



UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2024/25
BACHELOR

Environment and Workplace Prevention Techniques (Classe L/SNT4)
Enrolled since 2011/12 Academic Year

HEADING

Degree classification - Denomination and code:	L/SNT4 Health professions for preventive care
Degree title:	Dottore
Length of course:	3 years
Total number of credits required to complete programme:	180
Years of course currently available:	1st , 2nd , 3rd
Access procedures:	Cap on student, student selection based on entrance test
Course code:	D83

PERSONS/ROLES

Head of Interdepartmental Study Programme

Prof.ssa Luisa Romanò

Tutors - Faculty

Per l'orientamento:

prof.ssa Silvana Castaldi

prof. Paolo Carrer

Degree Course website

<https://tpal.cdl.unimi.it/it>

CHARACTERISTICS OF DEGREE PROGRAMME

General and specific learning objectives

The specific educational goals that students in the degree programme in Environment and Workplace Prevention Techniques must reach are as follows:

- learn the fundamental principles of physics, chemistry, biology, statistics, and IT in order to recognise and assess the magnitude of environmental and occupational risk factors on human health;
- recognise the biological principles that govern the key mechanisms for the functioning of human organs and apparati;
- gain a foundation in microbiology, biochemistry, human physiopathology and general pathology, in order to conduct a proper healthcare assessment of a person's work and everyday environment;
- know how to tackle occupational safety and health problems using the scientific method;
- be familiar with the leading food-storage and -safety technologies, and be able to assess risks along the food supply chain;
- gain an understanding of the standards established for professional ethics, as well as legal and forensic standards applicable to the profession;
- have a foundation in general psychology, environmental, regional, and organisational sociology;
- understand the basics of pharmacology and toxicology as needed to define the risk of workplace exposure to xenobiotics, and recognise the key mechanisms of toxicity and detoxification, including with respect to carcinogenic substances and agents;
- know the hygiene, structural, and system requirements for commercial and manufacturing operations seeking health-department permits and other authorisations;
- be familiar with regulations governing environmental safety, safety on the job, and safety in everyday life;
- understand the standards and regulations that govern the practice and responsibilities of this profession;
- gain the cultural and professional bases to guide accident- and illness-prevention activities for the individual and the community;
- be familiar with, and gain specific expertise in occupational safety and health, including foundations and methodologies for radiation protection;
- be familiar with the basic principles of occupational injury and disease prevention within various manufacturing segments;
- gain the knowledge necessary to identify and assess the elements in the environment having an impact on health, whether in the air, water, soil, food, or in a workplace.

Professional profile and employment opportunities

Graduates of the Environment and Workplace Prevention Techniques programme will have gained expertise in both theory

and practice, and will have honed skills in analysis, and in vetting the efficacy and efficiency of efforts to safeguard and promote health, as well as communication abilities for both routine and emergency management of issues from a healthcare-science perspective. Graduates thus have a range of employment opportunities, handling preventative efforts as well as inspections and supervision, whether in the public sector (AO, ASL [Health Departments], ARPA [non-profit], ISPESL [Occupational Safety and Health Inspectorate], local entities, etc.) as well as through contracted inspection and prevention entities, or through organisations providing personnel training, or services relating to health safeguards and accident/illness prevention.

As employees or consultants in the private sector, graduates may independently provide professional technical support in the form of planning and organising how work is conducted, in terms of occupational safety and health; in cooperation with the health and safety office, they identify efforts to ensure worker safety and environmental protection. They work in concert with employers and businesses to analyse risks within a company, and generate risk-assessment documents (for workplace safety, food safety, and environmental safety). They conduct environmental surveys to monitor the salubrity of an environment, whether at home or at work.

Initial knowledge required

Admission into the programme is capped, at a national level, pursuant to Law no. 264 of 2 August 1999.

The number of students who may be admitted is set each year pursuant to a decree of the Ministry of Universities and Research (MUR), based on findings provided by the university in terms of available instructional, classroom, and clinical resources (human and otherwise), as well as the demand for the type of professionals contemplated for this Class as determined by the Region of Lombardy, and the Ministry of Health.

The admission test will be administered as a national exam, generally in the month of September. The date will be set pursuant to a decree issued by MUR.

Requirements and knowledge requested for access:

- Upper secondary-school diploma, or other similar diploma obtained overseas and deemed equivalent;

Assessment methods:

- Students' specific acumen in the disciplines contemplated under the degree programme will be assessed during the admission test

Additional learning requirements (OFA)

Students who answered less than 50% of the Biology and Chemistry questions on the admission test will be required to finish a set of additional learning requirements (OFA). These prerequisites may be met through specifically assigned remedial work. Any failure to complete the OFA will make it impossible for the student to sit exams in: Chemistry and Physics - Biochemistry.

Timely notice of the various courses will be posted to: <https://tpal.cdl.unimi.it/it>

Compulsory attendance

Attendance of all coursework (at least 75%), and all internship activities (100%), is mandatory.

Degree programme final exams

Degrees in Environment and Workplace Prevention Techniques are awarded at the end of three years of study once a student has passed all relevant exams, including the English-language proficiency examination, for a total of 173 CFU, as well as a final theoretical/practical exam worth 7 CFU, for a total of 180 CFU.

The final exam consists in the presentation and discussion of a thesis, and a practical exam.

The final examination acts as a State Exam which serves to license students to practice the profession.

Campus

Educational activities for the degree programme in Environment and Workplace Prevention Techniques are offered through the academic facilities located within the Città Studi area, or through teaching hospitals within the national health service, and accredited entities identified by the Interdepartmental Academic Board.

