

POLITECNICO DI MILANO



**Academic Year 2017/18**

**School of Design**

**Degree Programme of:**

**Product Design for Innovation**

**Laurea Magistrale (Equivalent To Master Of Science)**

**Milano Bovisa Campus**

## 1. General Information

|   |   |
|---|---|
| <b>School</b>                                   | School of Design  |
| <b>Code Reference Law</b>                       | 1160  |
| <b>Name</b>                                     | Product Design for Innovation   |
| <b>Reference Law</b>                            | Ordinamento 270/04  |
| <b>Class of degree</b>                          | LM-12 - Design  |
| <b>Degree level</b>                             | Laurea Magistrale (Equivalent To Master Of Science)                   |
| <b>First year of activation</b>                 | 2010/2011   |
| <b>Official length of the programme</b>         | 2   |
| <b>Years of the programme already activated</b> | 2   |
| <b>Official language(s) <sup>(1)</sup></b>      | Italian/English   |
| <b>Campus</b>                                   | Milano  |
| <b>Dean of the School</b>                       | Luisa Maria Virginia Collina  |
| <b>Coordinator of the Study programme</b>       | Francesco Zurlo   |
| <b>Website of the School</b>                    | <a href="http://www.design.polimi.it">http://www.design.polimi.it</a> |
| <b>Website of the Study programme</b>           | --  |

*<sup>(1)</sup> The degree course offers some tracks in Italian and others in English.*

### Student Office (Study programme)

|                         |  |
|-------------------------|--|
| <b>Reference office</b> | Centro Orientamento Studenti Scuola Design |
| <b>Address</b>          | Via Candiani 72, 20158 Milano              |
| <b>Phone</b>            | 02 2399 7277                               |

### Central Student Office

|                |                           |
|----------------|---------------------------|
| <b>Address</b> | VIA LAMBRUSCHINI, 15 (MI) |
|----------------|---------------------------|

## 2. General presentation of the study programme

The Laurea Magistrale Product Design for Innovation programme is the continuation of the three year Laurea programme in Industrial Product Design at the Milan campus.

Graduates from the Product Design for Innovation Laurea Magistrale Course will acquire a thoroughgoing education in design subjects focusing on a strategic vision of innovation processes. They will concentrate on the systemic impact of design action that takes place when new product systems and new of use are defined.

This Laurea Magistrale programme is designed to provide students with a grasp of socio-economic, consumer and market dynamics aimed to define the corporate identity of companies and institutions. These are the premises for the design of the whole product-service system and for the definition of manufacturing, communication and distribution strategies. In this sense, of central importance are activities which are defined, in specialist language, as researching-through-designing relating to the definition of the contextual conditions for designing, aimed at elaborating new concepts, developing new languages, types, functions and technological and material solutions.

## 3. Learning objectives

The Laurea Magistrale in Product Design for Innovation focuses on the processes and methods by which design can generate innovation within socio-technical systems, prefiguring sustainable development scenarios.

The Laurea Magistrale in Product Design for Innovation is a second level university programme, a continuation of the three year Industrial Product Design Laurea. The specific objectives of this Laurea Magistrale in Product Design for Innovation are further development and consolidation of students' grasp of the cultural references, conceptual and methodological structures and technical skills required in design culture, strongly oriented to exploring innovative opportunities and building critical assessment skills in relation to the implications projects may have on the social, cultural and economic context as well as strategic project planning and management.

Designing objects, products and goods can be seen as the nerve centre in which many contemporary emergencies converge: the Laurea Magistrale's design focus is precisely those design methods and practices which enable designers to define and develop meaningful innovation trajectories.

Seen in this way product design is the context in which wide ranging change processes can be activated, harbingers of diverse social, cultural and environmental quality. Within the various phases of the design process in which design's contribution is precisely to generate innovation, the focus is mainly on those stages in which conceptual issues emerge, namely that in which the predisposition of an issue in original ways takes place and in which occurs a strong tension between creativity and systemic ability. The field on which the Laurea Magistrale in Product Design for Innovation operates is that in which the design problem is relatively undefined both because uncertainties related to project objectives are high (what to design) and also in relation to response strategies in cultural, behavioural and manufacturing terms (how to design) thus requiring both an ability to structure design problems (problem finding and problem setting in specialist terminology) and to build visions and scenarios.

The programme's priority is to develop complex design strategies in which the strategic dimensions of the project measure up to:

- the ability to grasp and manage the social, economic, environmental and meaning implications

which the design will generate together with the context dynamics which will be modified;

- the ability to define design scenarios on a medium to long term time frame in which potential technological system evolution and integration are a central focus as are evolving social and cultural

dynamics;

- defining tools which enable design work to take place not solely on the product but also on the system scale as the '*from concept to vision*' expression summarises so well.

To the technical nature of the skills developed in the level I Laurea the level II Laurea Magistrale adds strategic, contextualised and decision making complexity directed at design exploration of opportunities and taking as read the ability to define and manage context limitations.

Description of the educational programme

This Laurea Magistrale programme focuses on three paradigmatic dimensions of the innovation processes generated by design:

- the dimensions of the type-formal, expressive and meaning qualities;
- the user dimension;
- the technology-materials dimension.

The artefact type-formal quality dimension and the innovation dynamics which 'generate forms' are encompassed by the academic reference sector SSD ICAR/13. In this context the focus is on the object innovation methods which: overcome formal archetypes (types); reinterpret methods to resolve the form-function nexus starting from the semantic reconceptualisation of functions or the technologies used; operate meaning recontextualisation processes as well as operating on conceptual scale leaps (such as cities or cultural heritage systems or distribution systems or product-service mix systems) in which access, interaction, information, marketing, interface and usability themes are revisited; equally explore formal configuration methods which take place from the starting point of attention to sensory and expressive qualities, sign reading and symbolic values and objects' cultural, emotional and experiential expression.

