



**POLITECNICO
MILANO 1863**

School of Industrial and Information Engineering

The training experience offered to the students of the Master's Degree Course in Computer Science & Engineering

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What does a computer engineer do?

An engineer is a professional capable of tackling and solving specific problems thanks to solid technical and methodological skills. Specifically, a computer engineer applies these skills to the development and management of software and hardware solutions.

Unlike specialized industrial production, where each operator contributes only part of the process, computer engineering allows for the design and implementation of complete digital systems, potentially intended for a global audience. In this sense, it represents a modern form of highly complex "craftsmanship": like a craftsman, a computer engineer can create a product from start to finish.

After completing a five-year program, a Master's degree in computer science has a broad and transversal engineering background, enabling them to interact with specialists from other fields, understanding their language and logic. This multidisciplinary approach is essential in professional contexts where computer science intertwines with disciplines such as energy, mechanics, medicine, or automation.

The benefits of a computer science and engineering education are numerous. Besides the opportunity to work in any field—from finance to robotics, from artificial intelligence to telecommunications—it offers concrete access to practical experience: by simply using your own computer, you can gain immediate access to a variety of design and implementation experiences, making learning highly practical from the earliest stages.

Upon completion of the MSc in Computer Science and Engineering, there are three main paths available: continuing studies (through a PhD or second-level master's degree), entering the workforce of a company (being a large organization or a small enterprise) or working as a self-employed professional, and starting a research collaboration with the university.

The three-year **PhD program in Information Technology** is the ideal path to a scientific career, both in academia and industry. The program involves advanced research, participation in projects (often international), specialized training, and the development of science communication skills, culminating in the writing of a thesis summarizing the results.

Alternatively, it is possible to access **temporary research contracts in the university**, which allow, for example, to continue a work started with the degree thesis or to gain research experience while waiting to begin a doctorate.

Second-level master's programs, also offered in collaboration with Politecnico's partner institutions (e.g., CEFRIEL, POLIMI Graduate School of Management), are one- or one- and-a-

half-year specialization programs designed to develop practical skills for successful entry into the workforce. They can also be completed in parallel with a working career.

In terms of employment, the main opportunities for master's graduates are concentrated in four fields: **software houses** , **industrial companies** , **consulting firms** , and **startups** . The latter, often founded by alumni, represent highly innovative businesses that require advanced skills, potentially acquired through a doctorate. Politecnico di Milano supports entrepreneurship through the **PoliHub incubator** and numerous promotional initiatives (awards, hackathons, dedicated events).

Compared to a bachelor's degree, a master's degree provides a more specialized and competitive professional profile, with in-depth studies in areas such as artificial intelligence, big data, and cybersecurity.

The university offers a structured job placement service through its **Career Service** , which manages relationships with companies, organizes recruiting events (such as Career Days), and provides a digital platform for consulting job offers and managing applications.



What do you study?

The **Degree Program** (*Manifesto degli Studi*), divided by academic years and semesters, is the set of educational activities (courses, laboratories, internships, final examinations), either compulsory or elective, that make up the educational offer of a Study Program (*Corso di Studi*).

The **Study Plan** (*Piano degli Studi*) is the list of educational activities that the student intends to undertake during each academic year. The Study Plan is normally compiled by selecting educational activities from the offer defined in the Degree Program (*Manifesto degli Studi*) of the student's own Study Program. In this case, the Study Plan is automatically approved.

Students may also request to include, for the purpose of obtaining their degree, courses/laboratories offered by Study Programs other than their own. In such cases, the request is subject to approval by a dedicated committee, which assesses its consistency with the educational objectives described in the Academic Regulations (*Regolamento*) of the Study Program.

The **Credito Formativo Universitario - CFU** (University Educational Credit - ECTS) is the unit of measurement of the workload required in terms of learning activities. One credit conventionally corresponds to 25 hours of work, including both self-study/individual work and assisted teaching activities, meaning all educational activities in which the student interacts with the instructor (lectures, group exercises, laboratory activities, etc.).

The Study Program in Computer Science and Engineering offers a wide range of courses, covering various specific areas related to computer science and to computer engineering. The program is divided into three different tracks, PSPA (Previously Approved Study Plans), identified by three different acronyms: **T2A**, **T2I**, and **T2D**.

T2A " *Computer Science and Engineering* " study plan, within the constraints outlined in the Academic Regulations, allows for the creation of a highly customizable curriculum based on the student's primary interests, drawing on courses from various fields of computer science and computer engineering. Given the wide range of courses available in this PSPA, several **non-binding thematic tracks have been created**, designed to guide students toward the courses that characterize a specific thematic "profile." The tracks are as follows: Ambient and data intelligence; Big data and data science; Bioinformatics and e-health; Business informatics,



analytics and intelligence; Cybersecurity; Games, Entertainment, and Learning; Internet engineering; Pervasive systems; Robotics and vision; and Software engineering for complex systems.

