

## Syllabus

### Course description

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| <b>Course title</b>      | Food processing equipment                     |
| <b>Course code</b>       | 44708   |
| <b>Scientific sector</b> | AGR/09  |
| <b>Degree</b>            | Food Sciences for Innovation and Authenticity |
| <b>Semester</b>          | I   |
| <b>Year</b>              | II  |
| <b>Academic year</b>     | 2023/2024                                     |
| <b>Credits</b>           | 6   |
| <b>Modular</b>           | No  |

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| <b>Total lecturing hours</b> | 36   |
| <b>Total exercise hours</b>  | 24   |
| <b>Attendance</b>            | Highly recommended   |
| <b>Prerequisites</b>         | General notions of information technologies, biology and physics |
| <b>Course page</b>           |  |

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| <b>Specific educational objectives</b> | <p>The course aim is to provide the attendants theoretical and practical fundamentals of the basic principles of a food production chain, focusing on the engineering and organisational aspects of the food processing equipment that must be there used. Particular emphasis will be devoted to the conceptual tools that must be used in the designing of a full production industrial line. The aim of the course is to offer a general overview of scientific contents combined with specific professional skills and knowledge. In addition, the student will acquire soft skills connected to scientific presentations or reports.</p> |
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| <b>Lecturers</b>                         | <p>Dr. Giovanni Carabin</p> <p><a href="mailto:giovanni.carabin@unibz.it">giovanni.carabin@unibz.it</a>;</p> <p><a href="https://www.unibz.it/it/faculties/agricultural-environmental-food-sciences/academic-staff/person/35346-giovanni-carabin">https://www.unibz.it/it/faculties/agricultural-environmental-food-sciences/academic-staff/person/35346-giovanni-carabin</a></p> <p>Dr. Alessio Tugnolo</p> <p><a href="mailto:atugnolo@unibz.it">atugnolo@unibz.it</a></p> <p><a href="https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/49428-alessio-tugnolo">https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/49428-alessio-tugnolo</a></p> |
| <b>Scientific sector of the lecturer</b> | AGR/09  |
| <b>Teaching Assistant</b>                |   |
| <b>Office Hours</b>                      | After consultation and agreement with lecturers   |

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| <b>Learning outcomes</b> | <p>Knowledge and understanding of the conceptual design and planning of an industrial food production line, including insights in the food unit operations and related physical running principles.</p> <p>Applying knowledge and understanding in scientific and professional environments, focusing on specific case studies. Applying analytical and modelling tools for conceptual and practical designing of production lines.</p> <p>Making judgments when assessing different solutions for a given technological application on the basis of its technical, organizational and economic</p> |
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|   | <p>performances. Achieving the basis for investment assessment.</p> <p>Communication skills in presenting scientific results in written and oral form, in particular using an appropriate English language, as well as proper graphical tools for exhaustive analytical reports.</p> <p>Learning skills concerning the ability to find information on the web and access their validity, to use and transmit the technical knowledge acquired in the course.</p> |
| <p><b>Assessment</b></p>  | <p>The assessment is carried out via an oral examination aimed to check the knowledge, the presentation skills and the practical know how acquired in the course.</p> <p>The oral part (max 45 minutes) consists of a scientific presentation (using power point) on a topic selected by the applicant; the presentation is prepared individually at home followed; further 2-3 questions on topics presented during lectures will follow.</p>                   |
| <p><b>Assessment language</b></p>                                 | <p>ENGLISH</p>   |
| <p><b>Evaluation criteria and criteria for awarding marks</b></p> | <p>The criteria that will be relevant for assessment will consider clarity of answers, mastery of language, ability to summarize, evaluate, and establish relationships between topics, capability of managing graphical designing tools.</p>  |

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| <b>Required readings</b>      | Materials distributed by the teachers |
| <b>Supplementary readings</b> | Materials distributed by the teachers |