

Master Universitario di II Livello

Impiantistica Industriale **MIPET** *Master in Industrial Plants, Engineering & Technologies*



**Companies & Academia working together in Industrial Plants Framework
New Opportunities for Young Engineers**



From Here...

Strive for perfection in everything you do. Take the best that exists
and make it better. When it does not exist, Design it.

Sir Henry Royce



ABB

AnsaldoEnergia
A Finmeccanica Company

BOMBARDIER

DANIELI CENTRO COMBUSTION

Duférco Engineering

CONFINDUSTRIA GENOVA

Ordine degli Ingegneri della Provincia di Genova

**Facoltà di Ingegneria
Università degli Studi
di Genova**



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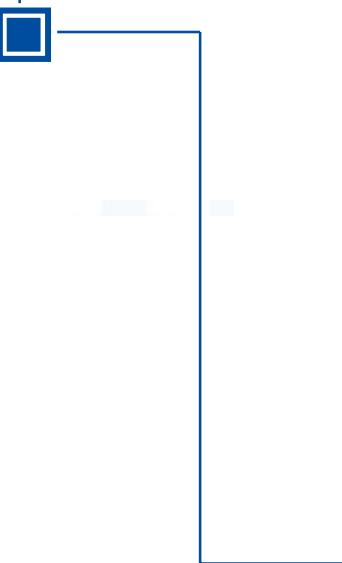
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ENGINEERING & CONSULTING SERVICES

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www.master.impianti.unige.it

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Master in Industrial Plant Engineering and Technologies

SPONSORS AND SUPPORTERS

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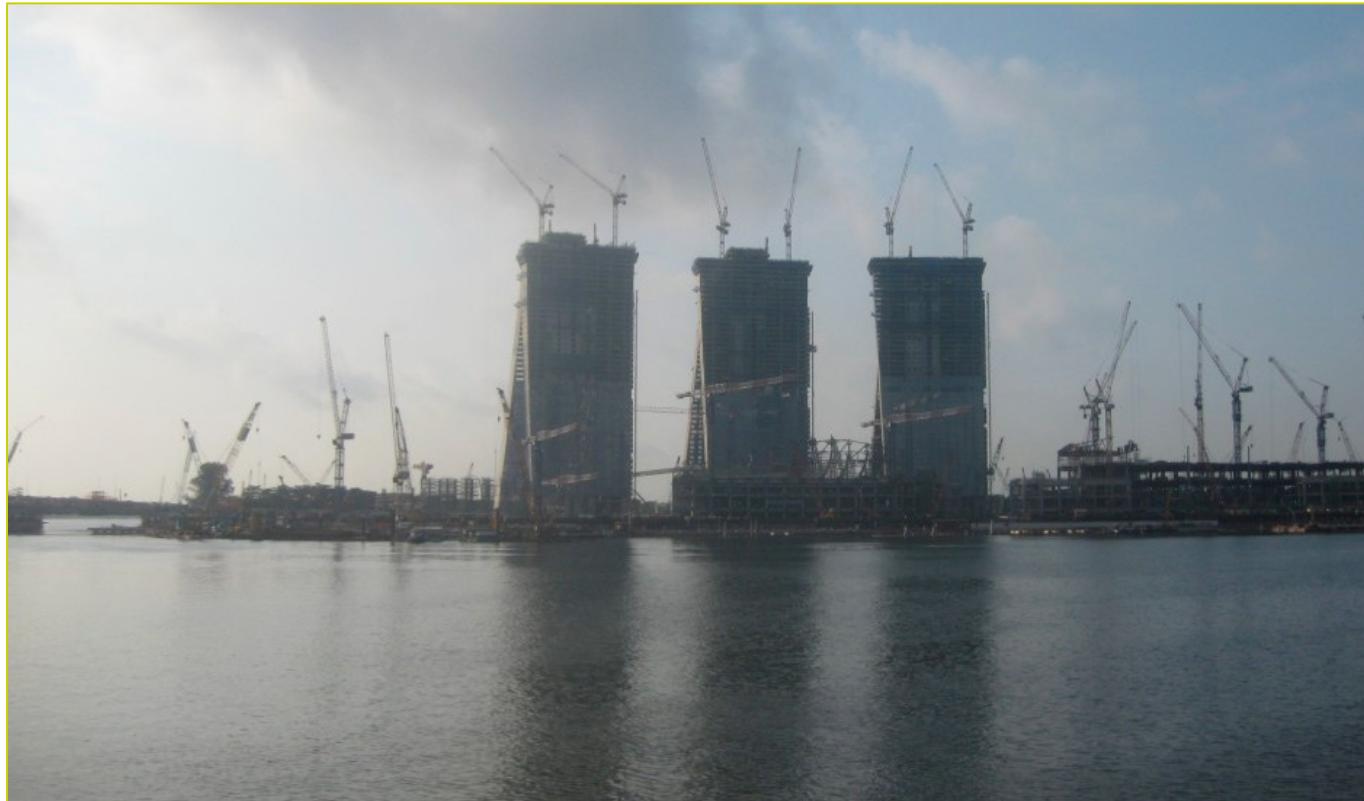
DIPTEM

