

# MASTER OF SCIENCE IN MANAGEMENT ENGINEERING

**Department of Engineering** 



## **KEY FACTS (2022)**

**158** students (37 international)

english

language

**65%** 

# foreing experience

100 %

placement rate



# MSc in Management Engineering

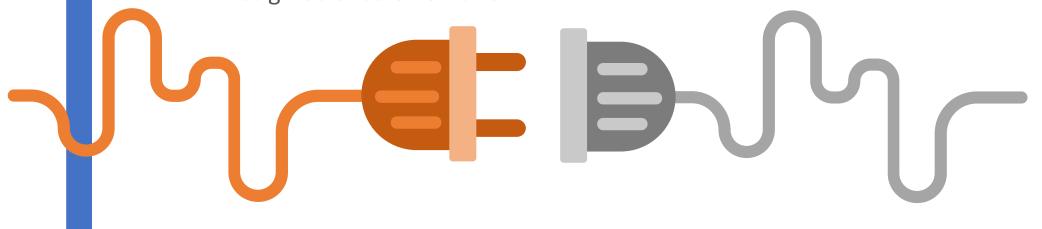
# THE MANAGEMENT ENGINEER

#### THE PERFECT MATCH

#### **ENGINEER**

**BUSINESS** 

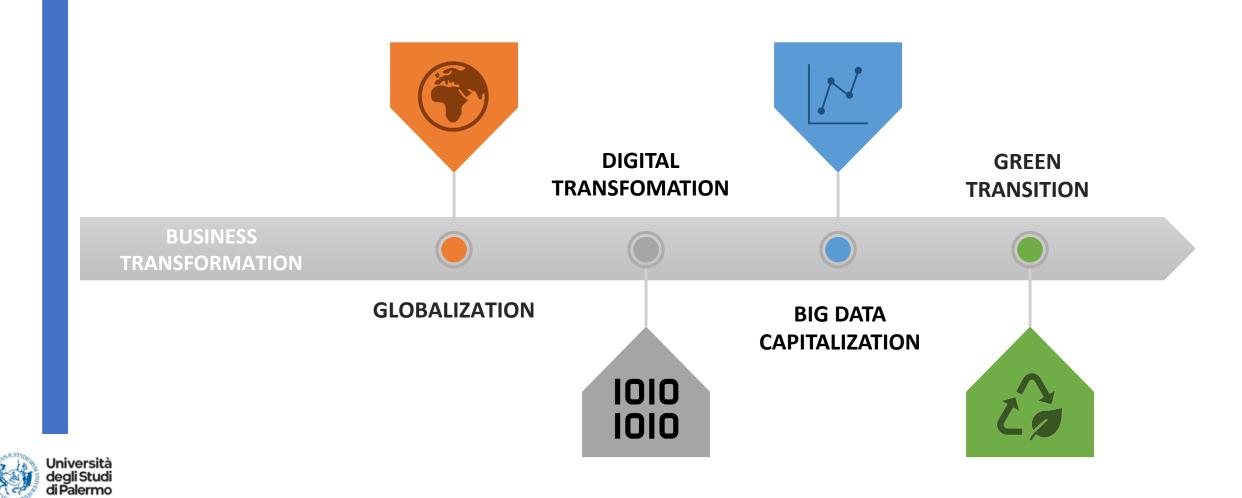
Scientific Knowledge Problem Solving Skills Design-Science Orientation Core business areas
Advanced business areas