Please note that approximately half of the specialized subjects that characterize and distinguish the two T2D and T2I curricula, described below, are also found in the "generic" T2A curriculum. For each of the 10 tracks, a detailed description, a list of suggested courses, and a series of supporting documents can be found at the following address: <https://www.inginformatica.polimi.it/cosa-studio-magistrale/>.

T2I " Artificial Intelligence " study plan, which has an admission limit, focuses on the entire field of artificial intelligence and machine learning, in all its forms. This program also offers the option of choosing some of the subjects, which include the applications of artificial intelligence in specific domains such as autonomous robotics, video games, computer vision, data mining, and recommendation systems.

T2D " Business and Innovation " study plan is structured as follows: the first year includes all the core Computer Engineering subjects that build on the undergraduate program. The remaining 40 credits of the second year are taken alongside management engineers, covering the essential aspects of management topics. The thesis, however, remains a computer science thesis. This study plan is designed to train professionals who manage ICT and therefore all aspects of business management through information technology. Students have the freedom to choose approximately 40 credits (both in the first and second years) from a well-defined portfolio of courses from Management Engineering.

In addition to pre-approved plans, students can participate in interdisciplinary programs, which aim to broaden the curriculum with courses taught within other degree programs and create classes of students with diverse backgrounds, fostering a collaborative attitude in interdisciplinary and multisectoral teams. These include the Ambassador program and the interdisciplinary SWT (Smart Wearable Technologies) track.

Interdisciplinary Programs

- **PoliMI Ambassador**

The PoliMI Ambassador programs are four advanced university-level training paths designed to create new professional profiles in Green Technologies, Smart Infrastructures, Inclusivity Design, and Creative Thinking. The objective is to foster the acquisition of:

- skills in specific areas consistent with the selected educational path;
- enabling digital technologies relevant to the profile;



- interdisciplinary tools and methods, and a systemic vision mindset;
- the ability to work in interdisciplinary and multi-sectoral contexts, developed through exposure—also in team settings—to case studies and challenges.

For a detailed description of the objectives of each PoliMI Ambassador program, please refer to the [PoliMI Ambassador](#) webpage.

Each educational path is developed throughout the *Laurea Magistrale* (equivalent to Master of Science) and defines, within 130 *Crediti Formativi Universitari* (University Educational Credits – ECTS), of which at least 10 must be extra credits, the minimum number of credits required to obtain the selected *Laurea Magistrale* degree and, at the same time, to receive the PoliMI Ambassador certification in the selected field.

The student must acquire at least 30 *CFU* (ECTS) in educational activities relevant to the chosen PoliMI Ambassador profile, selected from two course tables listed in the *Regolamento Didattico del Corso di Studi* (Study Program Educational Rules) of their program. In particular, the student must obtain at least 10 *CFU* from the first table (Table A) and 20 *CFU* from the second (Table B), in accordance with the procedures described in the Study Program **Educational Rules**.

The "PoliMI Ambassador" certification will be included in the Diploma Supplement and will be officially recognized through the issuance of a specific digital badge.

Failure to earn the 10 extra *CFU* (ECTS) and the minimum 30 *CFU* (ECTS) in activities related to the Ambassador profile does not preclude the student from obtaining the *Laurea Magistrale* (Master of Science) degree.

The Interdisciplinary Program in Smart Wearable Technologies aims to train new professionals with skills in the design of smart wearable devices and systems. Wearable systems have applications in various sectors, including healthcare, bioengineering, design, and fashion, and require advanced and interdisciplinary skills, from photonics to the miniaturization of electronic components, from the development of embedded systems to the design of intelligent algorithms. The program requires at least 30 credits (*CFU*) in specific training activities, among those included in the program, covering 15 credits of specific computer science topics and 15 credits of interdisciplinary topics.

What are the teaching methods?



Teaching and learning models

The educational model of the Politecnico di Milano includes five types of assisted teaching:

- Transmissive / Lecture-Based Teaching (Didattica trasmissiva/frontale - DT): the student listens to the delivery of content that will then be consolidated independently;
- Interactive / Participatory Teaching (Didattica interattiva/partecipativa - DI): the student, under guidance, is involved individually or in groups in carrying out or participating in an activity proposed by the instructor, also through the use of suitable digital tools;
- Laboratory-Based Teaching (Didattica laboratoriale - DL): the student is involved, individually or in groups, in a practical experience aimed at applying the concepts and methodologies presented by the instructor, typically with the aid of appropriate tools and equipment in computer or experimental laboratories;
- Project-Based Teaching (Didattica progettuale - DP): the student is involved, individually or in groups, in the development of a complex project or product, which is gradually enriched as awareness and the ability to use theoretical, technical, and metacognitive tools are acquired;
- Evaluation-Based Teaching (Didattica valutativa - DV): the student is directly involved in an evaluation or self-evaluation activity followed by appropriate feedback (quantitative or qualitative, and either named or anonymous).

The courses offered in the Computer Science & Engineering study program are characterized by a variety of teaching methods. The predominant teaching method remains face-to-face, alternating between lectures and exercises. However, given the strong applied component of the course content, there are also occasional interactive, laboratory, and project-based learning opportunities, as described above.