The sector reference points of user dimensions and innovation dynamics which emerge from the world of needs and use behaviours are: SSD SPS/08; M-DEA/01; M-PSI/01 + ICAR13. In these the focus is on the importance of direct observation of people and their behaviours both in terms of roles and context conditions - to recognise that a monolithic user concept does not exist - and in the user-context whole (physical, economic, legal and social contexts but also those linked to forms of knowledge, cultural models, practices and collective experiences, social acceptance or resistance methods relating to the chances for use and consumption offered by products). From the starting point of contributions deriving from a range of subject areas (ethnography, economy, marketing, IT, psychology, proxemics, anthropology and anthropometry) large scale social dynamics take shape and reciprocal, significant influences between individual behaviours and material culture form. The educational objective is to cultivate new anthropocentric perspectives in students and encourage their creative implications for design skills.

The technological-material dimension and the innovation dynamics driven by technology refer to the following subject areas: SSD ING-IND/22; ING-IND/16 + ICAR 13. These are the core materials, working processes and manufacturing processes modules. Together with design subjects, this dimension deals with forms of innovation linked to the innovative and skilled use of materials and transformation technologies (traditional materials transferred to new application contexts; redesigning existing products with new materials; creating value by means of the choice of sustainable materials). Technologies and transformation and working processes are also the basis of: design themes linked to elements of manufacturing process competitiveness; design limitations imposed by working technologies; manufacturing process innovation methods; hybridising forms of industrial and craft manufacturing; assessing the impact of the new technologies on product ownership.

Exploring the various opportunities for triggering innovative processes is accompanied by courses designed to form the skills and to provide tools, students require to enable them to generate forms of visual narrative in the design trajectory, above all elements which must be expressed are qualitative, conceptual and abstract as typically occurs when complex scenarios are described in physical, immaterial, relationship and time frame terms. The reference subject areas are: ICAR/13, ICAR/17, M-FIL/05. These skills hybridise knowledge from the visual explanation area and figurative/visual

semiotics which help students to de-codify or build contexts of visual meaning, introduce symbolic, allusive, abstract and conceptual language and translate them into visual texts.

The Laurea Magistrale in Product Design for Innovation programme is divided up into theory courses, project laboratories, project workshops, work experience with companies, institutions and professionals studios and a Laurea Magistrale thesis.

The purpose of the *ex cathedra* courses is to introduce students to the theoretical-critical dimensions of design as a culture which generates innovation, acting as interface between socio-cultural and technological changes. Each of the theoretical courses is designed to study one of the paradigmatic dimensions generated by design in depth, focusing on the debates under way and the various points of view provided by the subject areas.

Closely linked to the theoretical courses and parallel to them, students will take part in design activities within design laboratories. Laboratory activities provide opportunities for students to experiment with the theoretical-critical knowledge gained and lead on to individual research project work. Each laboratory focuses on one specific dimension of design as trigger to innovation (forms, languages, signs, visual culture; materials, technologies, manufacturing processes; user culture, new use and consumption methods, new socio-cultural practices).

By means of the choice of design-research themes, the laboratories are a space for students to develop an exploratory and experimental dimension in their studies, building the methodological rigour, tools and techniques for innovative project development in marked co-relation to vision, scenario and solution building training for complex design projects.

The laboratories are design trigger contexts, opportunities to examine problems and action often organised together with external bodies bringing experience and concrete needs to them. The teaching model involves two different types of laboratory experience:

- an intensive, limited time frame form linked to concept design laboratories and design workshops in which students are given a great variety of design opportunities with the objective of training their abilities to activate design concepts to configure and prefigure potential solutions;
- a laboratory form which lasts one semester in which students take on complete design projects.

In this Laurea Magistrale, the design laboratories, and in particular the Final Synthesis Laboratory, which can be used to develop the premises for the elaboration of Laurea theses, are full-blown research and educational platforms which involve students in markedly interdisciplinary design experiences.

The programme includes an obligatory internship period at companies, bodies, institutions and professional studios which is best integrated with thesis work.

## 4. Organization of the study programme and further studies

### 4.1. Structure of the study programme and Qualifications

For every level one Laurea course the School also sets up a related continued study Laurea Magistrale.

|                      |                                 |
|----------------------|---------------------------------|
| Level I Laurea       | Level II continued study laurea |
| Product design       | Integrated Product Design       |
| Communication Design | Communication Design            |
| Fashion Design       | Design for the Fashion System   |

|  |  |
|--|--|
| Interior Design  | Interior and Spatial Design                      |
| Product design   | Design & Engineering                             |
| Mechanical Engineering   |  |
| Material and Nanotechnology Engineering                            |  |
| Product Design/Communication Design/Interior Design/Fashion Design | Product Service System Design                    |
| Product Design/Communication Design/Interior Design/Fashion Design | Digital and Interaction Design                   |
| Interior Design/ Product Design (Product)                          | Yacht & cruising vessel design- La Spezia campus |

The Laurea Magistrale courses activated by the School of Design are divided up into sections.

