



UNIVERSITA' DEGLI STUDI DI MILANO
MANIFESTO DEGLI STUDI A.A. 2023/24
LAUREA MAGISTRALE IN
ENVIRONMENTAL CHANGE AND GLOBAL SUSTAINABILITY
(Classe LM-75)
Enrolled from 2022/23 academic year

GENERALITA'

Classe di laurea di appartenenza:	LM-75 SCIENZE E TECNOLOGIE PER L AMBIENTE E IL TERRITORIO
Titolo rilasciato:	Dottore Magistrale
Curricula attivi:	Environmental Systems: Management and Sustainability / Technological Processes and Environmental Sustainability
Durata del corso di studi:	2 anni
Crediti richiesti per l'accesso:	180
Cfu da acquisire totali:	120
Annualità attivate:	1° , 2°
Modalità accesso:	Libero con valutazione dei requisiti di accesso
Codice corso di studi:	F6B

RIFERIMENTI

Presidente Collegio Didattico

Prof. Roberto Confalonieri

Docenti tutor

Dott.ssa Elisa De Marchi - Erasmus and International mobility tutor
Prof. Giangiacomo Beretta - Academic guidance tutor and Study plan tutor
Dott. Mattia Brambilla - Academic guidance tutor and Study plan tutor
Prof. Daniele Curzi - Academic guidance tutor and Study plan tutor
Prof. Caterina La Porta - Academic guidance tutor and Study plan tutor
Prof. Stefano Trasatti - Internship tutor

Sito web del corso di laurea

<https://ecgs.cdl.unimi.it/en>

<https://www.unimi.it/en/education/faculties-and-schools/science-and-technology/environmental-science-and-policies>

ECGS Secretariat

Milano - Via Celoria 2, 2nd floor Tel. +39 02502 16501/16475 Contact us via InformaStudenti <https://www.unimi.it/it/node/359>

International Students Office - Welcome Desk

Milan - Via S. Sofia, 9/1 [##### **Student administrative office**](https://www.unimi.it/en/international/coming-abroad/international-students-office>Welcome Desk</p></div><div data-bbox=)

Milan - Via Celoria 18 Tel. +39 02503 25032 <https://www.unimi.it/it/node/360> <https://www.unimi.it/it/node/359>

Link al regolamento del C.D.S.

<https://www.unimi.it/en/education/faculties-and-schools/science-and-technology/environmental-science-and-sustainability>

CARATTERISTICHE DEL CORSO DI STUDI

Obiettivi formativi generali e specifici

Environmental change plays a central role in modern societies, to the point that a sustainable management of the environment currently represents one of the most important open challenges for humanity. Addressing this challenge requires a multidisciplinary approach that overcomes the usual boundaries of scientific disciplines. In this context, the Master program in Environmental Change and Global Sustainability (ECGS) provides advanced expertise in the hard- and life-science components of environmental studies as well as in their economic- and social-science components. The general goal is to train students to tackle environmental change and sustainability in a multidisciplinary perspective. Students will therefore be provided with both a solid knowledge of the dynamics of the different components of the environment and a deep understanding of the tools required to promote its sustainable management and protection.

The Master degree in Environmental Change and Global Sustainability represents a novelty in the Italian university system, not only for its marked multidisciplinary approach, but also for being taught entirely in English.

Risultati di apprendimento attesi

In the spirit of harmonization of education within the European Union, graduates from this Master program are expected to achieve the following standards according to the so-called Dublin Descriptors:

A. Knowledge and understanding

Graduates will gain advanced theoretical knowledge and expertise in the following fields: Mathematics and Statistics; Chemistry, Physics, Earth Sciences and Engineering; Life Sciences; Economics and the Social Sciences. As to Mathematics and Statistics, the courses offered include: i) Quantitative Methods; ii) Statistical Methods in Environmental Studies. These courses will strengthen the students familiarity with this subject-area, providing them with knowledge and skills that will help them to understand the mathematical and statistical methods which are used in many of the courses of the Master program. Moreover, they will allow students to get acquainted with many software packages that are currently used in environmental sciences.