Many courses also integrate formative assessment sessions, such as ongoing quizzes, assignments, and progressive assessments, and guided exercises with ongoing feedback throughout the year. These sessions are designed to guide students on their journey and gradually improve their preparation for the exam.



What are the assessment methods?

Assessment methods and exam sessions

The assessment methods are described in the course syllabus (scheda dell'insegnamento) and are made available at the beginning of each academic year. By including a course in their Study Plan, students acknowledge and accept the related assessment methods.

Student performance is assessed through exam sessions held during the dedicated periods specified in the Academic Calendar (*Calendario Accademico*), and may also be evaluated through ongoing assessments (*valutazioni in itinere*) conducted during the semester in which the course is delivered.

For each academic year, there are five exam sessions scheduled for all courses. Specifically, two exam sessions take place at the end of the semester in which the course is taught, two at the end of the other semester, and one in September.

Ongoing assessment

Ongoing assessment may take place through various methods, such as: written and/or oral and/or laboratory tests, projects, reports, assignments, and other types of activities assigned by the instructor, carried out either in class or independently, also through the use of digital and online tools.

Ongoing assessment based on two partial exams. For courses that include an ongoing assessment based on two partial exams, the tests are generally held during the breaks in teaching activities specifically scheduled in the Academic Calendar. The date of the second exam coincides with that of the first exam session in the session immediately following the teaching semester. On that date, the student may take either the second partial exam or the regular *exam session*.

Other forms of ongoing assessment. Forms of ongoing assessment other than those described above may take place at any time during the teaching semester. For courses that include them, some assessed activities, clearly indicated in the course syllabus, may be mandatory or required in order to receive a full evaluation. Failure to participate in such activities may result in restrictions during the exam sessions, either in terms of grading or in the ability to take the exams.

Registration for exam sessions

In order to take part in an exam session, students must register via the Online Services within the specified deadlines. Exam registration is permitted only if the student is up to date with tuition fee payments and the course is included in his/her Study Plan. If the regular registration deadline is missed, it is still possible to register until 11:59 PM on the day of the exam, subject to approval by the professor. Students who decide not to take the exam must cancel their



registration no later than the day before the exam, except in cases of unforeseeable last-minute impediments.

Many courses adopt a traditional assessment method, that is, a written exam or, less frequently, an oral exam.

Given the highly applied nature of the Study Program in Computer Science and Engineering, some courses are assessed through the creation, submission, and—sometimes—oral presentation of a project. This project can be completed independently or in a group, and allows students to acquire practical skills that enhance their portfolio. Other courses are assessed through a written or oral exam, to consolidate basic knowledge, and a project component, to put into practice the knowledge learned during the semester.

Courses whose assessment is the sum of several components often offer students more than one option for some or all of the components. For example, an exam might consist of a written component, mandatory for all, and a component that can be supported through another written component or a project. Alternatively, a course might be entirely supported through a project or through participation in some workshops and a possible written or oral component to complete the assessment.

Given the heterogeneity of the courses and their respective assessment methods, the main advice is to pay attention to the assessment methods reported in the course description in the study plan and to the explanations given by the teachers, generally in the first few days of class.



What does the final exam consist of?

On the website of the School of Industrial and Information Engineering, under the section [Bachelor's and Master's Degree Exams](#), the following resources are available:

- The regulations for Bachelor's and Master's degree exams, along with the *Regolamenti Integrativi* (supplementary regulations) for each *Corso di Studio* (Study Program);
- Information on how the examination sessions are conducted, key deadlines, and the procedures for submitting the thesis;
- Thesis templates: formats for traditional and article-style theses, as well as the executive summary template, which must be submitted together with the thesis in case a *Controrelatore* (Examiner) is required.

The final exam for the Study program involves the defense of a thesis. Twenty credits are assigned to the thesis work, including design, implementation and experimentation experiences, as well as the writing of the final report.

The thesis represents the moment in which all the knowledge and methodologies learned are put into practice in a transversal way, going in depth with respect to a specific topic.

If you're interested in writing a thesis **at the university**, the first thing to do is identify an area of interest and then search for one or more professors who are active in research in that area, keeping in mind that sometimes a professor's research doesn't match the content of their teaching. Practical ways to find professors, in addition to word of mouth, include consulting the publications of those who seem closest to the topic (for example, on [Google Scholar](#)), reading the professors' CVs linked to the teaching assignments page on the Politecnico's website, finding links to their personal pages on the department's website (which often also list available thesis topics), or exploring theses already completed at the Politecnico on [PoliTesi](#). Each professor provides information about available theses differently: some give in-person presentations, others have documents listing possible topics. Contacting them by email is an excellent way to find out.

Another option for completing a thesis is to leverage existing **internship experience** (or curricular internship), in Italy or abroad. A student may find an interesting company and wish to convert it into a thesis. In this case, they should immediately find a faculty member willing to serve as their advisor on those topics. It's essential to identify a potential advisor as soon as



possible so they can jointly plan and agree on objectives and a work plan. In other cases, a faculty member familiar with a company may suggest a collaboration with the student. It's important to note that in many cases, these projects are considered unsupervised theses (also known as "tesine") because they lack the innovative nature typical of theses. The thesis advisor will be the internship's academic advisor.

