## SYLLABUS
### COURSE DESCRIPTION

<table>
<thead>
<tr>
<th><strong>COURSE TITLE</strong></th>
<th>Introduction to Management Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COURSE CODE</strong></td>
<td>75005</td>
</tr>
<tr>
<td><strong>SCIENTIFIC SECTOR</strong></td>
<td>ING-INF/04</td>
</tr>
<tr>
<td><strong>DEGREE</strong></td>
<td>Bachelor in Computer Science and Engineering</td>
</tr>
<tr>
<td><strong>SEMESTER</strong></td>
<td>2nd Semester</td>
</tr>
<tr>
<td><strong>YEAR</strong></td>
<td>1st</td>
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<tr>
<td><strong>CREDITS</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTAL LECTURING HOURS</strong></td>
<td>48</td>
</tr>
<tr>
<td><strong>TOTAL LAB HOURS</strong></td>
<td>24</td>
</tr>
<tr>
<td><strong>PREREQUISITES</strong></td>
<td>The course is a first year Bachelor course. No prerequisites are required other than open mind and willingness to experiment</td>
</tr>
<tr>
<td><strong>COURSE PAGE</strong></td>
<td><a href="https://ole.unibz.it/">https://ole.unibz.it/</a></td>
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</tbody>
</table>

**SPECIFIC EDUCATIONAL OBJECTIVES**

- Type of course: “affini o intergrativi” for L-31 and “carattterizzanti” for L-08
- Scientific area: “formazione affine” for L-31 and “Ingegneria gestionale” for L-8

Introduction to management engineering teaches the basic key concepts, ideas and methods of each of the following disciplines: Information systems, operations, economics & finance, logistics & supply chain management and technology management. Technology development trends are also outlined.

**LECTURER**

Davide Taibi  
office POS 3.11, Faculty of Computer Science, Piazza Domenicani 3, davide.taibi@unibz.it, +39 0471 016185

**SCIENTIFIC SECTOR OF THE LECTURER**

ING-INF/04

**TEACHING LANGUAGE**

English

**OFFICE HOURS**

Friday 10:30-12:30, or per email arrangement

**TEACHING** Oliver Kutz: Oliver.Kutz@unibz.it
**Assistant Office Hours**
Tuesday, 18:00, POS 3.03, Faculty of CS, POS Building, piazza Domenicani 3.

**List of Topics Covered**
- Demand and supply
- Production and costs
- Market theory and structures
- Theory and value of the firm
- Processes and competition
- Quality management
- Resource planning
- Finance and accounting principles

**Teaching Format**
The course is a mix of conventional teaching methods (frontal lectures, exercise, project work) and novel more inspirational techniques involving game-playing, role-playing and physical construction of artifacts.

**Learning Outcomes**

**Knowledge and understanding**
- know various application areas, including their local, national and international economic context
- know and understand interdisciplinary aspects of computer science, such as socio-economic, entrepreneurial and professional aspects

**Applying knowledge and understanding**
- be able to apply the knowledge in a working context;

**Making judgments**
- be able to collect useful data and to judge information systems and their applicability;

**Communication skills**
- be able to explain a project activity or a scientific study, also to non-experts;

**Learning Skills**
- have acquired learning capabilities that enable them to carry out project activities in companies, public institutions or in distributed development communities;

**Assessment**
In the project part of the exam we will assess the learning outcomes related to the application of the acquired knowledge and the ability to work autonomously, to design a software and/or hardware prototype that aims to solve a real-world problem. In the oral exam we will assess the learning outcome related to "knowledge and understanding" and those related to the student ability to learn.

**Assessment Language**
English

**Evaluation Criteria and Criteria for Awarding Marks**
Final mark composed by
- 30% project work
- 70% oral exam

Relevant for oral exam: clarity of answers, ability to summarize, evaluate, and establish relationships between topics.
Relevant for project work: Identified solution, documentation
<table>
<thead>
<tr>
<th>REQUIRED READINGS</th>
<th>All course reading material is provided in the course by the lecturer.</th>
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<tbody>
<tr>
<td>SUPPLEMENTARY READINGS</td>
<td>-</td>
</tr>
<tr>
<td>SOFTWARE USED</td>
<td>No specific requirements</td>
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</table>