As to Chemistry, Physics, Earth Sciences and Engineering, the courses offered include: i) Chemistry of Natural Processes and Technologies for the Environment; ii) Geodiversity: Theory and Applications; iii) Sedimentary successions and their natural resources for the energy transition; iv) Climate Change: Impact and Adaptation; v) Georesources and Sustainability; vi) Environmental Geochemistry; vii) Recycle and life cycle assessment (LCA) of products and processes. The knowledge and skills acquired in this area range from environmental chemistry to environmental physics; from the many aspects of the earth sciences that are relevant to the environmental issue to a number of engineering topics that are useful for a better management of the environment. The knowledge and skills acquired in this area will be very important to allow students to face the environmental issue with a quantitative approach. As to Life Sciences, the courses offered include: i) Biodiversity Dynamics and Conservation; ii) Approaches to the Study of Ecological Systems; iii) Climate Change: Impact and Adaptation; iv) Economic Botany and Zoology; v) Ecosystem Functioning and Services; vi) Bioresource and Pollution Control Technology; vii) Waste Management and Sustainability; viii) Food Industry Design, Technology and Innovation; ix) Multilevel Effects of Environmental Contamination; x) Methods in Ecotoxicology; xi) Environmental Change and Public Health. The knowledge and skills acquired in this area will first provide students an advanced understanding of:

- the dynamics regulating biodiversity and the problems connected to its conservation;
- the dynamics regulating ecological systems and the services they can provide.

Then advanced knowledge and understanding of multilevel effects of environmental contamination will be provided, ranging from the cellular scale to living beings and ecosystems, with particular emphasis on adverse effect on humans. Moreover, advanced knowledge and understanding of the economic relevance of plants and animals in a quickly changing environmental context will be provided.

Finally, students will get acquainted with several technologies relevant for environmental protection and sustainable development.

As to Economics and the Social Sciences, the courses offered include: i) Environmental Economics and Policy; ii) Statistical Methods in Environmental Studies; iii) Agricultural and Natural Resource Economics and Policy; iv) Applied Environmental and Resource Economics; v) Sustainable Development; vi) Environmental Law; vii) Green Procurement; viii) Sustainability Accounting and Management.

The knowledge and skills acquired in this area will first provide students an advanced understanding of:

- the principles of environmental economics, with a focus on policy applications;
- the principles underlying the determination of the economic value of agricultural and natural resources and the models employable for evaluating the environmental impact of economic activities and assessing the effectiveness of adaptation and mitigation policies.

Then advanced knowledge and understanding of sustainable development will be provided and students will be trained to evaluate sustainability at firm level and to plan the introduction and use of sustainable materials and processes. Finally, students will get acquainted with Environmental Law that will be examined at both a national and an international level.

B. Applying knowledge and understanding

Graduates will be able to apply the knowledge and skills acquired in the Master program to:

- properly adopt the scientific method and apply it to analyse, control and manage complex environmental problems;
- set up models, make use of quantitative tools and develop appropriate methods of analysis to investigate and understand complex environmental contexts and to propose solutions for their sustainable management;
- face all topics related to environmental protection as well as to environmental monitoring and management taking into account the issue of sustainability and considering the ethical implications of activities affecting the environment; - consider the different spatial scales related to environmental issue, ranging from the local level to the global scale; - set up and manage initiatives linked to environmental monitoring, control and remediation in every social and economic context;
- set up environmental impact studies as well as strategic environmental assessments and environmental risk assessments;
- contribute to plan climate change mitigation and adaption initiatives;
- promote sustainability and contribute to strengthen social awareness on environmental issues.

C. Making judgments

The Master program will grant its graduates the ability to make judgments and to critically investigate the effects and effectiveness of the actions and decisions related to the environment, including their ethical implications. The

multidisciplinary approach of this program is designed to foster the development of independent judgment and critical thinking capabilities by offering students the opportunity to compare methodological approaches in different disciplines.

D. Communication Skills

ECGS graduates will be able to effectively present and communicate the results of their work (projects, reports, documents, analytical studies, research papers, etc.) within companies and institutional bodies, at both a national and an international level. They will be able to state and defend their positions and opinions and to communicate clearly and effectively in both written and oral forms, as well as to set up cooperative relationships and collaborative work within groups. The ability to competently communicate in the workplace is primarily gained through the presentation and discussion of case studies, a practice that is compulsory for several courses and during the final dissertation.