|   |  |
|---|--|
| <b>Laurea Magistrale in Integrated Product Design</b><br>Taught in both the Italian and English languages   | <b>Active in both the 1st and 2nd years of the Laurea Magistrale</b><br><i>Product Section 1 - IP1</i><br><i>Product Section 2 - IP2</i>   |
| <b>Laurea Magistrale in Communication Design</b><br>Taught in both the Italian and English languages        | <b>Active in both the 1st and 2nd years of the Laurea Magistrale</b><br><i>Communication Section 1 - C_1</i><br><i>Communication Section 2 - C_2</i><br><i>Communication Section 3 - C_3</i>   |
| <b>Laurea Magistrale in Design for the Fashion System</b><br>Taught in the English language                 | <b>Active in both the 1st and 2nd years of the Laurea Magistrale</b><br><i>Fashion Section 1 - M_1</i><br><i>Fashion Section 2 - M_2</i>   |
| <b>Laurea Magistrale in Interior and Spatial Design</b><br>Taught in both the Italian and English languages | <b>Active in both the 1st and 2nd years of the Laurea Magistrale</b><br><i>Interiors Section 1 - IS1</i><br><i>Interiors Section 2 - IS2</i><br><i>Interiors Section 3 - IS3</i>   |
| <b>Laurea Magistrale in Design &amp; Engineering</b><br>Taught in the English language                      | <b>Active in both the 1st and 2nd years of the Laurea Magistrale</b><br><i>D&amp;E Section 1 - DE1</i><br><i>D&amp;E Section 2 - DE2</i>   |
| <b>Laurea Magistrale in Product Service System Design</b><br>Taught in the English language                 | <b>Active in both the 1st and 2nd years of the LM</b><br><i>Product Service System Section 1 - PS_1</i><br><i>Product Service System Section 2 - PS_2</i><br><b>From the 2nd year of the LM the following section will also be active</b><br><i>Section Product Service System 2 - PS_3</i><br>Only for students studying on the <b>Double degree</b> with Management Engineering project. |
| <b>Laurea Magistrale in Digital and Interaction Design</b><br>Taught in the English language                | <b>At the 1st year only one section is active</b><br><b>Second year not active</b>   |

N.b. Course teaching can be in mixed Italian and English.

## 4.2. Further Studies

The qualification grants access to "Dottorato di Ricerca" (Research Doctorate), "Corso di Specializzazione di secondo livello" (2nd level Specialization Course) and "Master Universitario

di secondo livello" (2nd level University Master)

## **5. Professional opportunities and work market**

### **5.1. Professional status of the degree**

Potential career outcomes for graduates of the Laurea Magistrale in Product Design for Innovation integrate product design with management and strategic skills and focus on management of design activities, design research and art direction. Employment opportunities consist mainly of careers in technical and R&D(research and development) offices in companies or professional studios working in design and consultancy.

Graduates from the Laurea Magistrale in Product Design for Innovation are experts in industrial products and the innovation processes which result from these. Considerable career opportunities are to be found in the context of all professional and company opportunities in the design field. In particular graduates can work as freelance professionals, be employed in professional studios or work as consultants in these. There are also employment openings with local governments and research institutions and bodies. Graduates can work in both the small and medium sized businesses characteristic of the Italian context, intervening across the board in the renewal of the industrial culture of the market product and in industrial manufacturing organisations and services with high innovation content, performing specialist roles in the design and research and development fields.

They can also access third level research doctorate university courses.

The Laurea Magistrale in Product Design for Innovation equips students for employment in professional scenarios with strategic skills expressing an ability to co-ordinate project collectives and plan complex design action strategies.

The specific skills obtained are:

- the use of tools and practices useful in the development of a structured process of product innovation;
- the ability to analyse market behaviours and visualise consumer habits;
- a focus on remaining up-to-date on operational tools and project method adjustment;
- product innovation process organisational and planning abilities;
- an ability to liaise with specialists in the various phases leading to the development of new products.

The professionals graduating from the Laurea Magistrale in Product Design for Innovation integrate product design with expertise in the fields of management and strategy, and have been trained to supervise the design activity, design research and artistic coordination.

The inclusion in the labour market is usually within technical offices and R & D firms or professional engineering and consulting services.

### **5.2. Careers options and profiles**

Laurea Magistrale in Product Design for Innovation graduates find wide ranging career openings in all the professional and business activities working in the design field and planning in the widest sense, encompassing consumer goods, transport, furniture products and product-service systems.

In particular they frequently work as freelance professionals, as employees or consultants in professional studios, design department heads or assistants in companies, product design consultants at companies, in technical offices with product design duties, company design managers, company employees with product design and manufacturing co-ordination duties, teachers at professional or technical institutes.

Surveys of University Assessment Commission

[https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id\\_servizio=204&idApp=1&idLink=4218](https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id_servizio=204&idApp=1&idLink=4218)

## 6. Enrolment

### 6.1. Access requirements

Laurea (First degree), or foreign comparable degree

Candidate admission is dependent on assessments of merit and of the contents of previous courses of study. Students from other campuses or dissimilar study programmes will be required to undergo assessment of their educational background in order to identify any supplementary courses of study which may be required before admission to the Laurea Magistrale study programme.

Qualifications required for admission:

- Level I or II laurea;
- Appropriate English languages skills certification.

Updates to the “*Guida all’ammissione alla Laurea Magistrale*” are published every year on the School's site including detailed information on the material required for admission applications, how to register and deadlines, admission without assessment and reasons for non admission. Minimum laurea marks required for admission are also shown.

Students requiring supplementary studies prior to admission must fulfil these within one year of the date of assessment.

### 6.2. Requested knowledge

Students can be admitted to the Laurea Magistrale in either the first or the second semester (only students coming from similar courses or who have fulfilled supplementary educational requirements relating to the assessment semester will be eligible for admission to the 2nd semester). Available places on the 2nd semester will be published after September admissions procedures are complete.