**CONFINDUSTRIA GENOVA**Ordine degli Ingegneri
della Provincia di Genova

SPONSOR COMPANIES EDITION 2010

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From Here...



Scientists investigate that which already is; Engineers create that which has never been.

Albert Einstein



.... To Here



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Master in Industrial Plant Engineering and Technologies

Educational Framework



Base Modules
~160 hours



Operative Modules
~140 hours



Thematic Modules
~140 hours



Internship
~400 hours

420 hours as Classroom Lectures

650 hours as Project Work



The Education framework of MIPET is focusing on industrial plant engineering and technologies by adopting different methods such as lectures, case study, exercises, common experiences, RPG (role play games), simulations, use of models and software tools, interactive blended education (i.e. clickers) & industrial plant guided visits



From Here...



The first principle of Architectural Beauty is that the Essential Lines of a Construction be determined by a Perfect Appropriateness to its Use.

Gustave Eiffel



.... To Here



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Master in Industrial Plant Engineering and Technologies

Educational Module Topics

Base Modules

~160 hours

Fundamental Concepts related
to Industrial Plants Projects

Fundamentals of Financial
Analysis for Industrial Plants

Processes Engineering and
Components in Industrial Plants

Design and Engineering
for Industrial Plant Systems

Material Technology, Mechanical
Design and Industrial Plants

Automation in Industrial Plants

Environmental Control Techniques
and Industrial Plants

Software Systems for Supporting
Industrial Plant Design & Evaluation

Operative Modules

~140 hours

Standards & Regulations

Project Management

Construction

Safety & Risks



Thematic Modules

~140 hours

Power Plants

Iron & Steel Plants

Plants for Environment





From Here...



No problem can stand the assault of Sustained Thinking
Voltaire



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No problem can stand the assault of Sustained Thinking
Voltaire





Engineering Standards & Regulations

Operative Module of MIPET



Industrial Plants, Engineering & Technologies

Objectives

Engineering Standards & Regulations is devoted to organically present the existing and future norms to be adopted for the design and construction of Industrial plants; the course provides knowledge for supporting problem solving for companies facing for the first time regulations and codes in National and International industrial plant projects

Course Attendees

Engineering Standards & Regulations is designed for young engineers, specialists and professionals active in Industrial Plants enabling them to make use of the state-of-the-art norms, codes and standards for the design of equipment and systems.

Structure and Approach

This module is organized as a 35 hours course to be completed in 5 days by interactive sessions with experts coming from Industry and R&D. The approach includes lecturing, case studies, exercises, experiences, RPG, competitive and cooperative simulations



From Here...



Globalization has changed us into a company that searches the world, not just to sell or to source, but to find Intellectual Capital - the World's Best Talents and Greatest Ideas