E. Learning skills

ECGS graduates will learn how to develop and improve their learning skills through the access to and the consultation of the scientific literature, databases and other online information, and by analysing data using econometric and statistical tools. The Master degree in Environmental Change and Global Sustainability also provides its students with the methodological skills and the knowledge foundations that make it possible for graduates to continue their studies in doctoral programs. Master students will also have the opportunity to attend the other activities organised by the Department of Environmental Science and Policy, such as applied laboratories, seminars, and workshops, so as to improve their ability to understand scientific challenges and develop new topics of research.

Profilo professionale e sbocchi occupazionali

The main peculiar quality of ECGS graduates is their ability to tackle environmental change and sustainability in a multidisciplinary perspective. This ability benefits of advanced expertise in the hard- and life-science components of environmental studies as well as in their economic- and social-science components. In this context, five professional profiles ECGS graduates can achieve are listed below:

1. Environmental manager in agro-food, energy and green economy companies as well as in other companies in the industrial and service sectors;
2. Environmental specialist in the public administration as well as in local governments;
3. Environmental specialist in supra and international bodies as well as in national and international non-governmental organizations.
4. Specialist in environmental impact studies and strategic environmental assessments;
5. Specialist in environmental analysis and monitoring.

Further employment opportunities of ECGS graduates concern research positions at universities and research institutions as well as teaching at the secondary school level.

Conoscenze per l'accesso

Pre-requisites for admission and assessment requires

Eligibility to the Master program in Environmental Change and Global Sustainability presupposes to possess suitable curricular qualifications and to have an adequate personal preparation, to be verified by means of an interview. As to the curricular qualifications, the ECGS program can be accessed by graduates holding an Italian three-year laurea (BA) degree (ex D.M. 270/2004 or ex D.M. 509/1999) in either the class L-32 Scienze per l'ambiente e la natura (ex D.M. 270/2004) or the class L-27 Scienze e tecnologie per l'ambiente e la natura (ex D.M. 509/1999). The ECGS programme can also be accessed by graduates holding an Italian three-year laurea (BA) degree, obtained in classes different from the above-mentioned ones, provided they have earned at least 60 ECTS (European Credit Transfer System) credits for having attended courses in the scientific-disciplinary sectors belonging to at least two of the following sets, of which at least 15 in the scientific-disciplinary sectors belonging to the first set and at least 12 in the scientific-disciplinary sectors belonging to the second set or the third set.

1. computer science, mathematics, and statistics (INF/01, MAT/01-/09, SECS-S/01, SECS-S/06);
2. chemistry, physics and Earth sciences (CHIM/01-/03, CHIM/06, CHIM/12, FIS/01, FIS/06-/07, GEO/01-/02, GEO/04-/05, GEO/10-/12);
3. life sciences (AGR/02-/03, AGR/05, AGR/08-/10, AGR/13, AGR/15, BIO/01-/07, BIO/09-/13);
4. economic and social sciences (AGR/01, ING-IND/35, IUS/01, IUS/04, IUS/09, IUS/13, SECS-P/01-/02, SPS/04, SPS/07, SPS/10).

Students with foreign qualifications obtained from international Universities subscribing to both the European system for acknowledging university qualifications and the ECTS system for assigning university credits can also enter the ECGS program, provided that they hold first-level degrees accepted as equivalent to Italian laurea degrees by the members of a Committee appointed by the ECGS program Council, who will also ascertain that the international applicants meet curricular requirements in disciplines similar to those belonging to the scientific-disciplinary sectors listed above.

Finally, students with foreign qualifications obtained from international Universities not subscribing to the European system for acknowledging university qualifications and the ECTS system for assigning university credits can also enter the ECGS program, provided that they hold first-level degrees accepted as equivalent to Italian laurea degrees by a Committee appointed by the ECGS program Council, and that the same Committee verifies that the international applicants meet

curricular requirements similar to those required of the applicants holding qualifications awarded by Italian Universities.

Moreover, in all the above cases, knowledge of the English language is required at level B2 or higher, according to the classification provided by the Common European Framework of Reference for Languages (CEFR). The qualifications recognised by the University of Milan, with the corresponding CEFR levels, can be found at: <https://www.unimi.it/en/study/language-proficiency/placement-tests-and-english-courses/accepted-language-certificates>.

Native English speakers and graduates from university first-level programmes entirely taught in English are exempted from producing any such language qualification.

Students without a documented B2 level may be accepted on condition that their level of English proficiency, assessed during the interview, is evidently good.

In entrance, optional training activities are provided to facilitate the integration of students from different first level degrees and from different universities (see the programme website at: <https://ecgs.cdl.unimi.it/en>).

