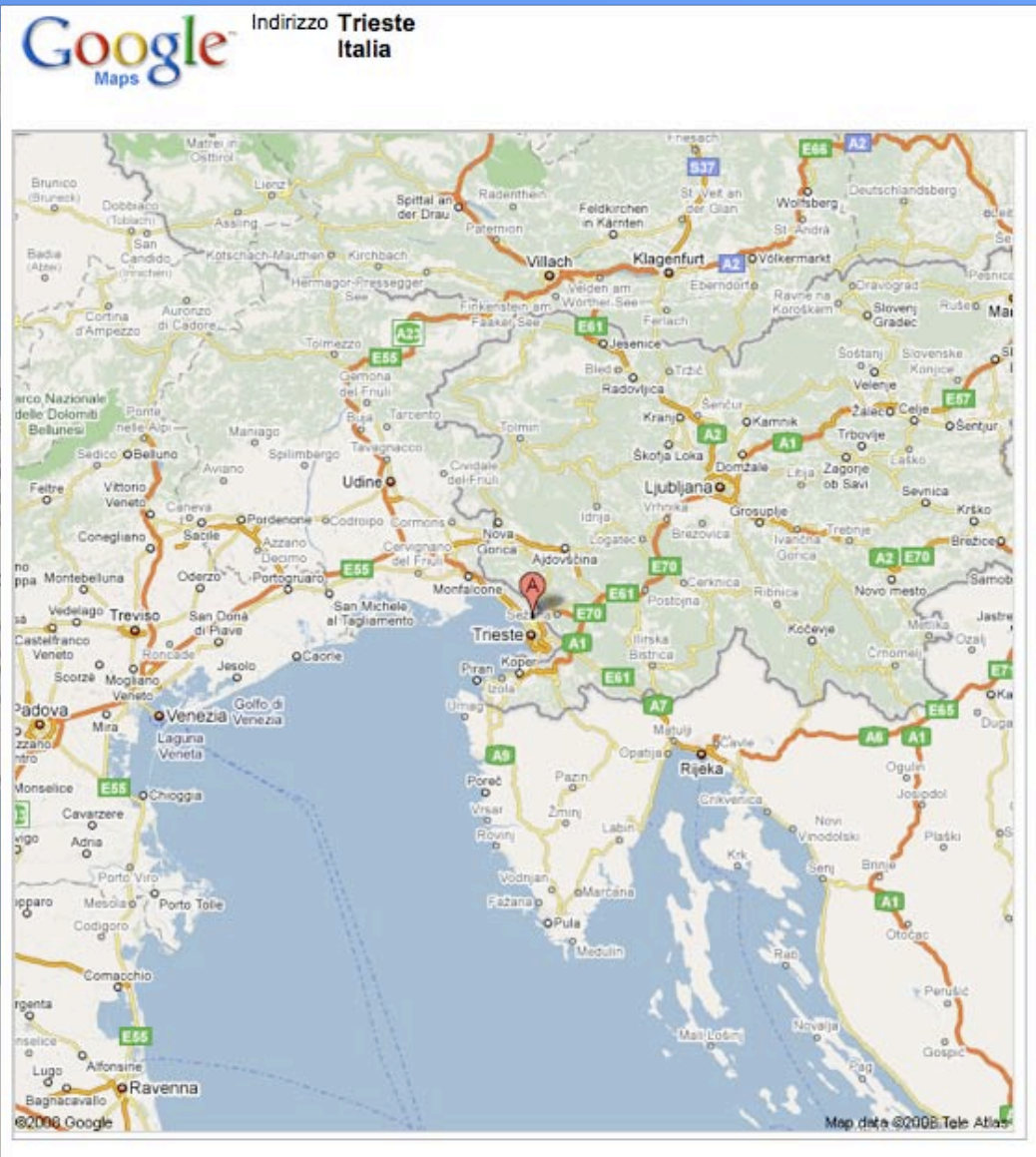


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Trieste: its geographical position

trieste, italy - Google Maps

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A long history...