The Laurea Magistrale in **Design & Engineering** accepts students for **2nd semester admission only if they have completed the following courses in the 1st semester: *Product development design studio 1* and *C.I. Design Materials*** as individual courses. The Study Programme Board (CCS) will assess whether students have fulfilled their laboratory requirements and effectively attended the course including in subsequent exam sessions.

**English language** fluency, according to the standards indicated by the university, is a registration pre-requisite. **Certificates must be presented before the assessment registration deadlines.**

Students applying for admission to the Laurea Magistrale must fill in the appropriate online form and will be eligible for admission only if their previous studies fulfil course requirements as assessed by the appropriate board whose decision is final. In the event that students are rejected the board will provide reasons for its decision.

To be eligible for admission to the Laurea Magistrale course students must have level a I level Laurea in category L-4 Industrial Design or another Laurea or equivalent Italian or foreign qualification judged suitable. Candidates' prior educational studies will in any case be assessed and any supplementary studies required will subsequently be assigned.

School of Design students fulfilling NV requirements (parameters relating to student averages and credits awarded in the second year of the course) are exempt from the need to supply support documents to online applications.

Assessment is required for:



- internal and external Politecnico di Milano students without the parameters cited above;
- internal and external graduating students at Politecnico di Milano who have obtained at least 150 ECTS when their applications are presented.

The following students are not eligible for access to the School of Design's Laurea Magistrale programme:

- students who have graduated from the Politecnico di Milano's School of Design with marks of **85/110** or lower;
- students who have graduated from the Politecnico di Milano's and are external to the School of Design with marks of **90/110** or lower;
- students who have graduated from other Italian universities with marks of **95/110** or lower;

**N.b.** Students who have **graduated** from the Politecnico di Milano's School of Design and Laurea in Engineering with marks of **85/110** or lower are not eligible for admission to the Inter-School Laurea Magistrale in Design and Engineering.

Students who fulfilled admission requirements in previous academic years but did not register for the programme will be required to conform to the new parameters when presenting new assessment applications.

Candidates will be assessed in accordance with the parameters set out in the “Laurea Magistrale Programme Admissions” document available for consultation on the [www.design.polimi.it](http://www.design.polimi.it) site. Fulfilment of assessment requirements will be notified to candidates by the board in two forms: admission without supplementary educational requirements or admission with supplementary educational requirements.

In the latter cases enrolment will be complete only when the required supplementary educational requirements have been fulfilled. These supplementary requirements must be fulfilled within one year of the date of assessment. Such students can supplement their studies by enrolling on individual courses and Magistrale taught courses to a maximum of 32 ECTS.

For admissions to the 2nd semester for students with supplementary educational requirements relating to the 1st semester, candidates will be required to reapply for the subsequent

To check your supplementary educational requirements consult the Laurea Magistrale Programme Admissions document on the School [www.design.polimi.it](http://www.design.polimi.it) site.

In addition to educational course assessments, candidates' curricula and other educational or extra educational activities will be subjected to comparative evaluation.

The board can also require written and/or oral tests.

The School reserves the right to accept individual course requirements for single topic and optional courses (note that for admission purposes no more than 32 Laurea Magistrale related ECTS can be recognised).

Students fulfilling NV criteria will be guaranteed admission to one of the Laurea Magistrale programmes selected but not necessarily their first choice depending on availability of places. Supplementary educational requirements can also be required where students are applying to transfer from one Laurea Magistrale course to another in dissimilar fields.

Detailed information relating to admission and enrolment is available on the Guidance and Counselling Office site [https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id\\_servizio=204&idApp=1&idLink=4549](https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id_servizio=204&idApp=1&idLink=4549)

The educational offer at the Politecnico di Milano

[https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id\\_servizio=204&idApp=1&idLink=4994](https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id_servizio=204&idApp=1&idLink=4994)

## 6.3. Deadlines

1st year registration takes place on the Magistrale in Integrated Product Design.

How to become a student at Politecnico di Milano

[https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id\\_servizio=204&idApp=1&idLink=2966](https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id_servizio=204&idApp=1&idLink=2966)

## 6.4. Tutoring and students support

The School has supplemented its information and guidance services for future students with the purpose of providing information on the teaching and educational contents of its programmes of study and clarifying future students educational objectives and potential career openings.

For students who are already enrolled at the School guidance activities designed to:

- help students remove any obstacles to their attendance and learning with initiatives tailored to individual student needs, attitudes and requirements;
- encourage a more active participation by students in the educational process.

A reference teacher/tutor has been selected for each study programme and he or she is the official reference point for any School guidance. The service is programme of study specific and deals in particular with:

- support services for students who require help in solving problems or clarifying concepts;
- approval and publishing texts relating to the presentation of laurea courses it represents;
- identification of student projects from each specific laurea course to be used as guidance tools at Open Days and on the School's official communication channels.

G u i d a n c e   a n d   C o u n s e l l i n g   O f f i c e

[https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id\\_servizio=204&idApp=1&idLink=3767](https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id_servizio=204&idApp=1&idLink=3767)

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[https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id\\_servizio=204&idApp=1&idLink=2166](https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id_servizio=204&idApp=1&idLink=2166)

## 7. Contents of the study Program

### 7.1. Programme requirements

To be eligible for the final examination of Laurea Magistrale, students must:

- To have accomplished 120 credits required in Level II of the Master including the credits related to the Internship and the credits of the final examination.
- To have developed an individual thesis under the guidance of a tutor, which can be either a projectable work, a theoretical-methodological deepening, or a historical/critical analysis.

