



# UNIVERSITÀ DEGLI STUDI DI PALERMO

Department: Engineering

A.Y. 2021/2022

## DEGREE COURSE IN MANAGEMENT ENGINEERING

### Characteristics



Class of Master's Degree  
(MSc) on Management  
engineering (LM-31)



2 YEARS



PALERMO



FREE ACCESS



2255

### Educational objectives

The growing complexity and the dynamics of the competitive system, in the age of globalization and knowledge require a new type of professionals, capable of facing issues in an interdisciplinary, flexible and innovative way.

Management engineers are an answer to the needs of new markets, and they are always more appreciated and required both by companies and by public administrations.

Management engineering finds proper solutions to technical, economical, operational and organizational problems in production processes and delivery of goods and services, through the scientific methods and capabilities which are typical of engineers.

Management engineers, in their activity, use the quantitative tools, decision supports and methodological rigour typical of engineering sciences, aiming at optimizing solutions. The engineering vision and method, when applied to managerial and organizational problems, enable the achievement of efficient and effective solutions, contribute to a better understanding of business phenomena, facilitate the identification and control of the most significant decisional variables, set the bases for the continuous improvement of business based on measurable parameters and, eventually, are suitable to build well-structured relations among the various business functions and among companies.

The education of a management engineer is based upon a sound grounding in disciplines such as mathematics, physics, economics, statistics, operations research, computer science as well as upon the planning capabilities typical of the most important engineering disciplines. Among these latter, particularly important are the disciplines related to the sectors of processing technologies and systems, of industrial plants and economics engineering.

The education is completed by the acquisition of ECTS from other educational and training activities such as internships, seminars, foreign language courses, industry visits.

The degree course in Management Engineering of the University of Palermo has got a well-established tradition; actually, it started in Palermo in 1980.

The Master degree program focuses on the managerial education of engineers. This is the reason why the educational objective of the course is to provide advanced and scientific knowledge of managerial issues: project management, innovation management, marketing, corporate finance, strategy, supply chain management.

The course is divided into three groups of disciplines:

- disciplines related to the managements methods and techniques (statistical methods and methodologies for business processes modelling);

- managerial disciplines (marketing, finance, strategy, supply chain management and operations management, project management, technological innovation, customer satisfaction, HR management);

- focus disciplines in manufacturing area, in industrial plants field and in economics.

### Professional opportunities

A national survey by ISTAT, published in 2004, about all the degree courses of all Italian Faculties, has put Managerial Engineers at the first places in the charts in career development ("89% of graduates find a stable job position within three years after finishing of ongoing studies.")

This trend is confirmed by the survey of 2011 (released in June 2012) which found that 95% of management engineers reach a stable job position.

The 2015 survey from AlmaLaurea consortium showed that 86% and 94% of senior management engineers found a stable job position within 1 and 3 years since graduation, respectively.

The survey also shows that more than 90% of the graduates are satisfied of their master degree course for the competences in

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their job positions.

All the results confirm that the management engineer is one the most appreciated professional figure.

The master degree program in Palermo is an answer to the requirements of the economical-productive system and its occupational rates are over the national average.

The senior management engineer finds professional opportunities in companies operating in the following sectors: consulting, manufacturing, logistics, marketing, utilities, ICT, healthcare, public administration, energy, banking, finance and so on.

The master degree council develops placement surveys on its graduates every two years. The last survey was released on 2015 and concerns the master graduates from 2009 to 2014.

A 97% of the respondent (138) have a stable job position (over the national average).

The master graduates usually get a first job interview within 3 months form the graduation and 26% of them got it by the Master degree council. Above 25% of them work in Sicily.

### Final examination features

It consists of a dissertation with discussion of the results. The dissertation is awarded 15 credits. The final exam includes an important design work or scientific research, ending with a thesis on a management engineering subjects. It aims to prove the ability of the candidate to operate autonomously, his/her analytic capability and complex problem solving skills. During the discussion of the dissertation, candidates must demonstrate their communication skills in line with the educational objectives, their specialized knowledge of the subject, independent judgment and investigation autonomy. The dissertation topic is chosen by the student and approved by the council of the master degree course. The thesis can be either a systematic and critical literature review or the proposition of the chosen topic and can be a novel approach to solve a given management engineering problem both theoretical and empirical. The thesis can also be developed ad a detailed an engineering design project.