...a journey into the sea of knowledge



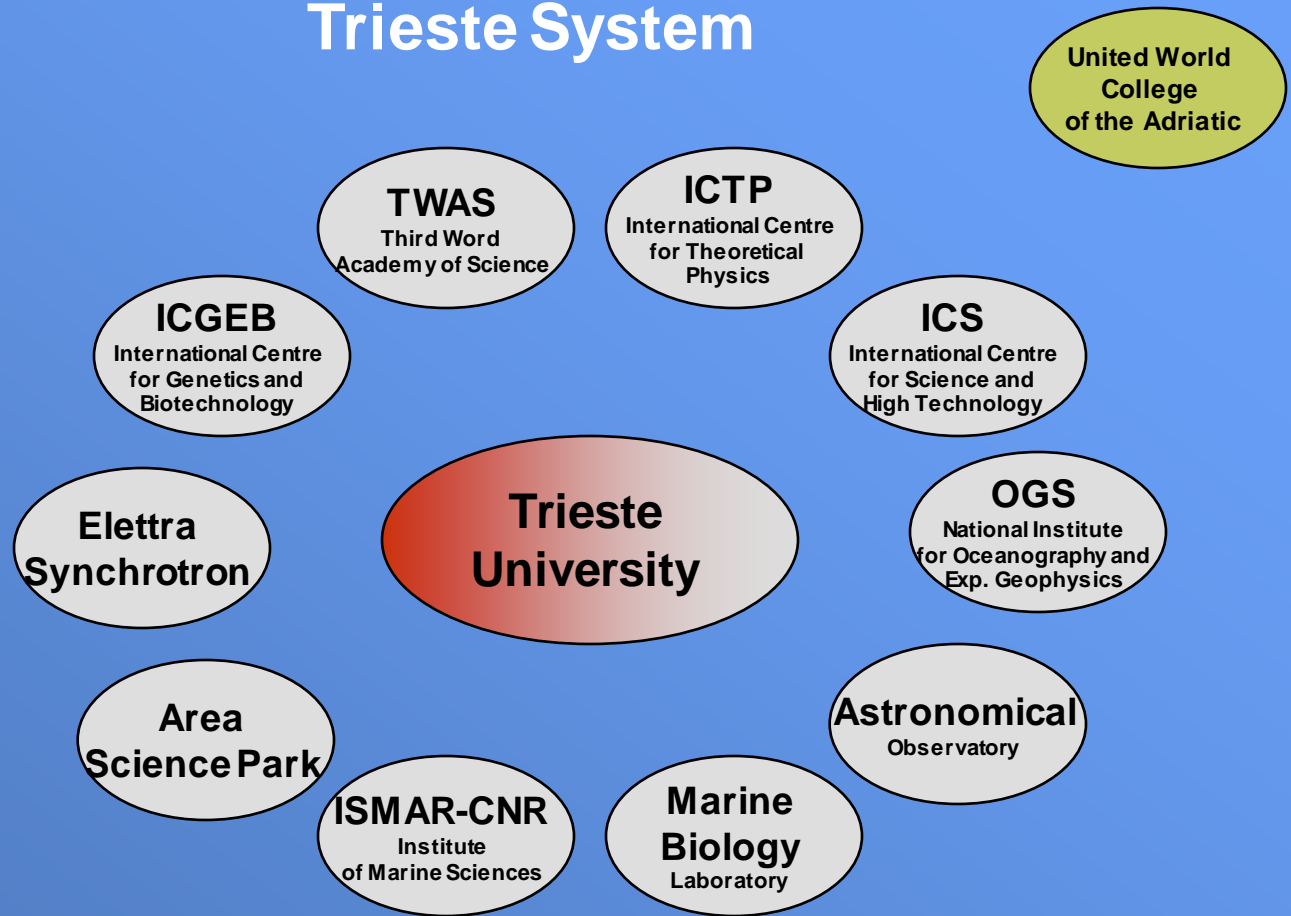
In **1924** the School of Commerce, set up in 1877 by Baron Pasquale Revoltella, was granted the title of Royal University of Economics and Business Studies of Trieste.