Please note, however, that the optional curricular internship and the master's thesis are separate activities. The first activity is optional and does not earn credits. The second activity is mandatory and does earn credits.



Can I get help with my studies?

Tutoring

In order to guide and support students throughout their studies, particularly during the first three years, the School of Industrial and Information Engineering offers various tutoring opportunities, with the aim of providing each student with the most suitable support for their needs. The approach includes peer-to-peer tutoring services, activated on demand based on student requests, as well as more traditional tutoring services offered on fixed dates and times.

- **Learn how to Learn (Information and guidance tutoring)**

Targeted at first-year students who scored below 60 on the TOL, this is an optional program consisting of three thematic webinars designed to help students immediately identify effective strategies for managing typical university situations, such as attending lectures, studying independently, managing study time, and handling distractions.

To complement the live component, asynchronous activities are provided to deepen the topics addressed during the webinars.

The program is delivered in September (over the course of one week), before the start of classes. Interested students receive a notification email inviting them to participate.

- **Peer to Peer Tutoring**

In this form of tutoring, experienced student tutors provide support, either individually or in small groups of 3-4 students, on the core courses taught during the first two years of all *Corsi di Laurea Triennale* (Bachelor's Laurea Programs). Students may request tutoring for up to two courses per semester.

Those who wish to request a tutor must apply through the "Peer-to-Peer Tutoring" platform available on their Online Services.

For further information, please contact: tutorato-ingegneria@polimi.it.

- **Tutoring for first-year students**

For many of the first-year courses of the *Bachelor's degree program*, tutoring sessions are available and led by PhD students or experienced instructors.

The calendars are available on the School's website at the page: [Calendario Tutorato Matricole](#) (*First-Year Tutoring Calendar*).

- **Specific tutoring activities**

The School also promotes specific tutoring initiatives:

Equalization peer-to-peer tutoring: this service is intended for students coming from Bachelor's degrees not strictly aligned with the chosen *Master's degree program*, or for



international students. More experienced student tutors provide support, either individually or in small groups of 3–4 students, on courses within the Master's *Study Programs*.

Tutoring in support of specific courses: tutoring sessions held by PhD students and experienced instructors on selected courses from various study programs, also based on student feedback.

The schedule for these activities is available on the website at: *Calendario tutorato specifico (Specific Tutoring Calendar)*.

Polimi Open Knowledge (POK)

POK (Polimi Open Knowledge) is the first Italian university MOOC (Massive Open Online Courses) platform, offering free online courses open to everyone. The main objective of the platform is to support students, not only from Politecnico di Milano, throughout their university and professional journey: from high school to university, from the *Bachelor's degree* to the *Master's degree*, and from university to the job market.

In addition, many other courses are available for teachers, researchers, professionals, and the general public.

First-year students who wish to strengthen their foundational knowledge in mathematics and physics are encouraged to follow the modules: [Introduzione alla matematica per l'università: Pre-Calculus](#), [Introduction to Experimental Physics: Electromagnetism, Optics, Modern Physics](#).

In addition to the tutoring opportunities offered by the School listed above, various forms of educational support are provided, including:

Exercises, practical activities and laboratories : almost all courses include guided exercise sessions that allow you to apply theoretical concepts to concrete cases.

Support from instructors and tutors : instructors are available for clarification and further information through office hours, email communications, or brief discussions after class. It's always advisable to contact them with specific questions or difficulties with key concepts.

Teaching materials and strategies for effective studying

Many instructors provide students with **materials useful** for teaching and to facilitate independent study: lecture recordings, notes, slides, completed exercises, in-depth studies, and exam papers from previous years. These materials can be found on the instructor's personal website, the link to which is usually provided during the first lecture, or, more frequently, on the **WeBeep platform** . Each course has its own associated WeBeep channel: <https://webeep.polimi.it/>



On WeBeep, in addition to uploading teaching materials, teachers can send messages to students, who in turn can use the forum to ask questions, which can be answered by the teacher, their assistants, or other students. Furthermore, if applicable, teachers can request assignments or other materials for assessment via WeBeep.

We recommend an approach to effective study that includes the following guidelines:

- **Attend lectures** as frequently as possible, preferably in person, to build a coherent and progressive framework of knowledge. Direct participation also fosters interaction with the instructor and discussion with fellow students, enriching the learning experience. Alternatively, you can use lecture **recordings**, available for most courses, to stay on top of the syllabus (or as an additional review tool).
- **Review the content before the exercises** to better understand the practical application of the concepts. Often, some concepts covered in class from a theoretical perspective are clarified through practical application, and it is therefore more effective to review them before the exercises.
- Alternate theoretical study with **exercises of increasing difficulty**, to strengthen understanding and prepare specifically for exams.
- Organize your **study in small groups**, taking advantage of the **different skills** present among classmates.



