MSc in Mechatronics Engineering
This master enables students to plan, understand, and implement **R&D projects** for **new products** in industry and **beyond the traditional industrial domain**. The programme is built according to the systems engineering approach: students learn to deal with the complexity and interconnections of modern industrial processes and products.

Specifically, students will learn **modern methods** (including Quality Function Deployment) for **design**, **development** and **management** of the entire life cycle of new industrial products, which are composed of a physical-mechanical base integrated with **automation technologies and new materials**. Furthermore, the focus will be laid on product-related development and manufacturing resources, tools, and processes (Concurrent Engineering).

Finally, the more recent developments related to Industry4.0 are addressed, considering that the evolution of modern industrial processes and products is ruled by the integration of cognitive and physical properties into Cyber Physical Systems.
### Programme overview

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<th><strong>Degree awarded</strong></th>
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<td>Master of Science - “Laurea Magistrale” - in Mechatronics Engineering</td>
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- Non-EU: 1.000€ - 4.500€ (based on merit)  
- Income/merit based scholarships and tuition waivers available |

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Admission

Application deadlines
(check online for updates)
- February for non-EU citizens living outside Italy
- From June to November: rolling admission for EU citizens and non-EU citizens regularly living in Italy

How to apply
- Access the online application form
- Upload the required documents
- Submit your online application by the deadline
- Check online for more information and updates: www.unitn.it/mastermechatronics

Selection criteria
- Academic curriculum
- English test
- Curriculum Vitae
- Statement of purpose

Requirements
- Bachelor’s degree (or equivalent) in Industrial Engineering or related field
- English at B1 level of the Common European Framework of Reference for Languages
Study Plan

MSc Students of Mechatronics Engineering can choose one of the three curricula:

Mechanics and Mechatronics
Devoted to advanced design tools for mechanical industrial products, (from concept generation to the end of the project), testing and prototyping methods, production technologies, methods and organization, and the modeling and control of mechanical systems.

Electronics and Robotics
Devoted to artificial intelligence techniques applied to mechanical systems, measuring and sensor fusion techniques, dynamic modeling, and the planning and control of mechanical systems applied to manufacturing and emerging sectors.

Industrial Process Management
Aimed at building the foundations of modeling, designing, managing and innovating industrial processes, taking into account scientific, technological, information and organizational features. The learning goals are pursued by emphasizing decision support systems, quality control systems and information systems for logistics and production management. Operations research and project management related topics can integrate the learning goals through dedicated elective courses.
For all curricula
• Elective courses
• Internship
• Final thesis

Extracurricular activities (for all curricula)
Activities related to the Career Boosting Program:
• Company tours
• Company presentations
• Company awards and scholarships

Dual Degrees
Beside the several international mobility opportunities active on this master’s degree, enrolled students can apply for a dual degree programme with:
• Instituto Superior Técnico, Lisboa (Portugal)
• Technische Universität München (Germany)
• Ecoles Centrales Paris/Lille/Lyon/Nantes/Marseille - Centrale Supélec, Paris (France)
• EIT Digital Autonomous Systems, Aalto (Finland), KTH (Sweden), TU Berlin (Germany), EURECOM (France) e ELTE (Hungary).
Career opportunities

Mechatronics engineers are increasingly demanded in the areas of innovation of products and production systems, intelligent mechanics, advanced design, planning and management of manufacturing process and complex systems.

Moreover, they are recruited by manufacturing industries (e.g. specializing in high-tech products), basic and applied research centres, engineering firms, consulting and services companies, business units at the level of corporate responsibility (e.g. in production, logistics, quality control, marketing, etc.), and public institutions.

Graduates may pursue a PhD in Trento (Materials, Mechatronics and Systems Engineering) or at international level.
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www.unitn.it/mastermechatronics