In **1938** the name of the University was changed to “Regia Università degli Studi” (Royal University of Trieste)



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Trieste System



**Over 30 researchers every 1,000 active citizens
(8.1 in USA, 9.1 in Japan, 5.7 in Europe)**



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Cursus Studiorum

High School



Laurea

3 years
BSc



Laurea Magistralis

2 years
MSc



PhD

3 years



Working World





950 staff members

Figures



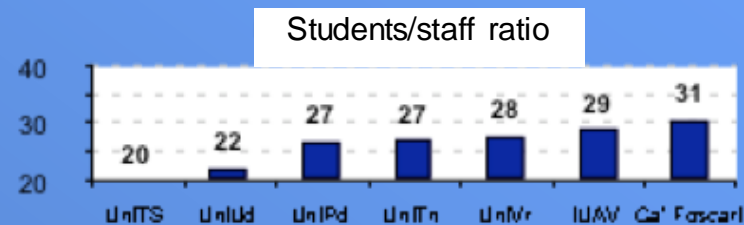
785 technical and administrative staff



25,000 students



Premises in: Trieste, Gorizia, Pordenone, Portogruaro



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Research Results

National Evaluation Council 2006-2009	National ranking
Mathematics and IT Sciences	6
Physics	9
Chemistry	2
Earth Sciences	4
Biology	16
Medical Sciences	4
Civil Engineering and Architecture	5
Industrial and Information Engineering	1
Antiquities, Philological-Literary and Historical-Artistic Sciences	12
Historical, Philosophical and Psychological Sciences	3
Law	2
Political and Social Sciences	7
Science of Nano and Micro Systems	1
Science and Technology for the Evaluation and Exploitation of Cultural Goods	5

International relationship

- **Scientific agreements:**

Worldwide partnerships with about 100 foreign institutions:

Albania, Angola, Argentine, Australia, Austria, Belarus, Bosnia-Herzegovina, Brazil, Bulgaria, China, Croatia, Cuba, Czech Rep., Denmark, France, Germany, Greece, Hungary, Iceland, Israel, Japan, Kosovo, Malta, Morocco, Nigeria, Paraguay, Poland, Rumania, Russia, Serbia, Syria, Slovakia, Slovenia, Spain, Turkey, UK, USA

- **Erasmus Programme:**

≈ 400 incoming students, ≈ 300 outgoing students
(330 bilateral agreements)





**... to the Mechanical
Engineering Department...**



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Dipartimento Ingegneria Meccanica

Università di Trieste
Dipartimento di Ing.
Meccanica

Via Alfonso Valerio n° 1
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Università di Trieste

The numbers:

25.000 students

2.500 engineering students

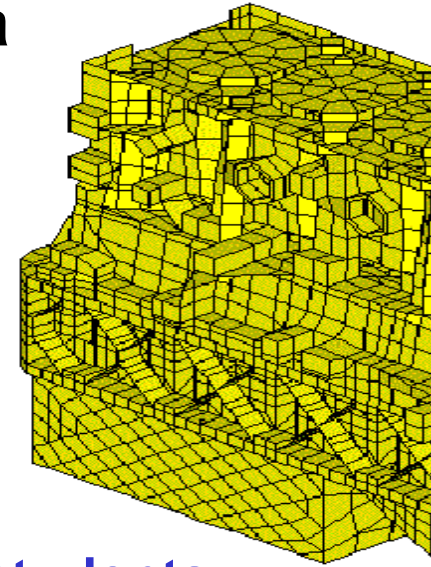
250 mechanical engineering students

1500 teaching staff

1400 technical & administrative staff

15 teaching staff

5 technical & administrative staff





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The sectors

Laurea Magistralis in Mechanical Engineering

Energy Conversion
& Environment

Production &
Organisation

Design and
Manufacturing





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**Vibro Acoustic
Testo
Lab**

**IC engine
Lab**

**CAD CAE
Lab**

DIM

**Mechatronic
Lab**

**Energy System
Lab**

...