Are there any extracurricular activities?

Passion in Action

"**Passion in Action**" is the catalogue of open-participation educational activities offered by Politecnico di Milano to its students, aimed at fostering the development of transversal skills, soft and social skills, and at encouraging/facilitating a personalized enrichment of each student's personal, cultural, and professional background.

Those who are interested can take advantage of this opportunity and choose which activities to attend, exploring different subjects according to their interests and personal inclinations.

Students who participate in *Passion in Action* may register for any activity in the catalogue, regardless of its thematic relevance to their *study plan*, provided that any specific prerequisites for individual activities are met.

The skills and competencies acquired are recognized through the awarding of a digital badge and will be reported in the *Diploma Supplement*.

The catalogue is updated regularly. Since the educational modules are activated asynchronously with respect to the semesters, interested students are advised to check the [Passion in Action](#) page periodically.

Student Associations

Student associations are organizations formed by students with the aim of promoting cultural, technical, social, and recreational activities, and creating opportunities for personal and professional growth within the academic environment.

Participating in a student association allows for greater engagement in university life, making the academic experience more dynamic and stimulating. It also fosters the development of transversal skills such as leadership and teamwork, as well as the expansion of one's network, valuable both during university and in professional life.

At Politecnico di Milano, several student associations are active, each with different goals and areas of interest. The full list is available at: [Student Associations](#).

The program's instructors organize and offer numerous "Passion in Action" activities, particularly those focused on project management, data analysis, and entrepreneurship. These include "STARTUP 101—FROM IDEA TO ACTION," which helps students understand how their technical knowledge can interact with academia and industry to create value for society.

Among other extracurricular activities, we also highlight:

- Laboratory activities within various courses
- Hackathons and challenges also proposed in collaboration with student associations and companies
- The activities of the Alta Scuola Politecnica (ASP, <https://www.asp-poli.it/>)
- Honors Programme for a long-term teaching and research experience within the university's groups or laboratories (<https://www.honours-programme.deib.polimi.it/>)
- Events and activities for orientation and introduction to the world of work, organized by the University Career Service. These activities are published on the [Career Service](#) portal .

Among the various student associations at the Politecnico di Milano, Polimi Data Scientist stands out. It promotes a culture of data science and data analysis among students by organizing events, workshops, and training activities related to the use of advanced data analysis, machine learning, and business analytics techniques. The goal is to develop transversal skills and foster networking between students, faculty, and companies in the sector.

Politecnico Open Unix Labs (POuL), on the other hand, is an association dedicated to promoting computer science and open source culture, offering students the opportunity to explore topics related to Unix systems, programming, and free technologies through courses, hands-on seminars, and collaborative projects, thus contributing to the technical and professional growth of the Politecnico di Milano student community.

Can I go and study abroad for a period?

Students who wish to take part in an exchange experience must apply through one of the two international mobility calls, which are published in November and April. The University's Mobility Call covers various types of international experiences: simple exchange (1 or 2 semesters) in EU and non-EU countries, Double Degree programs, and Special Programs for students enrolled in specific Study Programs (e.g. Alliance4Tech).

Due to procedural timelines, interested students must apply the year before the planned mobility period.

The choice of possible exchange destinations must be made at the same time as submitting the application to the mobility call. Students are therefore encouraged to gather all the necessary information about each selected destination, out of respect for all applicants.

In fact, declining an assigned destination due to inadequate research into the educational offer results in a lost opportunity, not only for the student who withdraws, but also for other students who could have taken advantage of that placement.

Once they have applied to the call, candidates must carefully follow the deadlines, monitor the rankings, and confirm or decline their interest in the assigned destination, if any. Dates vary for each call, but this phase of the process generally takes place between January and March for the first call, and between May and July for the second call.

Only after the candidate has confirmed the assigned destination, the International Mobility Unit will proceed with the official nomination of each student to the selected host institution. Delays in confirming the destination will result in exclusion from the exchange program.

To view the list of available destinations, students can refer to:

- the section of the Polimi website dedicated to the mapping of all partner universities. By filtering by School and Study Program, students can access useful information about each destination;
- the Exchange your Mind section of the Polimi website, which collects testimonials, useful information, presentations, and in-depth materials on the topic.

An international experience is valuable in its entirety, it allows students to discover new countries, cultures, people, and languages. These aspects should be taken into account when choosing a destination.

At the same time, it is important to remember that it is not always possible to obtain one of the top-listed choices; therefore, each option included in the list of preferred destinations should be selected carefully and thoughtfully.



The program offers numerous opportunities to study abroad, based on agreements with various foreign institutions. Every year, several students participate in international mobility programs and can enhance their CVs by spending time abroad, also earning credits recognized by the Politecnico di Milano. International experiences are regulated by the International Mobility Regulations of the program.