The final examination of the Laurea Magistrale consists in the discussion of the individual thesis which must be written under the direction of the official teacher, thesis supervisor.

For more information on this subject refer to Regolamento Esame di Laurea Magistrale published on the School website.

### 7.2. Mode of study

The Laurea Magistrale course is full time activity. It is characterized by many different didactical activities: Monodisciplinary Courses are characterized by theoretic contents communicated by

means of ex cathedra lessons and verified throughout the year with tests and interviews.

Integrative Courses cover more than one discipline or specific context, and are taught by two teachers who supplement one another.

Experimental Workshops are taught in the workshops, where the students are given an opportunity to experiment and use the tools used in design professions.

Design Studios involve both a number of internal teachers employed by the Faculty and several external professionals and feature design activities where the students work under the guidance of a team of teachers, each contributing with his or her expertise as related to the subject of the design.

Design Seminars (workshop) are of a duration of one week during which the students develop a project under the guidance of an established and well-known professional or a company.

Erasmus Program and the other international mobility projects enable the students to spend six months studying abroad, at qualified European and non-European design universities.

Professional Apprenticeship enable the student to work with a company or design studio that collaborates with the Polytechnic, under the guidance of a tutor of the Faculty and a tutor appointed by the company.

Conclusive Design Studio represents a complete design experience, linking numerous disciplinary contributions and guiding the students in the choice and development of their Dissertation.

The System Regulations require a series of educational activities (specialist, elective or supplementary) which are present in the course of study in the form of single subject and integrated courses and Design studio in which the Laurea Magistrale's educational content is conveyed.

In addition to these types of educational activities the System Regulations also require that a specific number of credits are attributed to types of activity which can be categorised as follows:

- educational activities chosen independently by students (Optional courses);
- educational activities relating to preparation for the final exams required for the qualification to be awarded and foreign language assessment (Final exam and Language);
- activities designed to enable students to gain additional language skills, IT, telematic and relational skills which will help them in finding employment as well as educational activities designed to facilitate professional choices by giving students direct experience of working in the sector which the qualification can gain them access to including, in particular, educational work experience and guidance (Internships).

Below is a demonstration of the main characteristics of these activities.

#### Optional student courses

In the Laurea Magistrale programme 12 credits are awarded to optional courses (equivalent to one course per year).

Students are required to choose their optional courses on presentation of their first year study plans. Similarly when they present their second year study plans they will be required to choose a second course.

The optional courses take place in both 1st and 2nd semesters. Internships - Laurea Magistrale

In Laurea Magistrale students carry out an internship at a company, professional studio, study centre, body, etc. with a partnership agreement with the Politecnico di Milano which fulfils the requirements of current legislation specifying that, on completion of the agreed internship period (minimum 250 hrs, maximum 1 year) a certificate will be issued.

Such internships can be incorporated into students' study plans in either the 1st or the 2nd year of study depending on the organisation of the student's course of study.

Internship is an educational experience which gives students real experience of the world of work. The host company must be aware of and agree to the legal regulations and the need for

educational support and the student must accept and show an ability to respect the company's rules and behaviours.

For additional information on how to draw up a study plan, educational priorities, attendance requirements and exam sessions, etc., you are advised to consult the document “Implementing Norms for Educational Regulations” available for consultation on the School's site.

### 7.3. Detailed learning objectives

Students' ability to choose the courses and credits to be incorporated into their study plans is subordinate to a series of rules imposed by the School which makes available an educational programme worth 60 credits for each year of the course (nominal courses).

Each year students can choose courses for a different number of credits than that specified by the nominal courses (60 ECTS per year) to graduate their study programmes according to their needs.

The minimum number of credits a student can enrol on is 30 unless the number of credits needed for course completion are fewer than this.

The maximum number of credits a student can enrol on is 80, respecting exam priorities.

The current framework of the study plan requires the course exam sequence to be respected as shown in the Regulations.

Courses designed for later years of the programme cannot be inserted into an earlier year study plan (“advance study”) unless all previous and current year courses have also been integrated into it.

The School has also implemented an exam priority sequence on the basis of which certain courses can only be enrolled on if other, introductory courses have already been passed. Students may actually be able to enrol on fewer credits than is nominally the case as a result of this rule.

The System Regulations require a series of educational activities (specialist, elective or supplementary) which are present in the course of study in the form of single subject and integrated courses and laboratories in which the two-year Laurea Magistrale's educational content is conveyed.

Laurea Magistrale

In addition to these types of educational activities the System Regulations also require that a specific number of credits are attributed to types of activity which can be categorised as follows:

- educational activities chosen independently by students (Optional courses);
- educational activities relating to preparation for the final exams required for the qualification to be awarded (Final exam);
- activities designed to enable students to gain additional language skills, IT, telematic and relational skills which will help them in finding employment as well as educational activities designed to facilitate professional choices by giving students direct experience of working in the sector which the qualification can gain them access to including, in particular, educational work experience and guidance (Internships).