Jack Welch



BOMBARDIER

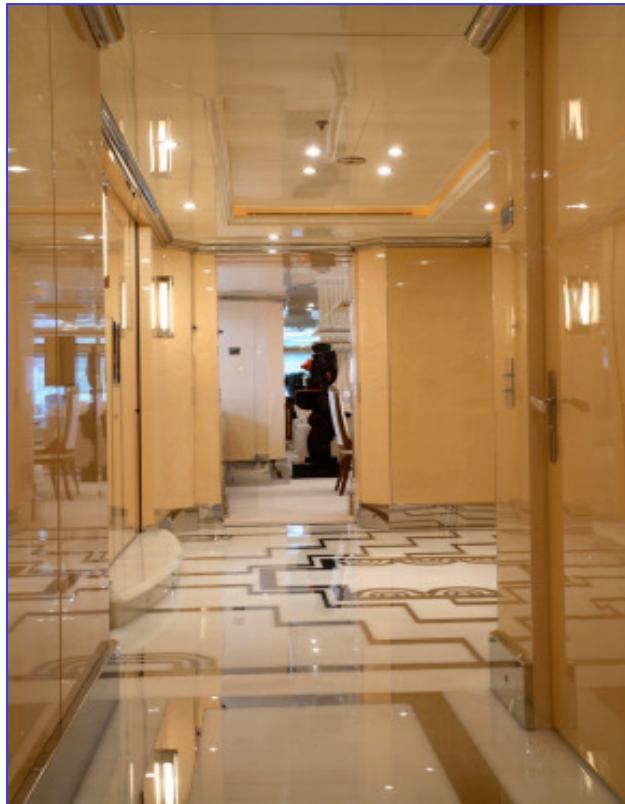
DANIELI CENTRO COMBUSTION



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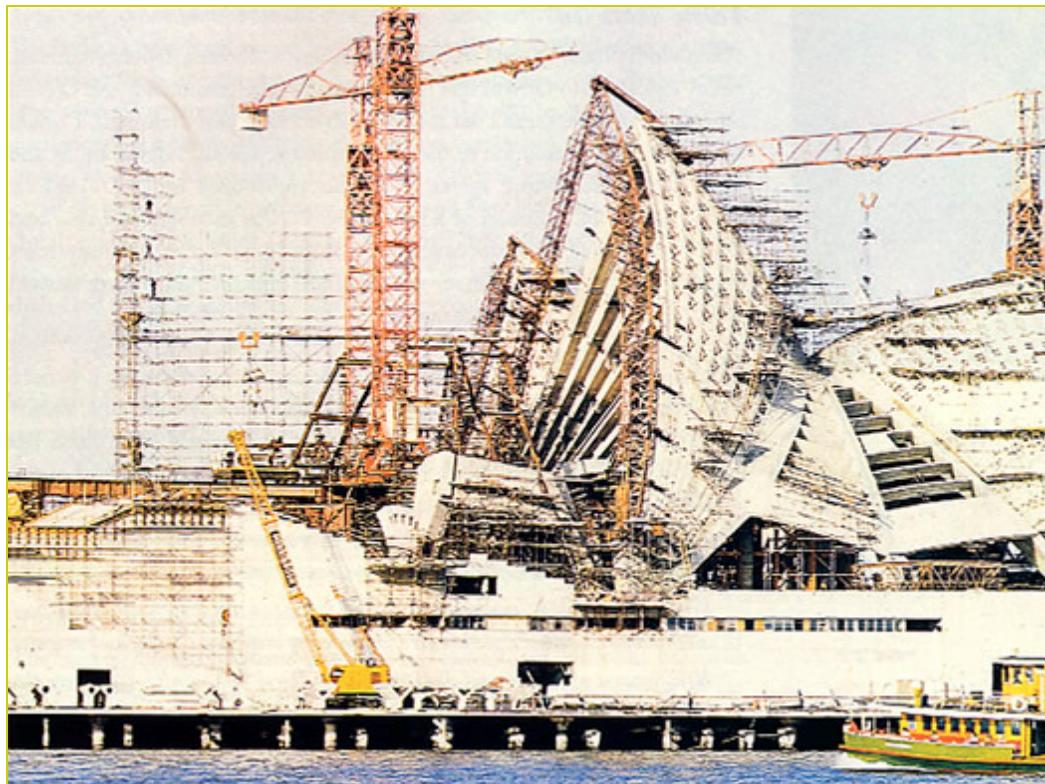
Master in Industrial Plant Engineering and Technologies

WHAT KIND OF BENEFITS FOR YOUNG ENGINEERS

- High Profile Professional Education devoted to provide High Value Skills in Industrial Plants, Engineering and Technologies
- Continuous Interaction with Top Quality Experts from Academia, Institutions and leading E&C Companies.
- Very Qualified Selection and Evaluation Processes that guarantee the Master Attendees as highly qualified resources for top companies.
- Opportunities to complete experiences On Field on complex Industrial Plant projects
- Contacts and visibility to major E&C Companies operating at National and International level.
- Developing Human Potential of the attendees by training and improving Individual and Team Working capabilities.