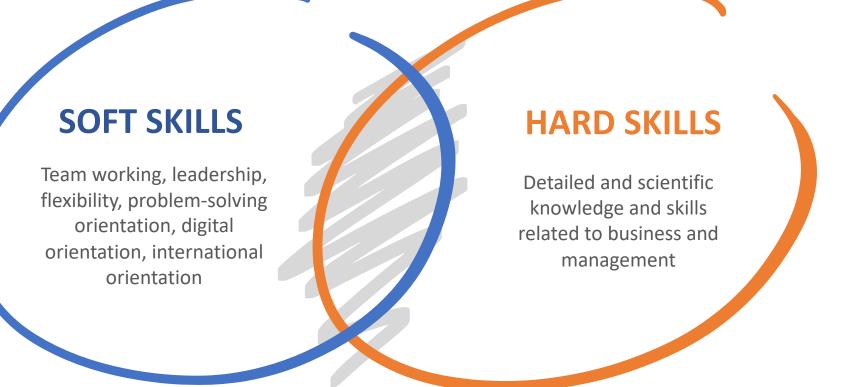


MANAGEMENT ENGINEER

#### THE NAVIGATOR



#### LEARNING OUTCOMES





# MSc in Management Engineering

# STUDY PROGRAM

#### STUDY PROGRAM STRUCTURE

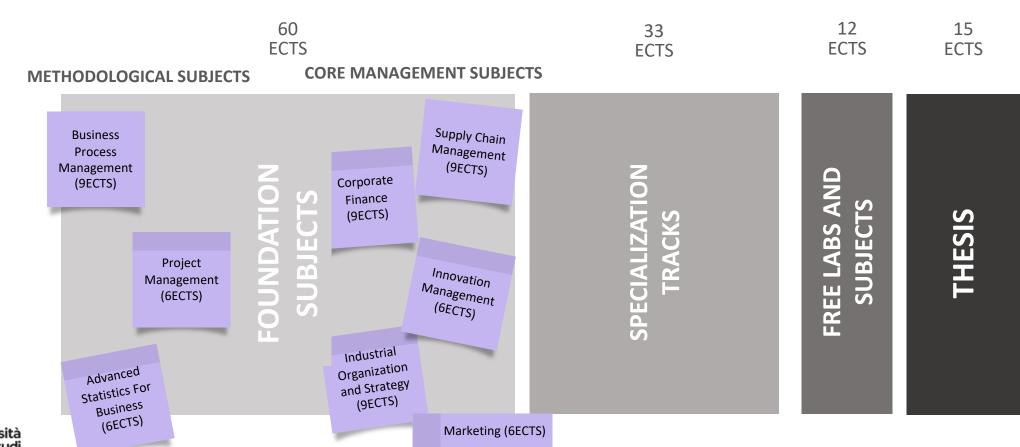
**120 CFU** - 2 years





#### **FOUNDATION SUBJECTS**

**120 CFU** - 2 years





#### STUDY PROGRAM STRUCTURE

**120 CFU** - 2 years

33 12 15 60 **ECTS ECTS ECTS ECTS FREE LABS AND** FOUNDATION SUBJECTS SUBJECTS #2 **THESIS** #4



FREE LABS AND SUBJECTS

SUBJECTS

#### **SPECIALIZATION TRACKS**

#### SUSTAINABILITY AND SOCIAL IMPACT

track aims to get students acquainted with the societal challenges, the new economic paradigms and the technological breakthroughs that push transitions towards sustainable production and consumption









## INNOVATION AND ENTREPRENEURSHIP

track allows students to develop competences required to manage innovation projects and understand the major challenges and success factors in launching a new business

#### DIGITAL TRANSFORMATION

track aims to provide students with competences to understand the connections between manufacturing, management and digital technologies and leverage on their related business opportunities

#### DATA ANALYTICS FOR BUSINESS

track allows students to learn how to organize, manage and analyze data to turn the information into data-powered business strategies



#### **#1\_SUSTAINABILITY AND SOCIAL IMPACT**

#### **CORE TRACK SUBJECTS**

Sustainable
Manufacturing
(6ECTS)

Reverse
Logistics and
Smart Waste
Management
(6ECTS)

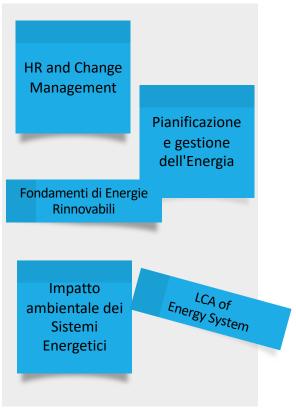
Circular
Economy
Business
Model (6ECTS)