Among the opportunities offered are:

- Study abroad as part of the Erasmus program, or special non-EU programs, such as the exchange program with the National University of Singapore; in this case, students may attend a maximum of one semester at a foreign university, for a maximum total of 30 recognized credits.
- Double degree program (which involves earning a double master's degree over a three-year period, two of which must be spent at the foreign partner institution). Among the opportunities available for Computer Science and Engineering is one with Xi'an JiaoTong University in China.
- Internship at foreign companies or university laboratories
- Carrying out the thesis abroad

In addition to these opportunities, there are also specific opportunities offered by the Study Program under agreements with other partner universities, and these are listed below.

Master of Science in Electrical Engineering and Computer Science from the University of Illinois at Chicago (UIC) at the Politecnico di Milano

Students in the MSc Study program in Computer Science & Engineering may be selected to simultaneously attend the Master of Science in Electrical Engineering and Computer Science at the University of Illinois at Chicago by taking specific computer science courses taught in English for one semester at the Politecnico di Milano and one at UIC, and by completing a master's thesis to be defended at UIC. Exams taken for the master's degree will be recognized for the Master's degree in Computer Science and Engineering. Admission to the master's degree requires a TOEFL score above a minimum threshold. Selection takes place in June of each academic year.

ENHANCE Erasmus+ Programme

ENHANCE Erasmus+ programme (<https://enhanceuniversity.eu/>), which involves ten European universities of excellence in the technical field, aims to promote student mobility

between universities by supporting the development of **ENHANCE European Education Pathways** : innovative educational paths that allow students to select courses from the overall educational offering of partner universities, with automatic recognition of the credits acquired.

Courses can be chosen from multiple partner institutions, allowing students to combine courses from different universities and expanding their opportunities. Those participating in the program can spend one or more semesters at a partner institution, attending courses in person and taking exams at the host university. In parallel, they can also take distance learning courses offered by other universities in the consortium, where this option is available.

For the Computer Science and Engineering program, students can currently participate in the annual ENHANCE selection process and, if selected, spend a full semester abroad attending in-person courses at the partner university. Further details are available in the ENHANCE call for applications published annually. The courses available at partner universities are listed in the ENHANCE TAB group of the program brochure and shown in the respective table in the program description.

EIT Digital Master School

This is a two-year, 120-credit double degree program, co-financed by the European Commission and the European Institute of Innovation and Technology (EIT), in which students spend one year at the Politecnico di Milano and one year at one of the partner universities. We offer multiple specialization programs, with dedicated study plans, including:

- Data Science
- Human-Computer Interaction and Design
- Fintech
- Emotion Artificial Intelligence
- Embedded Systems Design

In addition to technological and specialist courses, all EIT Digital programs include “ Innovation & Entrepreneurship ” courses in their study plan , with strong involvement of partner companies and research centers, to foster a culture of innovation and entrepreneurship by enhancing engineering and IT skills, including in the business direction.

Participation is regulated by a dedicated call for applications, and applications must be submitted before starting the master's program. Further information, including scholarship opportunities, is available on the website: <https://www.mastereit.polimi.it/>



Can I do an internship?

The stage, also referred to as internship (*tirocinio*), is an educational experience in the professional world, allowing students to put into practice the skills acquired during their academic path, and to guide them toward making informed future career choices.

It can take place either in Italy or abroad, in companies, professional firms, foreign universities, or public and private research institutions.

The stage is considered as **curricular** when it is aimed at students. Specifically, it can be:

- *curriculare obbligatorio* (compulsory curricular), linked to the acquisition of University Educational Credits (ECTS) and included in the Study Plan;
- *curriculare opzionale* (elective curricular), linked to the acquisition of University Educational Credits (ECTS) and included in the Study Plan at the student's discretion;
- *curriculare facoltativo* (curricular but voluntary), not involving the acquisition of ECTS and not included in the Study Plan, with a maximum duration of 12 months, to be completed before the thesis defense.

The extracurricular stage is instead intended for recent graduates who are not enrolled in any other university Study Program, and may last up to a maximum of 6 months.

More information: *Stage per laureati* ([Internships for graduates](#)).

Students interested in a curricular stage, whether *obbligatorio*, *opzionale* or *facoltativo*, can visit the [Stage curricolari](#) (Curricular Internships) webpage for more information about:

- how to find internship opportunities (which is the responsibility of the student);
- the documents that the host organization must request from Politecnico di Milano (*Convenzione di Tirocinio* - Internship Agreement and *Progetto Formativo* - SAT - Internship Academic Structure).

Internship and Master's Degree Thesis

The optional curricular internship and the *Laurea Magistrale* (Master of Science) thesis are two separate activities. The first is optional and does not allow for the acquisition of University Educational Credits (ECTS), while the second is mandatory and involves the acquisition of credits.

It is not excluded that the activity carried out during an optional curricular internship could lead to a Master's Degree thesis. However, for this to be possible, the research activity at an external organization must be carried out under the supervision of an academic advisor from Politecnico di Milano, who must agree from the beginning of the internship on the research objectives and methodologies, and must supervise the activities throughout their execution. It is the student's responsibility to contact an academic advisor before the internship begins.

An internship (or traineeship) is a training activity carried out in a work context that a student can undertake during their studies or immediately after graduation, as described above.