#### 2 Year courses - Track: PR1 - PRODOTTO 1

| Code   | Act type | SSD            | Course Title                             | Language | Sem | Credits (CFU) | CFU Group |
|--|----------|----------------|--|----------|-----|---------------|-----------|
| 096200   | B        | ICAR/13 SPS/08 | FINAL SYNTHESIS DESIGN STUDIO            | IT       | 1   | 18.0          | 18.0      |
| 096021   | B        | ICAR/12        | DESIGN SYSTEMS AND COMPONENTS (SEMINARS) | IE       | 1   | 6.0           | 6.0       |
| Courses defined on the not diversified (***) program, common to all specialization options |          |                |  |          |     |               |           |

#### 2 Year courses - Track: PR2 - PRODOTTO 2

| Code   | Act type | SSD            | Course Title                             | Language | Sem | Credits (CFU) | CFU Group |
|--------|----------|----------------|--|----------|-----|---------------|-----------|
| 051284 | B        | ICAR/13 SPS/08 | FINAL SYNTESIS DESIGN STUDIO             | EN       | 1   | 18.0          | 18.0      |
| 096021 | B        | ICAR/12        | DESIGN SYSTEMS AND COMPONENTS (SEMINARS) | IE       | 1   | 6.0           | 6.0       |

Courses defined on the not diversified (\*\*\*) program, common to all specialization options

### 1 Year courses - Track: \*\*\* - non diversificato

| Code   | Act type | SSD                   | Course Title   | Language | Sem   | Credits (CFU) | CFU Group       |
|--------|----------|-----------------------|--|----------|-------|---------------|-----------------|
| 050591 | --       | --                    | m [METAINS] CONCEPT DESIGN STUDIO  |          | 2     | 18.0          | 18.0            |
| 050583 | --       | --                    | m [METAINS] PRODUCT DEVELOPMENT STUDIO                                   |          | 1     | 12.0          | 12.0            |
| 050574 | --       | --                    | m [METAINS] USER STUDIES FOR PRODUCT DESIGN                              |          | 1     | 6.0           | 6.0             |
| 050585 | --       | --                    | m [METAINS] MATERIALS AND TECHNOLOGIES FOR INDUSTRIAL PRODUCT INNOVATION |          | 1     | 6.0           | 6.0             |
| 050575 | --       | --                    | m [METAINS] DESIGN NARRATIVES  |          | 1     | 6.0           | 6.0             |
| 050596 | --       | --                    | m [METAINS] TEORIE E CULTURE DELL'INNOVAZIONE                            |          | 2     | 6.0           | 6.0             |
| 089859 | B        | ING-IND/35            | BUSINESS INNOVATION  | EN       | 1     | 6.0           | 6.0 (Grp. Opz.) |
| 092051 | B        | ICAR/13               | DESIGN OF EVENTS   | IT       | 2     | 6.0           |                 |
| 092058 | B        | ICAR/13               | GAME DESIGN  | IT       | 2     | 6.0           |                 |
| 091909 | --       | ING-IND/14            | THE COMPLETE ELEMENT METHOD FOR ANALYSIS OF INDUSTRIAL PRODUCTS          | IT       | 2     | 6.0           |                 |
| 092065 | B        | ICAR/13               | LIGHT ART AND DESIGN OF LIGHT  | IT       | 1     | 6.0           |                 |
| 091907 | C        | ING-IND/22            | NANOTECHNOLOGY AND FUNCTIONAL MATERIALS FOR DESIGN                       | IT       | 2     | 6.0           |                 |
| 092050 | B        | ICAR/13               | SYSTEM DESIGN FOR SUSTAINABILITY   | EN       | 2     | 6.0           |                 |
| 050537 | B        | ICAR/13               | LICENSING E BRAND EXTENSION  | IT       | 2     | 6.0           |                 |
| 096616 | B        | ICAR/13               | COMMUNICATION DESIGN AND GENDER CULTURE                                  | IT       | 2     | 6.0           |                 |
| 098628 | --       | ING-IND/17            | QUALITY MANAGEMENT   | EN       | 1     | 6.0           |                 |
| 096766 | --       | INF/01                | ONLINE GAME DESIGN   | EN       | 2     | 6.0           |                 |
| 096736 | C        | ING-INF/05            | VIDEOGAMES DESIGN AND PROGRAMMING  | EN       | 1     | 6.0           |                 |
| 050545 | C        | ING-INF/05            | MULTIDISCIPLINARY PROJECT  | EN       | 2     | 6.0           |                 |
| 050817 | --       | SECS-S/01             | APPLIED STATISTICS   | EN       | 1     | 6.0           |                 |
| 051730 | B        | L-ART/03              | ARTE E PAESAGGIO ITALIANO, DAL MODERNO ALLA CONTEMPORANEITÀ              | IT       | 2     | 6.0           |                 |
| 052003 | B        | ING-IND/15            | VIRTUAL AND PHISICAL PROTOTYPING   | EN       | 2     | 6.0           |                 |
| 094864 | B        | ING-IND/15            | REVERSE MODELING   | IT       | 1     | 6.0           |                 |
| 051879 | B        | ICAR/13               | DESIGN E CULTURA DELLA LUCE. LA LUCE COME FONDAMENTO DEL PROGETTO        | IT       | 2     | 6.0           |                 |
| 051850 | B        | ICAR/13               | SMART AND INTERACTIVE FURNITURE  | EN       | 1     | 6.0           |                 |
| 093801 | --       | ICAR/16               | SCENOGRAPHY OF LIGHT - THE CITY AS STAGE                                 | IT       | 1     | 6.0           |                 |
| 051998 | B,C      | ICAR/13<br>ING-INF/05 | DESIGN AND ROBOTICS  | EN       | 2     | 6.0           |                 |
| 092046 | B        | ICAR/13               | TEMPORARY URBAN SOLUTIONS  | EN       | 2 (2) | 6.0           |                 |
| 051729 | B        | L-ART/03              | ARTE DEL PAESAGGIO ITALIANO, DAL MODERNO ALLA CONTEMPORANEITÀ            | IT       | 2     | 6.0           |                 |
| 095200 | --       | IUS/04                | COPYRIGHT  | IT       | 1     | 6.0           |                 |
| 051881 | B        | ING-IND/35            | DIGITAL USER INNOVATION  | EN       | 1     | 6.0           |                 |
| 050540 | B        | ICAR/13               | DESIGNING MATERIALS EXPERIENCES  | EN       | 1     | 6.0           |                 |
| 098617 | B        | ICAR/13               | DIGITAL STRATEGY   | IT       | 2     | 6.0           |                 |
| 089860 | B        | SPS/08                | USER AND SOCIAL INNOVATION   | EN       | 2     | 6.0           |                 |
| 098651 | B        | ICAR/13               | DESIGN THE COMPLEXITY  | EN       | 2     | 6.0           |                 |
| 097927 | B        | ICAR/13               | PARAMETRIC REPRESENTATION METHODS  | IT       | 1     | 6.0           |                 |
| 098619 | B        | ICAR/13               | ANALYSIS OF THE FILM AND NARRATIVE WORLDS                                | IT       | 1     | 6.0           |                 |