#### (1 OUT OF 8 - 6 ECTS)



#### **ELECTIVE ADDITIONAL**

(1 OUT OF 5 - 6 ECTS)





Lab of LCA (3 ECTS)

#### **#2\_DIGITAL TRANSFORMATION**

#### **CORE TRACK SUBJECTS**



#### (1 OUT OF 7 - 6 ECTS)



#### (1 OUT OF 5 - 6 ECTS)





#### **#3\_INNOVATION AND ENTREPRENEURSHIP**

#### **CORE TRACK SUBJECTS**



#### (1 OUT OF 8 - 6 ECTS)



#### ELECTIVE ADDITIONAL

(1 OUT OF 5 - 6 ECTS) Intellectual **Property Rights** Competion Law **HR and Change** Management Risk Management



Lab of Crowdsourcing (3ECTS)

#### **#4\_ DATA ANALYTICS FOR BUSINESS**

#### **CORE TRACK SUBJECTS**



#### ELECTIVE CHARACTERIZING (1 OUT OF 6 - 6 ECTS)



#### (1 OUT OF 5 - 6 ECTS)





Lab of Statistics (3ECTS)

#1\_SUSTAINABILITY AND SOCIAL IMPACT

**Sustainable Manufacturing (6ECTS)** 

**Circular Economy Business Models (6ECTS)** 

Reverse Logistics and Smart Waste Management (6ECTS)

Lab of Life Cycle Assessment (3 ECTS)

1 OUT OF 8 (6ECTS)

Advanced Project Management for Business
Service quality data-driven management
Manufacturing Processes for the Circular Economy
Digital Manufacturing
Additive Manufacturing
Economia del settore pubblico e del welfare
Sicurezza Industriale
Healthcare Operations Management

1 OUT OF 5 (6ECTS)

HR and Change Management
LCA of Energy System
Pianificazione e gestione dell'Energia
Fondamenti di Energie Rinnovabili
Impatto ambientale dei Sistemi Energetici

Smart Factory (6ECTS)

**Digital Marketing (6ECTS)** 

**Supply Chain Management 4.0 (6ECTS)** 

Lab of Business Process Digitalization (3ECTS)

1 OUT OF 7 (6ECTS)

Tech Entrepreneurship
Sicurezza Industriale
Additive Manufacturing
Advanced Project Management for Business
Strategic Management and Open Innovation
Digital Manufacturing
Process and System Simulation

1 OUT OF 5 (6 ECTS)

HR and Change Management
Programmazione
Machine Learning + Data Analytics and Storage
Cybersecurity
Fondamenti di Smart Grid

#2\_DIGITAL TRANSFORMATION

**Tech Entrepreneurship (6ECTS)** 

Product/process innovation (6ECTS)

Strategic Management and Open Innovation (6ECTS)

Lab of Crowdsourcing (3ECTS)

1 OUT OF 8 (6ECTS)

Smart Factory
Digital Marketing
Digital Manufacturing
Manufacturing Processes for the Circular Economy
Economia del settore pubblico e del welfare
Advanced Project Management for Business
Supply Chain Management 4.0
Sicurezza Industriale

1 OUT OF 5 (6 ECTS)

HR and Change Management
Competion Law
Intellectual Property Rights
Family Business
Risk Management

#3\_ INNOVATION AND ENTREPRENEURSHIP

Advanced Project Management for Business (6ECTS)

**Business Analytics (6ECTS)** 

Service quality data-driven management (6ECTS)

Lab of Statistics (3ECTS)

1 OUT OF 6 (6 ECTS)

Digital Marketing
Sicurezza Industriale
Digital Manufacturing
Economia del Settore Pubblico e del Welfare
Supply Chain Management 4.0
Tech Entrepreneurship

1 OUT OF 5 (6 ECTS)

HR and Change Management
Time-series analysis and Design of Experiment
Data and Models for Managerial Decisions
Machine Learning + Data Analytics and Storage
Cybersecurity