In the Study program in Computer Science and Engineering, internships are optional; they are not included in the curriculum. However, Politecnico di Milano actively supports students both in contacting companies and in managing the necessary documentation. Those interested in an internship can consult the dedicated internship portal, available on the Career Services website, where numerous offers from companies are listed. Students can apply directly for an internship. If selected, the company will contact them for an interview and, if successful, the process can begin. If the student independently finds a company willing to offer an internship, the company will need to enter into an agreement with Politecnico. The company can then publish a specific offer for that student on the portal, including their information. Since the internship does not carry the recognition of academic credits, the procedure does not involve the academic administration and is managed entirely by the Career Services.

It's important that all curricular internships be processed through the portal. This way, in addition to receiving support from Politecnico di Milano, students will be protected by insurance coverage during their internship .

If the internship is done during your studies, it is advisable to make the most of the experience but without getting so absorbed that you neglect completing your studies.

For further details, we recommend consulting the [specific handbook](#) .

How can I express my opinion?

Students' opinions are important, and Politecnico di Milano provides several tools through which students can express their views.

OPIS Questionnaire

The *OPIS questionnaire* is the official tool used to collect students' opinions on teaching. The questionnaires are anonymous and results are processed in aggregate form.

The outcomes of these questionnaires are essential for instructors and *the* Study Programs Councils, as they offer insight into students' thoughtful and honest feedback, helping to improve both the educational offer and teaching methods. Once a year, every Study Program Council is required to reflect on its educational path, starting also from the results of these questionnaires. Student Representatives are involved in this process, collaborating in the definition of possible improvement actions.

For this reason, it is important that students express their opinions responsibly, in the interest of the entire academic community of students and faculty.

Students are asked to give their opinion on every course they attended during the semester, by answering a questionnaire that gives students the opportunity to directly contribute to the improvement of the quality of education. For each course, the questionnaire becomes available approximately two-thirds into each semester, and its completion is mandatory before registering for exam sessions for the first time.

Graduating Students' Questionnaire

During the final year of the Study Program, students are also required to give their opinion on the entire educational path. Completing the questionnaire is mandatory in order to register for the Bachelor's/Master's Degree graduation session (Graduating Students' Questionnaire). In this survey, students are asked to provide feedback on several aspects, including the organization of teaching, specific course content, facilities, internships, international mobility opportunities, and the final examination.

Student Services Satisfaction Questionnaire

This questionnaire is mandatory for registration to the first exam session of the academic year and is intended only for regular students in the final year of their Study Program. The questions concern the services offered to students, including, for example: enrolment procedures, Study Plan submission, exam registration, tuition fees, student offices, ICT, libraries, dining services, and communication.



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How can I contribute?

Role of Student Representatives

Student representatives play a key role in ensuring the proper and transparent functioning of the University's governing bodies, where they participate to bring the students' perspective. They are elected every two years and serve not only as points of reference for students in various aspects of university life, but also contribute concrete proposals to improve the student experience.

The **Senato Accademico** (*Academic Senate*) is the body responsible for guiding and planning the University's development, with particular focus on teaching and research, and oversees the overall proper functioning of the institution. The Consiglio di amministrazione (Board of Directors), on the other hand, defines the long-term financial planning based on the proposals and opinions of the Senate. Therefore, the student representatives in these bodies are involved in decisions that affect the entire University.

The Joint Student-Professor Committees (Commissione paritetica) of each of the four Schools (3I – Industrial and Information Engineering; ICAT – Civil, Environmental and Territorial Engineering; AUIC – Architecture, Urban Planning and Construction Engineering; Design) monitor the educational offer, the quality of teaching and student services, and make proposals to enhance them. Depending on the School, some or all of the representatives on the Joint Student-Professor Committee also sit on the School Council, which coordinates the study programs and provides general guidance to the School.

The members of the Academic Senate, the Board of Directors, and the Joint Student-Professor Committees form the **Student Council**, a body where discussions take place on topics addressed within the various governing bodies. At the beginning of their term, they also elect the student representatives to the *Nucleo di Valutazione* (*Evaluation Committee*), the *Comitato Unico di Garanzia* (*Guarantee Committee*), and the Sports Committee.

Each **Study Program** has a certain number of student representatives (the number varies depending on the number of enrolled students). Student representatives are full members of the **Study Program Council**, the body responsible for defining the Degree Program and Educational Rules for each Study Program. In this context, student representatives contribute to defining how teaching is delivered, analyzing the effectiveness of courses, organizing the study plan, and acting as spokespersons for their fellow students by reporting any issues related to teaching.

If you want to learn more about the role of representatives, as well as the different representation lists present at the Politecnico, we invite you to visit the page [Polimi – Rappresentanti e Associazioni](#).

Work with Us as a Tutor

Politecnico di Milano offers students the opportunity to carry out tutoring activities as part of paid collaborations within the University:



- If you are a Master's degree student, you can support teaching through tutoring activities.
- If you are a Bachelor's degree student, you can take part in *Peer-to-Peer* tutoring activities, assisting fellow students along their academic path.