(2) Course offered in the second half-semester

## 7.4. Foreign language

Foreign language assessment will be carried out in accordance with the university's methods as set out on the "Student Services/Guides and Regulations/Guide to the English Language" web page [www.polimi.it](http://www.polimi.it).

Students are encouraged to read this document carefully and respect the norms set out in it.

Specifically, note that: "Pursuant to Ministerial Decree 270/04 the Politecnico di Milano has adopted the English language as the European Union language which students must speak in addition to Italian".

**English language** fluency, according to the standards indicated by the university, is a registration pre-requisite. For admission to the **School of Design Laurea Magistrale Programme certificates must be submitted by candidates within the time frames for admission applications. This deadline must be respected by all students (from similar or different courses)**

Language courses

[https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id\\_servizio=204&idApp=1&idLink=3046](https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id_servizio=204&idApp=1&idLink=3046)

## 7.5. Degree examination

Pursuant to Ministerial Decree 270/04, article 11, subsection 5 the final exam for the LM in Product Design for Innovation consists of the preparation of a thesis by students under the guidance of a supervisor.

The thesis must be experimental and original and can lead to design or theoretical and historical-critical outcomes. In both cases theses must contain a methodological foreword illustrating its disciplinary foundations, arguments and the knowledge framework within which the research in it has been carried out and show which elements constitute original contributions by the candidate.

The thesis must be written and discussed in Italian and have an English language abstract.

For wholly English sections theses can be drawn up, presented and discussed in English alone.

The thesis must complete the student's educational course of study. It must be an individual work which can, however, be based on structured activities carried out together with other students. The individual candidate's contribution must, however, be clearly recognisable in the final outcome.

For information on the Laurea Magistrale Exam and Thesis writing procedures you are advised to consult the "Laurea Magistrale Exam Regulations" published on the School's site.

Information concerning general rules and regulations, session calendars, registration and consignment of theses is available at

[https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id\\_servizio=204&idApp=1&idLink=3126](https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id_servizio=204&idApp=1&idLink=3126)

## 8. Academic calendar

The Laurea Magistrale programme calendar is structured into two semesters and students can enrol at the beginning of either semester. Thus studies can begin in either the first or the second semester of each academic year. The course is structured in order to enable students to complete the programme in four semesters whether first year Laurea Magistrale enrolment takes place in the first



or second semesters.

An exam period takes place at the end of each semester (exam).

Academic calendar

[https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id\\_servizio=204&idApp=1&idLink=3206](https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id_servizio=204&idApp=1&idLink=3206)

## 9. Faculty

The names of the Programme of Study teachers and what they teach will be made available on the degree programme from September onwards.

The Degree Programme is published each year on the Politecnico di Milano's website.

The names of the teaching staff who will be teaching on the programme with their CVs are published on the university site by year and study programme.

## 10. Infrastructures and laboratories

Design Laboratories

The creation of large scale laboratories supporting design education is coherent with the Politecnico di Milano School of Design's tradition of experimentation, its inductive teaching model, in which 'knowledge' and 'know-how' are mutually supportive.

The purpose of these laboratories is the practice of activities which allow students to verify their design hypotheses and learn how to use the technical tools required for experimentation, representation and design communication.

The laboratories managed by the Design Department occupy an approximately 10,000 square metre space in the Milan Bovisa campus.

The Politeca, an integrated documentation system for design research, is an integral part of the laboratories.

For details on the laboratories

<http://www.dipartimentodesign.polimi.it/laboratori/i-laboratori>  
[www.politeca.polimi.it](http://www.politeca.polimi.it)

## 11. International context

Building an international dimension for the School of Design has been one of its priority objectives since it was founded in the year 2000.

There are many reasons for this: the nature of design which inherently draws its very lifeblood from its multicultural and multi-local character, its proximity to both the world of manufacturing - which has now taken on a global dimension - and the sphere of consumption whose dynamics and tendencies are visible in a range of local specific contexts; the very DNA of the design community which has always been international; Milan's acknowledged status as design capital, a crucible for designers from all over the world who have come here to study or open a studio; the desire to make educational trajectories increasingly permeable to impulses deriving from this stimulating context as in other dynamic foreign contexts. For the School of Design internationalisation has a two-fold meaning: supporting student (and teaching and technical staff) mobility outwards and the opposite, attracting students, researchers, professors and visiting professors into the Politecnico from abroad.