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Vibro Acoustic
Lab

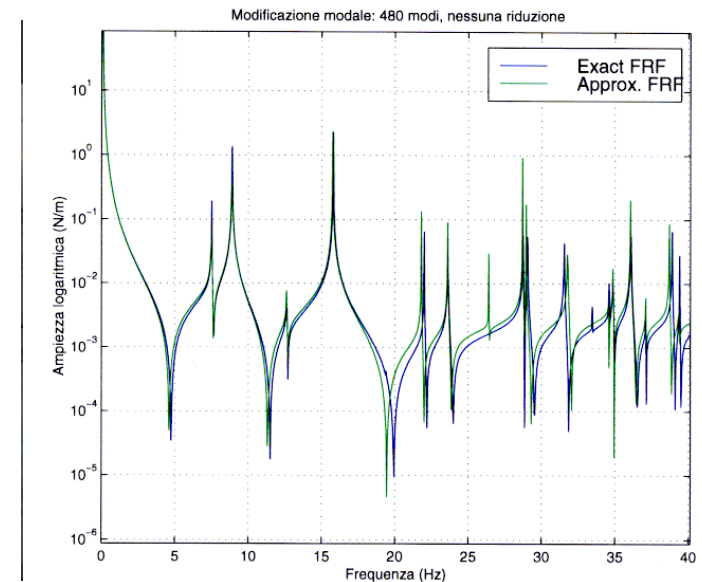
Experimental and Numerical
Modal Analysis

Microstructure sensing

Vibration source
mounting optimization

...

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Energy System
Lab

Energy conversion optimisation

Plant simulation for energy saving

Alternative energy
systems

Fuel cells

...

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IC engine
Lab

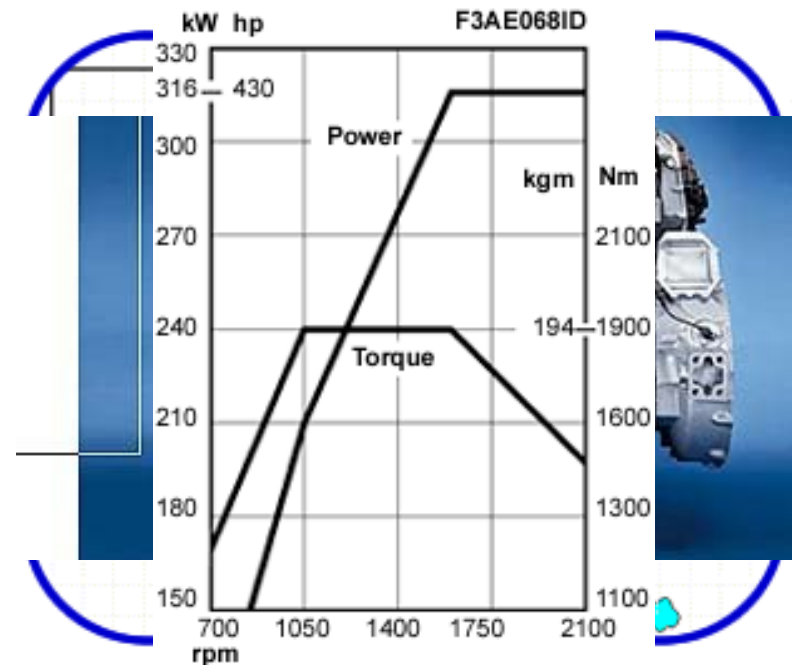
Power and Torque output optimisation

Pollutant reduction

IC engine simulation

...