From Here...



When Engineers and Quantity Surveyors discuss Aesthetics and
Architects study what Cranes do we are on the Right Road

Over Arup

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.... To Here



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Master in Industrial Plant Engineering and Technologies

2011 IS ALREADY HERE AS STEP FORWARD FOR MIPET

The ongoing cooperation among partners and sponsors aims at introducing new features capable to bring MIPET to a top quality level. For the 2011 edition, improvements already defined are the following:

- Lectures given in English
- Presentations and lecture notes also in English
- Issuing of a Reference Book of MIPET
- Involvement of Foreign Students
- Agreements with International Schools active in Plant Technologies for Exchanging Trainers and Students





From Here...



The Major Difference between a Thing that might Go Wrong and a Thing that Cannot Possibly Go Wrong is that when a Thing that Cannot Possibly Go Wrong Goes Wrong, It usually Turns Out to be Impossible to Get at and Repair.

Douglas Adams

... avoiding to come Here



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Douglas Adams



Safety & Risk

Operative Module of MIPET



Industrial Plants, Engineering & Technologies

Objectives

Safety and Risk Module is devoted to present methodologies, techniques and technologies related to safety and risk evaluation during design, construction and operation of an Industrial Plant.

Course Attendees

Safety and Risk Module is designed for young engineers, technicians and professionals active in the engineering of Industrial Plants enabling them to deal with safety rules and risk analysis according to the state-of-the-art legislation.

Structure and Approach

This module is organized as a 35 hours course to be completed in 5 days by interactive sessions with experts coming from Industry and R&D. The approach includes lecturing, case studies, exercises, experiences, RPG, competitive and cooperative simulations



From Here...



For 'tis the sport to have the engineer Hoist with his own Petar and't shall go hard
But I will delve one yard below their mines And blow them at the moon.

William Shakespeare





.... To Here



For 'tis the sport to have the engineer Hoist with his own Petar; and't shall go hard
But I will delve one yard below their mines And blow them at the moon.

William Shakespeare





Project Management

Operative Module of MIPET



Industrial Plants, Engineering & Technologies

Objectives

Project Management Module presents critical aspects related to Industrial Plant PM and provides basic concepts and methodologies in Project Management. The course provides knowledge for facing issues in Project Organization, Risk Management, Cost and Time Management, Planning & Control, Quality, HR and Communications

Course Attendees

Project Management Module is designed for young engineers, technicians and professionals intended to operate as Project Engineers in complex Industrial Plants projects;

Structure and Approach

This module is organized as a 35 hours course to be completed in 5 days by interactive sessions with experts coming from Industry and R&D. The approach includes lecturing, case studies, exercises, experiences, RPG, competitive and cooperative simulations

From Here...



Asian Countries produce Eight Times as many Engineering Bachelors as the United States
and the number of U.S. Students graduating at the Masters and PhD Levels in these areas is declining.

Mark Kennedy



... To Here



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Mark Kennedy





Construction

Operative Module of MIPET



Industrial Plants, Engineering & Technologies

Objectives

Construction Module presents critical aspects related to Constructions in Industrial Plant and provides basic concepts and case studies as methodologies. The course provides knowledge for facing issues in Site Management, Erection Planning, Cost and Time Control, Safety and Risks during erection and commissioning.

Course Attendees

Construction Module is designed for young engineers, technicians and professionals active in Industrial Plants and dealing with Construction issues, enabling them to understand and make use of the key tools for the control and the management of the construction stage of an Industrial Plant.

Structure and Approach

This module is organized as a 35 hours course to be completed in 5 days by interactive sessions with experts coming from Industry and R&D. The approach includes lecturing, case studies, exercises, experiences, RPG, competitive and cooperative simulations

From Here...



I've never seen a job being done by a Five-Hundred-Person Engineering team that couldn't be done better by Fifty People.

C.Gordon Bell



.... To Here



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