

## **Syllabus**

## Course Description

Course Title	Economics and Management
Course Code	42420
Course Title Additional	
Scientific-Disciplinary Sector	ING-IND/35
Language	English
Degree Course	Bachelor in Electronics and Cyber-Physical Systems Engineering
Other Degree Courses (Loaned)	
Lecturers	Prof. Guido Orzes, Guido.Orzes@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/36819
Teaching Assistant	
Semester	First semester
Course Year/s	3
СР	6
Teaching Hours	36
Lab Hours	24
Individual Study Hours	90
Planned Office Hours	18
Contents Summary	<ul> <li>The company: objectives and context</li> <li>Essentials of financial accounting;</li> <li>Investment analysis;</li> <li>Other economic evaluation analyses.</li> </ul>
Course Topics	<ol> <li>The company: objectives and context</li> <li>Terms and definitions</li> <li>Basic economical concepts</li> <li>Company, firm, enterprise</li> <li>Classifications of companies</li> </ol>



<ul> <li>Fayol's five elements of administration</li> <li>Value Chain</li> <li>1.2 Corporate objectives and corporate strategy</li> <li>Vision, mission and objectives</li> </ul>	
<ul> <li>Porter's generic strategies</li> <li>Strategy tools</li> <li>Essentials of financial accounting</li> <li>Terms and definitions</li> </ul>	
Basic accounting principles	
Balance sheet and income statement	
Financial statement preparation	
Ratio analysis	
3. Investment analysis	
Terms and definitions	
Repayment plans	
Actualization and capitalization	
Investment analysis and evaluation (Discounted Pay-back	
period, Net present value, Internal rate of return, External rate of	
return, Benefit-cost ratio)	
Inflation	
4. Other economic evaluation analyses	
Classification of costs	
Break-even point	
Make or buy choices	
Keywords Accounting; Investment analysis; make or buy; break-even point.	
Recommended Prerequisites -	
Propaedeutic Courses	
Teaching Format  The teaching format is based on frontal lectures, exercises and a game-based business simulation. In addition to a solid theoretical background, special attention will be dedicated to examples, exercises and case studies discussion.	
Mandatory Attendance not compulsory	
Specific Educational Intended Learning Outcomes (ILO)	$\neg$
Objectives and Learning	
Outcomes Knowledge and understanding	



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<ol> <li>General knowledge of the various tasks, methods and techniques of financial accounting and investment analysis</li> <li>Knowledge of the main the economic and operational factors linked to the strategic choices of the companies and of the main strategy tools</li> <li>Basic understanding of management and business administration</li> </ol>
Applying knowledge and understanding 4. Ability to evaluate investment initiatives, the economic and financial solidity of economic and financial plans about the launch of new products or the adoption of new business models 5. Ability to "virtually" manage a company (game-based business simulation)
Making judgements 6. Systems Thinking - overview of the business organization 7. Ability to transfer the knowledge and methods learned to real practical applications
Communication skills  8. Ability to structure and prepare a presentation describing company strategy and management with business language  9. Oral communication skills (business language)
Learning skills  10. Ability to autonomously extend the knowledge acquired during the study course by reading and understanding
Formative assessment: In class exercises: 4x30 minutes; ILOs assessed: 1, 4. In class group works: 2x30 minutes; ILOs assessed: 2, 3.
Summative assessment: 65% written exam - exercises: 3 exercises (1 hour); ILOs assessed: 1, 4. 25% written exam - questions: 3 open-ended questions of 200

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	words each (30 minutes); ILOs assessed: 2, 3. 10% Business Game*: 6 hours (in class); ILOs assessed: 1-10.
	* The Business Game might be replaced with an assignment for non-attending students. The score obtained in the Business Game is valid for 1 academic year and cannot be carried over beyond that timeframe.
Evaluation Criteria	The final mark is the sum of the marks of the different parts of the exam. The assessment of the written part is based on ability to solve simple exercises about the topics of the course, clarity of answers, mastery of language (also with respect to teaching language), ability to summarize and establish relationships between topics. The assessment of the business game is based on ability to work in a team and skills of creativity and critical thinking.
Required Readings	Lecture slides and notes, which are available in the <u>OLE page</u> of the course (self-enrollment key will be provided to students in the first lecture).
Supplementary Readings	Antony R.N., Hawkins D.F., Merchant K.A., "Accounting: Text and Cases", Thirteenth Edition, McGraw-Hill International Edition
Further Information	
Sustainable Development Goals (SDGs)	Responsible consumption and production, Industry, innovation and infrastructure