# Syllabus

## Course description

<table>
<thead>
<tr>
<th><strong>Course title</strong></th>
<th>Computer Science</th>
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<tbody>
<tr>
<td><strong>Course code</strong></td>
<td>27324</td>
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<tr>
<td><strong>Scientific sector</strong></td>
<td>ING-INF/05</td>
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<tr>
<td><strong>Degree</strong></td>
<td>Bachelor in Economics and Management</td>
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<tr>
<td><strong>Semester and academic year</strong></td>
<td>1st semester 2022-2023</td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td>5</td>
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<tr>
<td><strong>Modular</strong></td>
<td>No</td>
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| **Total lecturing hours** | 50          |
| **Total lab hours**       | 0           |
| **Total exercise hours**  | 50          |

**Attendance**

- Strongly suggested. For non-attending students, extra study material will be provided on the course's website. Non-attending students should contact the professor at the beginning of the course.

**Prerequisites**

- English at level B1
- Basic computer usage, in particular Microsoft Windows or Mac and file handling.

**Course page**

- On the Unibz OLE website

**Specific educational objectives**

- The course is designed to acquire further computer skills, in particular to raise average skills in computer basics, network usage, and data organization, to provide knowledge of legal requirements when handling data, basic data organization, and extraction techniques.

**Lecturer**

- Andrea Molinari
- [Office Online](https://www.unibz.it/it/faculties/economics-management/academic-staff/person/3420-andrea-molinari)
- Andrea.Molinari@unibz.it

**Scientific sector of the lecturer**

- ING-INF/05

**Teaching language**

- English

**Office hours**

- Please refer to the lecturer’s timetable

**Lecturing assistant**

- None

**Teaching assistant**

- Riccardo Billero

**Office hours**

- Please refer to the teaching assistants’ timetables

**List of topics covered**

- File handling, basic computer usage, Windows, computer networks and security requirements, data management, information systems
- Microsoft Excel, graphs, formulas, functions, data
### Management in Excel
Microsoft Access basic, querying a database.

#### Teaching format
Frontal lectures in standard classroom, frontal lectures in computer lab with examples and exercises assigned in class, interactive exercises in standard classroom and in computer room held by teaching assistant.

#### Learning outcomes
**Knowledge and understanding:**
- Basic knowledge of information systems: hardware, software and computer networks
- Basic knowledge of data management
- Knowledge of threats, security and legal obligations of automatic data handling
- Deep knowledge of a spreadsheet program
- Basic knowledge of database interaction through queries

**Applying knowledge and understanding:**
- Advanced ability to analyse and organize economic datasets through spreadsheets
- Ability in data extraction from a database management program
- Information systems and their role in modern organization
- Basic usage of security systems for personal data

**Making judgments**
- Distinguish software types and licences formats
- Decide which techniques to use when organizing data

**Communication skills**
- Building efficient and appropriate graphs
- Building data summaries

**Learning skills**
- Extending Excel functions though usage of online help

#### Assessment
1. Written test to assess knowledge on theoretical concept (basic computer usage, computer networks and security requirements etc.).
2. Practical assessment to test data organization, handling and modification through Excel.
3. Practical assessment to test data extraction and handling ability on Access.

#### Assessment language
English

#### Evaluation criteria and criteria for awarding marks
The final grade is the weighted average of assessment on part 1 (50%), part 2 (25%), and part 3 (25%). To be sufficient, student must achieve the minimum grade (18/30) on all the three parts. Non-attending students will have extra parts in the exams.
corresponding to the missing hours of attendance according to the European Credit System

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<tr>
<th>Required readings</th>
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<tbody>
<tr>
<td>• Slides and other extra materials provided by the teacher</td>
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<tr>
<td>• Non-attending students will receive indications about extra materials to be prepared for the written exam</td>
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<table>
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<th>Supplementary readings</th>
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<tr>
<td>• Basic Computer course book, available on <a href="http://www.paolocoletti.it/27000">www.paolocoletti.it/27000</a></td>
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<td>• Videos on Excel, databases and Access, available on <a href="http://www.paolocoletti.it/27000">www.paolocoletti.it/27000</a></td>
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<tr>
<td>• Databases course book, available on <a href="http://www.paolocoletti.it/27000">www.paolocoletti.it/27000</a></td>
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