Applicants must apply for admission to the ECGS program from March 6th to August 25th, 2023.

Non EU candidates applying for a visa must apply from March 6th to May 31st, 2023.

Applicants will be contacted for an on-line interview.

Struttura del corso

The first year of the ECGS Master program is built on eight required courses. Two of these courses (one in either semester) aim at strengthening students' familiarity with the mathematical and statistical topics that are used in many of the courses of the Master program. The other ones concern the six disciplinary areas that a Master program in class LM-75 (Scienze e tecnologie per l'ambiente e il territorio) must include in Italy.

The first three of these six courses are in the first semester and concern biological, ecological and economical disciplinary areas; the other three are in the second semester and concern the disciplinary areas of chemistry, earth sciences and agronomic sciences. Each of these courses allows the students to obtain eight ECTS credits, whereas either one of the two courses of the mathematical and statistical area allows the students to obtain six ECTS credits.

Therefore the first year of the ECGS Master program allows the students to obtain 60 ECTS credits. All in all, lectures and classes cover globally 512 hours.

Compulsory attendance

Attendance is strongly recommended.

Curricula

In the second year of the ECGS Master program, students have to select one of the following two curricula:

A: Environmental Systems: Management and Sustainability;

B: Technological Processes and Environmental Sustainability.

Then three courses must be selected from those associated to the chosen curriculum. These courses allow the students to obtain 18 ECTS credits, whereas further 12 ECTS credits are obtained from other two elective courses to be chosen among those offered by all the Master programmes of Milan University, with the only restriction that the study plan must be approved by a Committee appointed by the ECGS program Council. The second year of the ECGS Master program is completed by an internship or a placement period (worth 9 ECTS credits) and by the final dissertation (worth 21 ECTS credits). Over the second year, lectures and classes globally cover 240 hours.

Study plan definition and submission for approval

Students have to submit their study plans in the first year of course, from February 1, 2024 to February 29, 2024. Consult the website: <https://www.unimi.it/en/study/bachelor-and-master-study/following-your-programme-study/plan-study>

Lecture timetable

The first Semester starts on September 25, 2023 and ends on January 19, 2024

The second Semester starts on February 26, 2024 and ends on June 14, 2024

The timetable will be available at <https://www.unimi.it/en/node/128/>

Testing and assessment procedures

Each course is followed by an exam, usually in the form of a written or oral test (or a combination of the two). Exam grades are calculated on a 30-point scale, 18/30 is the minimum passing grade.

Credits for a course are only granted upon passing the corresponding exam.

Procedures for exam registration and admittance

Exam sessions are scheduled during recess at the end of each semester. For each course, 6 tests are scheduled per academic year <https://www.unimi.it/en/study/bachelor-and-master-study/following-your-programme-study/sitting-exams/exams-calendar>

"Safety for field activities" course

During the second year, the student will have to attend the "Safety for field activities" course. Further information will be available by e-mail or on the course website.

Area didattica

Lecture rooms and laboratories are located in the “Città Studi” campus, mostly in the University buildings of Via Celoria, 20

Tutorato

Each student will have an academic guidance tutor who will help him/her in defining the most appropriate study plan and in managing any issue related to his/her career. Other tutors will support students for International mobility and Erasmus programme and for external internships.

Caratteristiche Tirocinio

In the second year of the ECGS Master students have to include an internship or a placement period (worth 9 ECTS credits). The Internship or Placement credits can be spent:

Within an external internship;

Within an internal internship;

Within the Multidisciplinary Laboratory of Environmental Change and Global Sustainability organised by ECGS Master

Caratteristiche della prova finale

The Master degree in Environmental Change and Global Sustainability ends with a final exam worth 21 ECTS credits. This exam consists of the preparation and public discussion of an original thesis drawn up by each graduating student under the guidance of a thesis supervisor. The thesis must be written and discussed in English.

To be admitted to the final exam students must have earned 99 ECTS credits.

ESPERIENZA DI STUDIO ALL'ESTERO NELL'AMBITO DEL PERCORSO FORMATIVO

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.

Cosa offre il corso di studi

In line with the nature of the ECGS programme, international mobility is highly encouraged.

Students enrolled in the programme may spend a study period abroad under the ERASMUS+ program (they can take courses, take exams, prepare theses, carry out research), obtaining recognition for their academic career from that educational experience.

