

ME Manufacturing Engineering (double degree)

Two Years Full Time (September start)



Introduction

This masters merges manufacturing technical and technological aspects with innovation and entrepreneurship teaching, in the context of the global societal challenges, such as circular economy, industrial innovation and sustainability. It is a double degree programme, coordinated by EIT Manufacturing Master School, between UCD and other universities around Europe i.e. Aalto University, Finland, Ecole Centrale de Nantes (ECN), France, Politecnico di Milano (POLIMI), Italy, University of Applied Sciences and Arts of Italian Switzerland (SUPSI),

Switzerland, Institut Polytechnique de Grenoble (Grenoble INP), France and and Vienna University of Technology (TU Wien), Austria. The first year is spent at UCD (entry university) and the second year is spent at another (exit) university as listed above. Students choose one of four minors offered as part of the programme i.e. Additive Manufacturing for Full Flexibility, Zero-Defect Manufacturing for a Circular Economy, Platforms for digitalized value networks, or Data Science & AI for Competitive Manufacturing.

Course Highlight

On completion students receive two degrees directly from entry and exit universities and the EIT label certificate from EIT Manufacturing, as international recognition of their high-quality education curriculum. EIT Manufacturing (EITM) Master School is part of EIT Manufacturing, a European association of leading Universities, industries and research centres linked to the manufacturing sector.

Course Content and Structure

- 120 credit Taught Masters
90 credits: Taught modules taken between 2 partner universities
30 credits: Thesis project undertaken at exit university
- Modules offered will depend on minor stream chosen and the Entry-Exit universities combination
- The teaching methods and learning environment are highly interactive and varied and include lectures, workshops, tutorials, labs, and practical exercises.

Please see UCD Graduate Studies for a full breakdown of each minor stream

Modules offered by UCD include:

- Manufacturing Engineering
- Computational Continuum Mechanics
- Advanced Metals & Materials Processing
- Medical Device Design
- Mechanical Engineering Design
- Technical Communication
- Advanced Polymer Engineering
- Materials Science and Engineering
- Engineering Decision Support Systems
- Professional Engineering (Finance)
- Professional Engineering (Management)
- Engineering Project Management
- Supply Chain Design & Analysis
- Operations Management
- Quantitative Methods for Engineers

Why study at UCD?



Graduate education

12,800 graduate students; 17% graduate research students; structured PhDs



Global community

9,500 international students and a 300,000 alumni network across 165 countries



Global Profile

UCD is ranked in the top 1% of higher education institutions worldwide



Global careers

Dedicated careers support; 2-year stayback visa to work in Ireland



Co-funded by the European Union





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Career Opportunities

There is strong demand throughout Europe for graduates of manufacturing degree programmes to be better equipped for the marketplace than their predecessors have been. There is strong need for graduates to have direct experience of industry, to have a practical awareness of important developments within the sectors of Europe's manufacturing industry (e.g., increased digitalisation, demands of Industry 4.0, growth of additive manufacturing and robotics, etc.), to have a greater awareness of innovation & entrepreneurship, combined with an international perspective that is the direct result of personal experiences. The ME Manufacturing Engineering will prepare you for high level technical positions, Innovation roles and business profiles, including the capability to create your own start-up. It will also allow you to create a professional network at national and international level through the several initiatives and the EIT alumni communities.

Programme Director

Dr Pezhman Ghadimi



This European and intersectoral mobility postgraduate programme is strongly oriented towards innovation and entrepreneurship. The strong industry component is reinforced by industry projects, the Master thesis and a potential internship. The objective of the Master School is to train the future European leaders in manufacturing, combining digital and technical manufacturing skills to meet the needs of European SMEs and multinationals alike. Students will be delivered a double Master degree after spending one year in two of the seven universities which shaped up this ambitious and prestigious training programme, along with a EIT Manufacturing certificate. UCD will welcome students participating in this programme next September 2022 for the first year of their Master studies. The students will spend their second year at other partner universities.

Applicant Profile

- Applicants must hold a bachelor's degree with a minimum of 180 ECTS credits or equivalent academic qualifications from an internationally recognized university with a minimum 2:1 degree GPA. B.Sc. in Mechanical Engineering, Electrical Engineering, Computer Engineering, Computer Science, Information Technology or Industrial Engineering, depending on the minor that the applicant wants to pursue.
- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent.

International Fees and Scholarships

All students for this programme are eligible for an automatic scholarship. The EIT Manufacturing Master School will rank applicants and offer scholarships at the time of the students admission. Scholarships may include: mobility grant, subsistence costs support and fee waivers. See EIT Manufacturing website <https://eitmanufacturing.eu/> for more information

Related Masters Programmes of Interest

- ME Mechanical Engineering
- ME Materials Science & Engineering
- MEngSc Materials Science & Engineering
- ME Engineering with Business
- MEngSc Engineering Management

CONTACT US

Irish/EU Students – Katie O'Neill **E:** katie.oneill@ucd.ie **T:** +353 1 7161781 **W:** www.ucd.ie/eacollege
International Students – **E:** eamarketing@ucd.ie **T:** +353 1 7168500 **W:** www.ucd.ie/global

APPLY NOW

Students apply through a central application system, managed by EIT Manufacturing

<https://apply.eitmanufacturing.eu/>