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Production Lab Mechatronic Lab

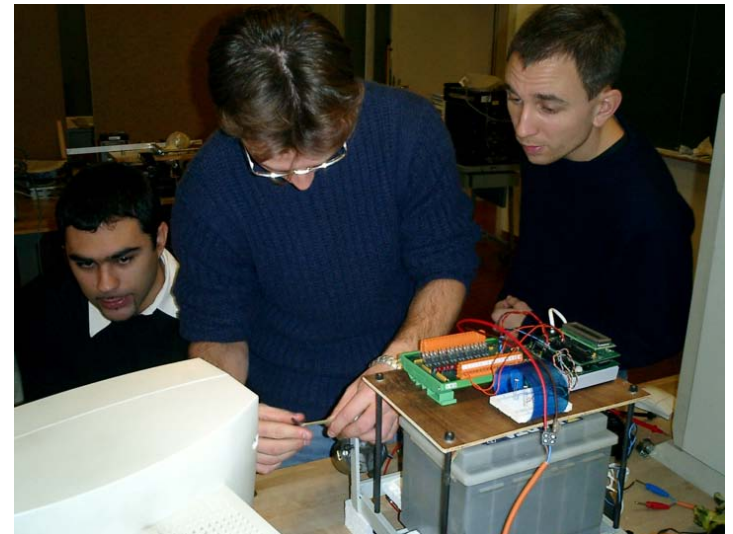
Production process modelling, simulation and optimization

Plant layout analysis

...

Hands on activities for students

Structure sensing and actuation



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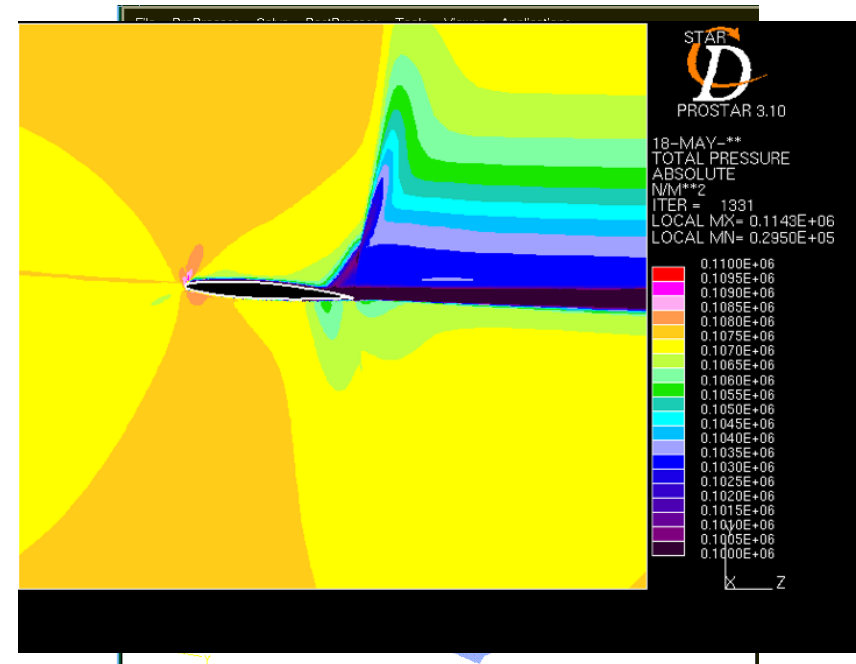
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CAD CAE
Lab

Multi Objective Optimisation
development and consulting

CAD, FEM, CFD

Extensive use of
industrial simulation
codes





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**CAD CAE
Lab**



Multi Disciplinary Analysis and Optimization, Key-research topics:

- **innovative modeling techniques (Fictitious domain and Spectral Element method)**
- **handling of uncertainties in simulation (Robust Design)**
- **innovative optimization techniques (topology optimization in fluids)**
- **innovative data-analysis techniques (GP for symbolic regression)**



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Thank you !