#4\_ DATA ANALYTICS FOR BUSINESS

#### STUDY PROGRAM

First year Second year ECTS) TRACK 1: SUSTAINABILITY AND SOCIAL IMPACT (33ECTS) **Advanced Statistics for Business** (6 ECTS) ECTS) Supply chain management (9 ECTS) Strategy (9 ECTS) **Project management (6 ECTS)** ECTS) **Business process management (9** ECTS) 6 Innovation management (6 of Lab (3 of subjects 6 **TRACK 2: DIGITAL TRANSFORMATION (33ECTS)** and **Corporate Finance** Industrial Organization selection selection TRACK 3: INNOVATION AND ENTREPRENEURSHIP (33ECTS) TRACK 4: DATA ANALYTICS FOR BUSINESS (33ECTS)



#### LEARNING METHODS

#### **ACTIVE LEARNING AND DESIGN THINKING**



ase studies, flipped classroom, team project works

ACTIVE LEARNING APPROACH



field research and project thesis

THESIS AND INTERNSHIP IN COMPANIES



seminar from practitioners

PRACTICE-ORIENTED LEARNING



Out-going and in-coming mobility

INTERNATIONAL BREATH



#### **SEMINARS**



Series Meet *the* Manager

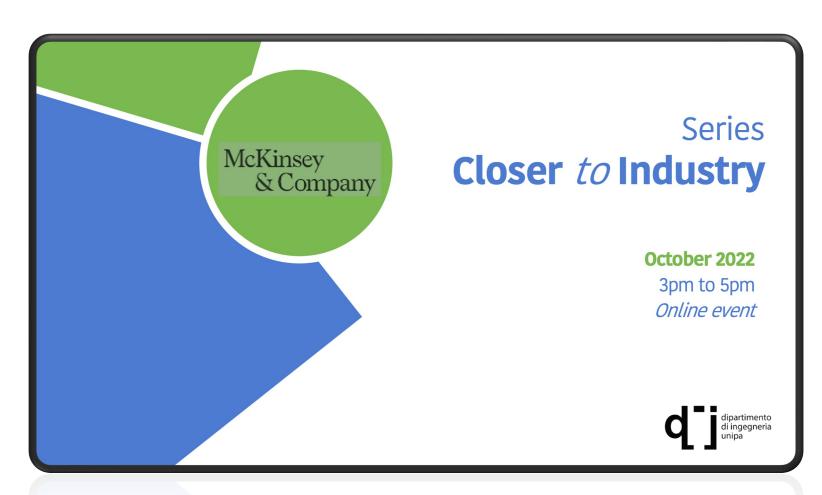
Dec 2022
3pm to 5pm
Online event







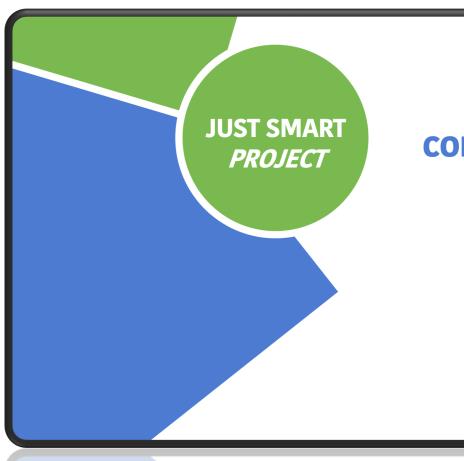
#### **WORKSHOPS**







#### **WORKSHOPS**



# Research and consulting activities with courthouses

**Jan - Sep 2023** 

**50** scholarships to be assigned 8.000€ each







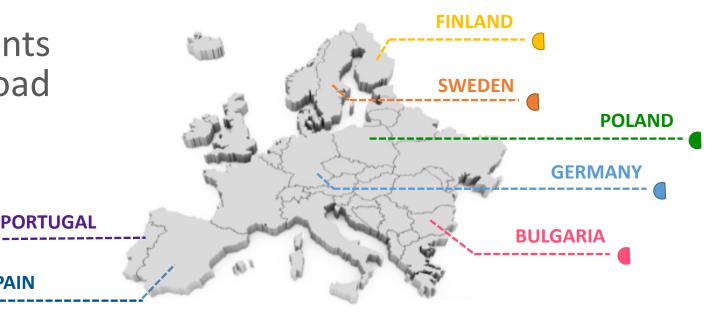
# MSc in Management Engineering

# AN INTERNATIONAL PROGRAMME

#### INTERNATIONAL MSc

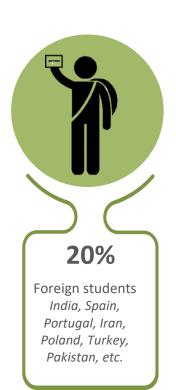
more than 20 institutions in 9 different Countries

over **65%** of our students go abroad





#### INTERNATIONAL MSC



#### **English**

The programme is entirely taught in English





#### International speakers

Seminars and workshops held by international invited practitioners