Erasmus+ also provides Placements, that is, the opportunity for a traineeship in companies and other organisations abroad. The new Erasmus+ program provides the following new study and placement opportunities: a) up to 12 months abroad (study periods and placements); b) placements, including those for new graduates (within 12 months of completing a degree). Students who have already spent a period abroad under the Erasmus+ programme may still apply for an Erasmus+ educational or placement activity. Yet, the months previously spent abroad concur to the attainment of the overall maximum of 12 months for each Erasmus+ study cycle.

Modalità di partecipazione ai programmi di mobilità - mobilità Erasmus

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

MODALITA' DI ACCESSO: 1° ANNO LIBERO CON VALUTAZIONE DEI REQUISITI DI ACCESSO

Informazioni e modalità organizzative per immatricolazione

- Admission interviews:
Applicants will be contacted for an on-line interview.

- Enrollment procedures:
<https://www.unimi.it/en/study/enrolment>

Link utili per immatricolazione

<https://www.unimi.it/en/study/bachelor-and-master-study/degree-programme-enrolment/enrolment-masters-programme>

Istruzioni operative

Applicants must apply for admission to the ECGS program from March 6th to August 25th, 2023(<https://www.unimi.it/en/node/92/>).

Non EU candidates applying for a visa must apply from March 6th to May 31st, 2023.

Admission interview:

International candidates, as well as Italian residents, will be contacted for an on-line interview.

Detailed information on the application procedures is available on the ECGS course website.

The aim of the individual interviews is to ascertain the candidates' background knowledge, their abilities and competences in the key areas of the ECGS programme.

Please consult the degree course web site for further information and updates (<https://ecgs.cdl.unimi.it/en>).

For enrolment information and procedures: <https://www.unimi.it/en/study/enrolment>

Nº posti riservati a studenti extracomunitari non soggiornanti in Italia

65

1° ANNO DI CORSO Attività formative obbligatorie comuni a tutti i curricula				
Erogazione	Attività formativa	Modulo/Unità didattica	Cfu	Settore
1 semestre	Approaches to the Study of Ecological Systems		8	BIO/07
1 semestre	Biodiversity dynamics and conservation		8	BIO/05
1 semestre	Environmental Economics and Policy		8	SECS-P/01
1 semestre	Quantitative Methods		6	MAT/06, MAT/08
2 semestre	Agricultural and Natural Resource Economics and Policy		8	AGR/01
2 semestre	Chemistry of Natural Processes and Technologies for the Environment		8	CHIM/07, CHIM/06
2 semestre	Statistical Methods in Environmental Studies		6	SECS-S/01, SECS-P/05
			Totale CFU obbligatori	52

Attività a scelta comuni a tutti i curricula

Choose one course between:

2 semestre	Geodiversity: Theory and Applications	8	GEO/04
2 semestre	Sedimentary successions and their natural resources for the energy transition	8	GEO/02

2° ANNO DI CORSO Attività formative obbligatorie comuni a tutti i curricula

Erogazione	Attività formativa	Modulo/Unità didattica	Cfu	Settore
	Final dissertation		21	ND
		Totale CFU obbligatori	21	

Attività a scelta comuni a tutti i curricula

During the second year, the student:

- must attend the "Safety for field activities" course. Further information will be available by e-mail or on the course website.
 - must acquire 9 ECTS credits for Internship and Placement.
- Internship and Placement credits can be spent:
 Within an external internship;

Within an internal internship;
Within the Multidisciplinary Laboratory of Environmental Change and Global Sustainability organised by ECGS Master.
Open choice courses: 12 CFU

ELENCO CURRICULA ATTIVI

Environmental Systems: Management and Sustainability Annualità attivate: 1°, 2°
 Technological Processes and Environmental Sustainability Annualità attivate: 1°, 2°

CURRICULUM: [F6B-A] Environmental Systems: Management and Sustainability

Obiettivi Formativi Qualificanti

The general goal of ECGS Master is to train students to tackle environmental change and sustainability in a multidisciplinary perspective. Within this general goal, the curriculum Environmental Systems: Management and Sustainability specifically aims at strengthen the understanding of the tools required to promote a sustainable management and protection of the environment

Risultati di apprendimento attesi

The curriculum Environmental Systems: Management and Sustainability will allow students to strengthen the competences concerning Economics and the Social Sciences.