EXPERIENCE OF STUDY ABROAD AS PART OF THE TRAINING PROGRAM

The University of Milan supports international mobility by providing its students with the opportunity to spend study and internship periods abroad. It is a unique chance to enrich your educational path in a new exciting environment.

The agreements entered into by the University with over 300 universities from the 27 EU member countries under the European Erasmus+ programme allow regularly enrolled students to carry out part of their studies at one of the partner universities or to undertake internships at companies, training and research centres and other organizations.

Similar international mobility opportunities are provided outside Europe, through agreements with a number of prestigious institutions.

How to participate in Erasmus mobility programs

The students of the University of Milan can participate in mobility programmes, through a public selection procedure.

Ad hoc commissions will evaluate:

- Academic career
- the candidate's proposed study programme abroad
- his/her foreign language proficiency
- the reasons behind his/her application

Call for applications and informative meetings

The public selection for Erasmus+ mobility for study generally begins around February each year with the publication of a call for applications specifying destinations and requirements. Regarding the Erasmus+ Mobility for Traineeship, the University of Milan usually publishes two calls a year enabling students to choose a destination defined by an inter-institutional agreement or to find a traineeship position on their own.

The University organizes informative meetings to illustrate mobility opportunities and rules for participation.

Erasmus+ scholarship

The European Union grants the winners of the Erasmus+ programme selection a scholarship to contribute to their mobility costs, which may be supplemented by the University funding for disadvantaged students.

Language courses

Students who pass the selections for mobility programmes can benefit from intensive foreign language courses offered each year by the University Language Centre (SLAM).

<https://www.unimi.it/en/node/8/>

Learn more at <https://www.unimi.it/en/node/274/>

For assistance, please contact:

International Mobility Office

Via Santa Sofia 9 (second floor)

Tel. 02 503 13501-12589-13495-13502

Contacts: InformaStudenti; mobility.out@unimi.it

Student Desk booking through InformaStudenti

1st COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
Biochemistry	4	(2) BIO/10, (2) BIO/13
Biomedical Sciences 1	4	(2) BIO/09, (2) BIO/16
Biomedical Sciences 2	6	(3) MED/04, (3) MED/07
Chemical And Physical Sciences	7	(1) MED/50, (2) CHIM/03, (2) FIS/07, (2) CHIM/06
Computer Science Course	3	INF/01
English assessment B1 (2 ECTS)	2	ND
Laboratory (Physics And Chemistry)	1	ND
Law Sciences	6	(1) MED/50, (2) IUS/17, (1) IUS/09, (2) IUS/07
Practical Training (1° Year)	12	MED/50
Preventive Sciences	8	(2) MED/50, (3) MED/44, (3) MED/42
Statistics And Epidemiology	5	(1) MED/50, (2) MED/01, (2) MED/42
Total compulsory credits		58
Elective courses		
2nd COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
Ecosystems And Environmental Quality	6	(2) MED/50, (2) CHIM/12, (1) MED/42, (1) BIO/03
Food Sciences	7	(1) MED/50, (1) AGR/15, (3) VET/04, (2) MED/42
Health Services Management	6	(1) MED/50, (1) M-PSI/06, (1) MED/02, (1) SECS-P/02, (2) MED/42
Interdisciplinary Clinical Sciences 1	6	(1) MED/50, (1)

			MED/30, (1) MED/33, (1) MED/09, (2) MED/44
Laboratory (Environment)		1	ND
Laboratory (Food)		1	ND
Life Sciences And Health Promotion		6	(1) MED/50, (1) SPS/10, (1) M-PSI/01, (2) MED/44, (1) MED/42
Pharmacology And Toxicology		6	(1) MED/50, (1) MED/44, (1) MED/43, (1) BIO/14, (2) CHIM/09
Practical Trainings (2° Year)		19	MED/50
	Total compulsory credits	58	
<i>Elective courses</i>			
<i>3rd COURSE YEAR Core/compulsory courses/activities common</i>			
Learning activity		Ects	Sector
Enviromental Health And Safety In The Workplace		7	(3) MED/50, (2) MED/44, (2) MED/42
Interdisciplinary Clinical Sciences 2		5	(1) MED/10, (1) MED/11, (1) MED/32, (1) MED/17, (1) MED/41
Practical Training (3° Year)		29	MED/50
Technical Physics And Industrial Chemistry		7	(2) ING-INF/02, (1) ICAR/03, (2) ING- IND/25, (1) ING- IND/11, (1) MED/36
	Total compulsory credits	48	
<i>Elective courses</i>			
<i>COURSE YEAR UNDEFINED Core/compulsory courses/activities common</i>			
Learning activity		Ects	Sector
Other Activities		3	ND
	Total compulsory credits	3	
<i>End of course requirements</i>			
Final Test		7	NA
	Total compulsory credits	7	

COURSE PROGRESSION REQUIREMENTS

The course contains the following obligatory or advised prerequisites

Learning activity	Prescribed foundation courses	O/S
Pharmacology And Toxicology	Biomedical Sciences 1	Core/compulsory
Biomedical Sciences 2	Biomedical Sciences 1	Core/compulsory
Technical Physics And Industrial Chemistry	Chemical And Physical Sciences	Core/compulsory
Interdisciplinary Clinical Sciences 2	Biomedical Sciences 2	Core/compulsory
Interdisciplinary Clinical Sciences 1	Biomedical Sciences 2	Core/compulsory