Subjects 1 ° year	CFU	Sem.	Val.	SSD	TAF
21678 - BUSINESS PROCESS MANAGEMENT <i>Bruccoleri(PO)</i>	9	1	V	ING-IND/35	B
17051 - CORPORATE FINANCE <i>Lo Nigro(PO)</i>	9	1	V	ING-IND/35	B
19022 - INNOVATION MANAGEMENT <i>La Commare(PO)</i>	6	1	V	ING-IND/16	B
21671 - ADVANCED STATISTICAL METHODS FOR MANAGEMENT ENGINEERING <i>Lombardo(PO)</i>	6	2	V	SECS-S/02	C
04864 - MARKETING <i>Roma(PA)</i>	6	2	V	ING-IND/35	B
20409 - PROJECT MANAGEMENT	12	2	V		
- TOOLS & TECNHNQUES FOR PROJECT MANAGEMENT <i>Micale(PQ)</i>	6	2		ING-IND/17	B
- STANDARD & METHODOLOGIES FOR PROJECT MANAGEMENT <i>Micale(PQ)</i>	6	2		ING-IND/17	B
Free subjects (suggested)	9				D
	<b>57</b>				

Subjects 2 ° year	CFU	Sem.	Val.	SSD	TAF
21676 - INDUSTRIAL ORGANISATION & STRATEGY AND BUSINESS GAME	15	Ann.	V		
- INDUSTRIAL ORGANISATION & STRATEGY <i>Perrone(PO)</i>	9	1		ING-IND/35	B
- BUSINESS GAME <i>Perrone(PO)</i>	6	2		ING-IND/35	B
21674 - SERVICE QUALITY MANAGEMENT <i>Lupo(PA)</i>	6	1	V	ING-IND/16	B
18823 - HUMAN RESOURCE MANAGEMENT <i>Pace(PA)</i>	6	2	V	M-PSI/06	C
14368 - SUPPLY CHAIN MANAGEMENT <i>Aiello(PA)</i>	9	2	V	ING-IND/17	B
20429 - FINAL EXAMINATION	15	2	G		E
Optional subjects	6				B
Stage and others	6				F

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## OPTIONAL SUBJECTS

Stage and others	CFU	Sem.	Val.	SSD	TAF
22147 - ENGINEERING PROFESSIONAL PRACTICE <i>Barcellona(PA)</i>	3	1	G		F
21167 - INTERNSHIP 2 CREDITS	2	1	G		F
11033 - INTERNSHIP 3 CREDITS	3	1	G		F
15458 - INTERNSHIP 4 CREDITS	4	1	G		F
11351 - INTERNSHIP 5 CREDITS	5	1	G		F
11028 - INTERNSHIP 6 CREDITS	6	1	G		F
11034 - OTHER EDUCATIONAL ACTIVITIES - 1 CREDIT	1	1	G		F
11035 - OTHER EDUCATIONAL ACTIVITIES - 2 CREDITS	2	1	G		F
11036 - OTHER EDUCATIONAL ACTIVITIES - 3 CREDITS	3	1	G		F
11037 - OTHER EDUCATIONAL ACTIVITIES - 4 CREDITS	4	1	G		F
11038 - OTHER EDUCATIONAL ACTIVITIES - 5 CREDITS	5	1	G		F
11039 - OTHER EDUCATIONAL ACTIVITIES - 6 CREDITS	6	1	G		F
21777 - STATISTICS LAB <i>Lombardo(PO)</i>	3	2	G		F
22148 - TECHNICAL ADVICE FOR JUDICIAL ACTIVITY <i>Barcellona(PA)</i>	3	1	G		F
Optional subjects	CFU	Sem.	Val.	SSD	TAF
21719 - CIM & DIGITAL MANUFACTURING <i>Rana(RD)</i>	6	1	V	ING-IND/16	B
18815 - PLANT DESIGN <i>Giallanza(RD)</i>	6	2	V	ING-IND/17	B
21675 - PRODUCT/PROCESS INNOVATION <i>Micari(PO)</i>	6	2	V	ING-IND/16	B
09093 - PUBLIC SECTOR ECONOMICS <i>Abbate(RU)</i>	6	1	V	ING-IND/35	B
16079 - SAFETY MANAGEMENT <i>La Fata(PA)</i>	6	2	V	ING-IND/17	B
21682 - SMART FACTORY RESEARCH AND INNOVATION <i>La Commare(PO)</i>	6	2	V	ING-IND/16	B
21668 - SUSTAINABLE MANUFACTURING <i>Ingarao(PA)</i>	6	1	V	ING-IND/16	B
21669 - TECHNOLOGY ANALYSIS & STRATEGIC MANAGEMENT <i>Piazza(RD)</i>	6	1	V	ING-IND/35	B
Free subjects (suggested)	CFU	Sem.	Val.	SSD	TAF
17917 - DATA AND MODELS FOR MANAGERIAL DECISIONS <i>Dardanoni(PO)</i>	9	2	V	SECS-P/03	D

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