



# UNIVERSITÀ DEGLI STUDI DI PALERMO

<b>DEPARTMENT</b>	Ingegneria
<b>ACADEMIC YEAR</b>	2019/2020
<b>BACHELOR'S DEGREE (BSC)</b>	MANAGEMENT ENGINEERING
<b>SUBJECT</b>	ECONOMICS FOR ENGINEERS
<b>TYPE OF EDUCATIONAL ACTIVITY</b>	B
<b>AMBIT</b>	50300-Ingegneria gestionale
<b>CODE</b>	02795
<b>SCIENTIFIC SECTOR(S)</b>	ING-IND/35
<b>HEAD PROFESSOR(S)</b>	ABBATE LORENZO      Ricamatore      Univ. di PALERMO
<b>OTHER PROFESSOR(S)</b>	
<b>CREDITS</b>	9
<b>INDIVIDUAL STUDY (Hrs)</b>	152
<b>COURSE ACTIVITY (Hrs)</b>	73
<b>PROPAEDEUTICAL SUBJECTS</b>	
<b>MUTUALIZATION</b>	
<b>YEAR</b>	2
<b>TERM (SEMESTER)</b>	2° semester
<b>ATTENDANCE</b>	Not mandatory
<b>EVALUATION</b>	Out of 30
<b>TEACHER OFFICE HOURS</b>	<b>ABBATE LORENZO</b> Tuesday 10:00 12:00 Stanza docente, Dipartimento di Ingegneria, Ingegneria Gestionale, edificio 8, primo piano Wednesday 13:00 15:00 Stanza docente, Dipartimento di Ingegneria, Ingegneria Gestionale, edificio 8, primo piano

<b>PREREQUISITES</b>	General concepts of mathematical analysis, elementary algebra.
<b>LEARNING OUTCOMES</b>	<p>Knowledge and understanding. The student at the end of the course will have the knowledge about general economics and economic sciences, the positive and normative microeconomics, macroeconomics, the financial mathematical tools for the valuation of investments. She/he will be able to understand consumer choices, and the difference between long and short-term decisions of the producer, the formation of the demand and supply curves and the main market structures. She/he will know the main topics of macroeconomics such as measures of welfare and economic growth, the labor market, inflation and the economic cycle. The student will also be able to understand which variables affect rate of return on an investment or project and why.</p> <p>Applying knowledge and understanding: The student will be able to use the techniques for economic analysis to determine the conditions of equilibrium of a market and evaluate if a given investment is convenient or not.</p> <p>Making judgements: The student will be able to interpret and comment on the aspects of micro and macroeconomics. Also she/he will be able to gather and interpret the data necessary for the evaluation of investments.</p> <p>Communication skills The student will acquire the ability to communicate and express issues concerning the micro and macroeconomics, and can hold conversations on topics related to business investments and projects.</p> <p>Learning skills The student will have learned the interactions between micro and macroeconomic issues and business issues. It will also have to learn to combine the sensitivity to the technological problems with the company's overall efficiency and achieving superior performance in terms of management.</p>
<b>ASSESSMENT METHODS</b>	<p>A Written Exam and an Oral Exam.</p> <p>a) Assessment procedure for the written exam. The written exam consists of at least 3 problems to be solved, namely: a problem of Microeconomics, a problem of Macroeconomics, a problem of investment analysis. The written examination will seek to determine the possession of skills, abilities and knowledge. In the written exam the theoretical comments of the numerical findings are appreciated. The assessment is expressed in thirtieth and admission to oral test is determined by a minimum score (15), in case of lower score the exam fails.</p> <p>b) Evaluation criteria for the oral examination. The oral test consists of an interview, in order to check the student's skills and knowledge disciplinary provided by the course. The evaluation is expressed in thirtieths. The questions (four at least), both open and semi-structured are specifically designed to test the results of learning provided for. Usually, some comments about the written exam are required. The interview wants to assess the knowledge captured; the processing capacity; the ability to talk properly about the main topics. The final evaluation will take into account both the score of the written exam and that of the oral exam. Excellent: 30-30 and praise. Outstanding knowledge of the topics, excellent properties of language, good analytical ability, the student is able to apply knowledge to solve complex problems. Very Good: 26-29. Good command of the topics, full of language, the student is able to apply knowledge to solve problems proposed. Good: 24-25. Basic understanding of the main topics, discrete properties of language, with some abilities to independently solve the proposed problems. Satisfactory: 21-23. The student has not fully mastered the main teaching subjects but he/she has the knowledge, satisfactory property language, poor ability to independently apply the knowledge acquired. Sufficient: 18-20. Minimum basic understanding of the major teaching and technical language issues, very little ability to independently apply the knowledge acquired. Insufficient, the student does not have an acceptable knowledge of the contents of the topics covered in the teaching.</p>
<b>EDUCATIONAL OBJECTIVES</b>	The student will acquire knowledge about the market dynamics, the behavior of the consumer, the manufacturer's choices and will be able to make an economic and financial evaluation of investment alternatives. Another educational

	objective is to provide the student with the knowledge and skills needed to understand the macroeconomic dynamics in which every day businesses are operating.
<b>TEACHING METHODS</b>	Frontal lessons - Classroom exercises
<b>SUGGESTED BIBLIOGRAPHY</b>	L. Abbate, Dispense distribuite durante il corso. Begg-Fischer-Dornbush, Economia, McGraw-Hill, 2018. Sullivan-Wicks-Luxhoj, Economia applicata all'ingegneria, Pearson Prentice Hall.

## SYLLABUS

Hrs	Frontal teaching
2	Introduction: aim of the course
4	Firm definition, legal framework, corporate governance basics
4	Demand, supply and the market
2	Elasticities of demand and supply
2	Consumer choice and demand decisions
3	Costs and supply
4	Market structure
2	The labour market
2	Interest formulas - Discrete compounding
2	Economic analysis of alternatives
2	Decision making
3	Introduction to macroeconomics - Output and aggregate demand
3	Fiscal policy
2	Economic indicators
2	Money and banking
3	Monetary and fiscal policy
2	International trade
3	Exchange rates and the balance of payments
Hrs	Practice
2	Demand, supply and the market
2	Elasticities of demand and supply
2	Consumer choice and demand decisions
2	Costs and supply
2	Market structure
2	Interest formulas - Discrete compounding
6	Decision making
2	Fiscal policy
2	Economic indicators
2	Money and banking
2	Monetary and fiscal policy