Profilo professionale e sbocchi occupazionali

The curriculum Environmental Systems: Management and Sustainability is adequate for all the five professional profiles listed for ECGS Master:

1. Environmental manager in agro-food, energy and green economy companies as well as in other companies in the industrial and service sectors;
2. Environmental specialist in the public administration as well as in local governments;
3. Environmental specialist in supra and international bodies as well as in national and international non-governmental organizations.
4. Specialist in environmental impact studies and strategic environmental assessments;
5. Specialist in environmental analysis and monitoring.

2° ANNO DI CORSO Attività a scelta specifiche del curriculum Environmental Systems: Management and Sustainability

Choose three courses (18 CFU), according to the following rules:

1 - the student can choose the following course:

1 semestre	Economic Botany and Zoology		6	BIO/05, BIO/04
------------	-----------------------------	--	---	-------------------

2 - the student can choose the following course:

1 semestre	Ecosystem Functioning and Services		6	BIO/07
------------	------------------------------------	--	---	--------

3 - the student can choose the following course:

1 semestre	Recycle and life cycle assessment (LCA) of products and processes		6	CHIM/04
------------	---	--	---	---------

4 - the student can choose the following course:

1 semestre	Georesources and Sustainability		6	GEO/09
------------	---------------------------------	--	---	--------

5 - the student can choose one of the following courses:

1 semestre	Applied Environmental and Resource Economics		6	AGR/01
------------	--	--	---	--------

1 semestre	Climate Change: Impact and Adaptation		6	FIS/06, AGR/02
------------	---------------------------------------	--	---	-------------------

6 - the student can choose one of the following courses:

1 semestre	Green procurement		6	IUS/10
------------	-------------------	--	---	--------

2 semestre	Environmental Law		6	IUS/10
------------	-------------------	--	---	--------

2 semestre	Sustainable Development		6	SECS-P/01
------------	-------------------------	--	---	-----------

7 - the student can choose the following course:

2 semestre	Sustainability Accounting and Management		6	SECS-P/08
------------	--	--	---	-----------

CURRICULUM: [F6B-B] Technological Processes and Environmental Sustainability

Obiettivi Formativi Qualificanti

The general goal of ECGS Master is to train students to tackle environmental change and sustainability in a multidisciplinary perspective. Within this general goal, the curriculum Technological Processes and Environmental Sustainability specifically aims at strengthen the understanding of the dynamics of the different components of the environment.

Risultati di apprendimento attesi

The curriculum Technological Processes and Environmental Sustainability will allow students to strengthen the competences concerning hard sciences and life sciences.

Profilo professionale e sbocchi occupazionali

The curriculum Technological Processes and Environmental Sustainability is adequate for all the five professional profiles listed for ECGS Master:

1. Environmental manager in agro-food, energy and green economy companies as well as in other companies in the industrial and service sectors;
2. Environmental specialist in the public administration as well as in local governments;
3. Environmental specialist in supra and international bodies as well as in national and international non-governmental organizations.
4. Specialist in environmental impact studies and strategic environmental assessments;
5. Specialist in environmental analysis and monitoring.

2° ANNO DI CORSO Attività a scelta specifiche del curriculum Technological Processes and Environmental Sustainability

Choose three courses (18 CFU), according to the following rules:

1 - the student can choose the following course:

1 semestre	Multilevel Effects of Environmental Contamination		6	BIO/06, BIO/05, BIO/14
------------	---	--	---	------------------------------

2 - the student can choose the following course:

1 semestre	Ecosystem Functioning and Services		6	BIO/07
------------	------------------------------------	--	---	--------

3 - the student can choose the following course:

1 semestre	Environmental Geochemistry		6	GEO/08
------------	----------------------------	--	---	--------

4 - the student can choose one or two of the following courses:

1 semestre	Application of Remote Sensing to the monitoring of Agro-Environmental Changes		6	AGR/02
1 semestre	Waste Management and Sustainability		6	AGR/18, AGR/10, AGR/13

5 - the student can choose one or two of the following courses:

1 semestre	Bioresource and Pollution Control Technology		6	AGR/09
1 semestre	Environmental Change and Public Health		6	MED/50, MED/04
1 semestre	Methods in Ecotoxicology		6	VET/07, BIO/07
2 semestre	Food Industry Design, Technology and Innovation		6	AGR/15