These collaborations are assigned through specific calls for application and are reserved for students who meet certain academic and financial requirements. Compensation and the number of working hours vary depending on the assigned role.

For more details on requirements, application procedures, and deadlines, visit the page: [Polimi - Paid Collaborations](#).

What's next?

The [Career Service](#) is the professional guidance and placement service of the Politecnico di Milano. It works in collaboration with employers (both private and public companies) and with the Study Programs Councils to offer students, starting from their early academic years, a wide range of initiatives aimed at bringing them closer to the professional world. The goal is to broaden their perspective by presenting them with future opportunities in terms of promising sectors and the most in-demand roles and skills.

Among the services offered by the Career Service:

- **Personalised support programs** with a *Career Advisor*, providing tips for preparing an effective CV, simulating job interviews, and more. [Discover more in the video resources.](#)
- **Special orientation pathways** to explore professional roles in innovation ([Am I an Innovator?](#)) across a variety of settings, from roles in established companies to positions involved in launching new start-ups.
- **Support in identifying internship opportunities**, both before and after graduation ([Internships](#)), as well as assistance in setting them up and formalising them through an *Internship Advisor*.
- **Organisation of orientation and mentoring events** with Italian and international companies (e.g. roundtables, career talks, career competitions, company tours), regularly posted on the website: [[Career Service](#)].

The Study Program in Computer Science and Engineering allows access, upon passing a State Exam (Esame di Stato), to the Information Engineering Class of Section A of the Register of Engineers, with the title of Engineer. Please note, however, that the aforementioned state exam for qualification to practice the profession of Information Engineer and registration in the relevant register are currently not required for practicing IT-related professions, either in the private or public sectors.

The Study program in Computer Science and Engineering provides specific skills for:

- design devices and systems;
- create hardware and software systems;
- use information technology to plan, design, manage, decide, produce and administer;
- design and implement corporate information systems;



- design and implement service automation using modern technologies, including Internet-based ones;
- develop multimedia and hypermedia systems;
- develop IT systems based on joint HW/SW design techniques;
- manage systems and applications related to robotics and artificial intelligence;
- design networked IT architectures and systems, infrastructures, and software designed for the pervasive management of diverse contexts and environments.

MSc graduates find employment primarily in areas related to research and development, advanced design, planning, and management of even complex IT systems. They may work as freelancers, enter manufacturing or service companies, or even hold positions of responsibility in public administration. Typical areas of employment include hardware and software production, automation, data management and analysis, artificial intelligence, and robotics; consulting and services; and IT services in public administration.

The main employment opportunities are in the following industrial areas:

- computer engineering area: IT industries operating in the hardware and software production sectors; automation and robotics software companies; companies operating in the information systems and computer networks sector; IT service companies;
- telecommunications engineering: companies designing, manufacturing, and operating equipment, systems, and infrastructure for the acquisition and transmission of information and its use in telematics applications; companies providing terrestrial or space-based telecommunications and remote sensing services; regulatory bodies and air, land, and naval traffic control agencies;
- information security and protection engineering area: management and service systems for large infrastructures, construction sites and workplaces, for public and private bodies, for industries, for IT and telecommunications security and for performing the role of security manager;
- automation engineering: electronics, electromechanical, space, chemical, and aeronautical companies that develop sizing and construction functions for complex architectures, automatic systems, processes, and automation systems that integrate IT components, measurement, transmission, and actuation equipment; automation and robotics industries;
- biomedical engineering: biomedical and pharmaceutical industries that produce and supply systems, equipment, and materials for diagnosis, treatment, and rehabilitation; hospitals;

service companies for the management of medical equipment and systems, including telemedicine; specialized laboratories;

- electronic engineering: companies designing and manufacturing electronic and optoelectronic components, devices, and systems; manufacturing industries, public administration sectors, and service companies that apply electronic technologies and infrastructures for the processing, transmission, and use of signals in civil, industrial, and information technology settings;

- Management engineering: manufacturing and service companies, and public administration for materials procurement and management, business and production organization, production system organization and automation, logistics, project management, and management control, industrial sector analysis, investment evaluation, industrial marketing and finance, and digital services.

Furthermore, graduates in the class will be able to find employment opportunities in all those non-strictly engineering areas in which information engineering technologies play a central role.

Alternatively, students can enroll in a first- or second-level master's program, lasting approximately one year. These professionally-oriented programs aim to provide operational skills in specific fields such as data science. These master's programs are often offered in collaboration with Politecnico's partner institutions, including CEFRIEL and POLIMI Graduate School of Management, and are designed to be compatible with work.

Finally, students can pursue a PhD program.



Contacts

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Useful links

Website of the [School of Industrial and Information Engineering](#)

Study Programme Website : <https://www.inginformatica.polimi.it>

WeBeeP Channel of the Degree Course : <https://webeep.polimi.it/course/view.php?id=2588>

Student Office: [Online counter](#)

Campus and Services: [Equal Opportunities and Inclusion](#), [Psychological Well-being](#)