In relation to these two internalisation channels (dealt with separately, the first in this chapter and the second in the subsequent chapter) the School of Design has committed itself in recent years to enlarging its international contact network and it now works with 300 design universities the world over in Erasmus exchange programmes (with 150 European universities), bilateral exchange projects (with 70 non European universities), joint workshops with other schools, international internships

and so on.

To these should be added more highly structured activities which aim to consolidate partnership relationships in the educational and research fields with a number of selected universities. This is the case of the MEDes\_Master of European Design training for excellence programme (with 7 university partners) in addition to the many international research programmes under way. The School of Design is a member of Cumulus, a network of International design schools, and of the main international design associations. Like the city which hosts it - Milan is a veritable international design laboratory - the Politecnico's School of Design aims to be a meeting place between different cultures, between education, industry and the professions, in which professors, entrepreneurs and celebrated designers from all over the world take an active part in the students' educational experience.

## 12. Internationalization

### International exchanges

The School of Design takes part in international student exchange programmes which offer students the opportunity to go abroad for a period of study at one of the Politecnico's partner universities. A list of the School's partner universities is available on the Politecnico's website and on the School of Design website in the Internationalisation Area.

### *The Erasmus Programme*

The Erasmus programme was set up in 1987 by the European Community to give students the chance to carry out a period of study at a foreign university within the European Union from 3 to 12 months legally recognised by their own university, at Bachelor or Master level.

In 2014 the European Union's Erasmus+ programme was set up for education, training, youth and sport in the 2014-2020 period.

Specifically Erasmus for study enables university students to carry out a period of study at a university with a partnership agreement with their own university. This mobility can entitle students to a grant (under the conditions set out in the international mobility tender) and free registration at the host university. Students can thus follow courses and take exams at the partner university and have the exams recognised at their own universities.

### *Bilateral exchanges*

The School of Design has also activated a number of bilateral agreements with non EU universities. These are mainly intended for the use of Laurea Magistrale students and can also be applied for by those who have already carried out an Erasmus period abroad during their three year study course. The procedures for admission to such exchanges are the same as those for Erasmus exchanges with the exception of the study scholarship which is not guaranteed in such cases.

The bilateral agreement, in fact, enables students to attend a period of study abroad at a partner university without incurring registration fees at such universities. In some cases, however, a management fee for exchange students is payable (e.g. Orientation fee).

**Master of European Design (MEDes)** In the 2002/2003 academic year a specific 5 year programme was set up at the School of Design.

This international study programme, promoted and designed by the school together with a further five prestigious European design universities and formalised in an agreement signed by all university partners, entitles students to an additional qualification on top of the Laurea Magistrale granted by the Politecnico di Milano. Students can graduate only from their own universities.

In addition to the Politecnico di Milano the universities taking part in this programme are:

The Glasgow School of Art, *Glasgow, Scotland*

Aalto University, School of Arts, Design and Architecture, *Helsinki, Finland*



Konstfack University College of Arts, *Stockholm, Sweden*

Ensci Les Ateliers, *Paris, France*

KISD - Köln International School of Design, *Cologne, Germany*

Universidade de Aveiro, *Aveiro, Portugal*

5 students are selected for this programme of excellence from all those enrolled on the 2nd year of the Laurea programmes in Industrial Product Design, Interior Design and Communication Design.

Candidates for the MEDes programme carry out two study periods at two partner universities:

\_one in the 3rd year of the level I Laurea;

\_the other in the 1st year of the Laurea Magistrale.

The choice of university will be made on the basis of student preferences and the Board of MEDes.

### ***DOUBLE DEGREE laurea***

The School of Design has set up a number of Double Degrees at Master level

These programmes entitle students to a double Laurea Magistrale title issued by the Politecnico di Milano and its partner school on completion of a common programme involving an exchange.

Master Theses can be drawn up, presented and discussed in English.

#### ***Thesis abroad***

Students in the 2nd year of Laurea Magistrale program may develop a part of their thesis abroad.

This can be done in the following ways:

-through the Erasmus program and/or Bilateral exchange outside Europe including specific courses in the Study Plan, agreed on with your supervisor, that are useful to the development of your thesis or with a co-supervisor from the partner university depending on availability, who co-ordinates with your supervisor at the School of Design.

-with co-supervision from the other university, organized autonomously and without joining an exchange program. In this case the student must communicate his/her intentions in advance to the Relé office of the School of Design, which will formalize the procedure.

-Applying to the Public Call from Politecnico to have a scholarship for doing the thesis abroad.

#### ***In-course Internship/job placement***

The in-course internship envisaged for the 2nd year of the Laurea Magistrale may be carried out abroad by:

- applying to the **R.A.P** service (*Company and Professions relations*)

- *joining the Erasmus/extra UE programmes, if available in the partner schools, or by activating a collaboration with professional practices, or through attending courses (design studio based) or workshop as per the same amount of hours.*

- *Answering to the Call “Erasmus for Traineeship” to obtain scholarships to make the internship within the European Union.*

- *Making the internship within the exchange mobility substituting it with project courses that amount at least 250 hours.*

Information on exchange programmes, double degree projects and international internships, European research and international relations projects are available at

[https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id\\_servizio=204&idApp=1&idLink=4708](https://aunicalogin.polimi.it/aunicalogin/getservizio.xml?id_servizio=204&idApp=1&idLink=4708)

## **13. Quantitative data**

No contents for this section.

## **14. Further information**

For any other information the students are invited to visit the School website, in particular the teaching regulations of the academic rules.

## **15. Errata corrige**

No contents for this section.

BOVISA