# MSc in Management Engineering

## PLACEMENT & CAREERS

#### **PLACEMENT**

employment rate

100 %

time to employment

4,8

average months

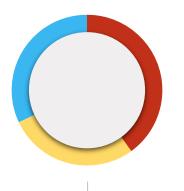


[source: ALMALAUREA 2021]

#### **PLACEMENT**



Google, Amazon, Unicredit, Vodafone, Banca d'Italia, Poste Italiane, Enel, ISMETT, etc.





# Manufacturing Companies

FCA, Nestlè, Bulgari, ENI, OMER, Irritec, Fincantieri, etc.



# Business and IT Consulting Companies

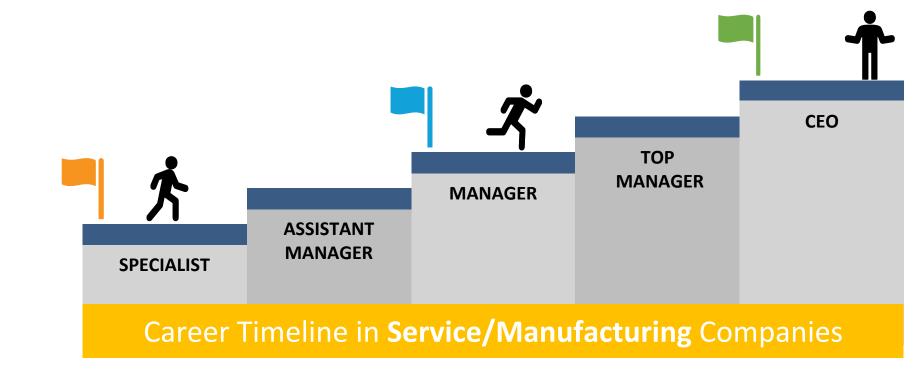
PwC, Deloitte, Ernst & Young, KPMG, Lipari Consulting, Reply, Accenture, etc.



#### **PLACEMENT**

#### WHICH ROLE?

It depends on time!





#### PALERMO US. ITALY





| PERFORMANCE - COMPARISON  | MSc Management Engineering UNIPA | MSc Management Engineering ITALY (Avg) |
|---|----------------------------------|--|
| Tasso di occupazione (a 1 anno dalla laurea)                        | 95,2%                            | 84,8%                                  |
| Laureandi complessivamente soddisfatti del CdS                      | 93,7%                            | 93,4%                                  |
| Laureati che si iscriverebbero di nuovo allo stesso corso di studio | 83,5%                            | 70,3%                                  |



[source: Ministero MUR 2021 - SMA]



# MASTER OF SCIENCE IN MANAGEMENT ENGINEERING

# ONLINE BRAND-NEW!



#### WHY AN ONLINE PROGRAM?





## ADMISSION REQUIREMENTS



Basics of Mft **Technology/Operations** 



Basics of **Business/Economics** 



Basics of **Statistics** 



Bachelor Degree in Engineering





#### **CONTACTS**



#### email

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#### website

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