



**UNIVERSITÀ DEGLI STUDI
DELL'INSUBRIA**

**DIPARTIMENTO
DI SCIENZE TEORICHE E
APPLICATE**

**CURRICULUM DESCRIPTION (TEACHING
REGULATIONS)**

**BACHELOR'S DEGREE COURSE in
ENGINEERING FOR WORK AND ENVIRONMENT SAFETY
a.y. 2022/2023**



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Chiaramente Insubria!



I. GENERAL INFORMATION

NAME OF THE DEGREE COURSE (DC)	Engineering for Work and Environment Safety
CLASS	L7 - Civil and environmental engineering
TYPE	3-year degree course
COURSE LOCATION	Varese
COURSE WEBSITE	For information on the learning objectives of the DC, occupational opportunities, access requirements, admission procedures, expected educational results, curriculum / study plan, final exam, you may refer to the Annual Program Report (DC-APR), published on the course website at: www.uninsubria.eu/bachelor-eose
DEPARTMENT	Scienza e alta tecnologia – DiSAT (Science and High Technology – DiSAT)
DEGREE COURSE COORDINATOR	Prof. Vincenzo Torretta
ACADEMIC OFFICE OF THE DEGREE COURSE	Servizio di Ascolto Manager Didattici per la Qualità - DiSAT (in Italian)
LESSONS TIMETABLE	19/09/2022 - 22/12/2022 1st semester 20/02/2023 - 01/06/2023 2nd semester 09/01/2023 - 17/02/2023 1st exam session 05/06/2023 - 22/09/2023 2nd exam session (August excluded) For lesson suspension dates and holidays for national, local and other festivities (Christmas break, Easter break, University holidays), students should refer to the University Academic Calendar approved by the University bodies at the following link: www.uninsubria.it/chi-siamo/sedi-e-orari/calendario-didattico-di-ateneo (in Italian)
FURTHER INFORMATION	<ul style="list-style-type: none">• COURSE ACCESS: open-access• TEACHING LANGUAGE: Italian• TEACHING PROCEDURES: Traditional



<p>TUTORS</p>	<p>The DC tutors guide and assist students during their entire educational pathway making them actively participate in the educational process and removing obstacles to a profitable attendance to courses, also through specific initiatives related to the needs and predispositions of individual students.</p> <p>The TUTORs of the DC in Engineering for work and Environment Safety are Professors:</p> <p>Conti Fabio Copelli Sabrina Espa Paolo Ruggieri Gianluca</p>																		
<p>LECTURERS OF THE DC</p>	<table border="1"> <thead> <tr> <th data-bbox="632 698 1034 734">Lecturer</th> <th data-bbox="1034 698 1513 734">Course</th> </tr> </thead> <tbody> <tr> <td data-bbox="632 743 1034 801">CASSANI Daniele</td> <td data-bbox="1034 743 1513 810">1. Mathematical analysis A 2. Mathematical analysis B</td> </tr> <tr> <td data-bbox="632 810 1034 913">CAVALLO Domenico Maria Guido ESPA Paolo</td> <td data-bbox="1034 810 1513 922">1. General and occupational hygiene 1. Hydraulics and hydraulic plants</td> </tr> <tr> <td data-bbox="632 913 1034 1003">RADA Elena</td> <td data-bbox="1034 913 1513 990">1. Environmental healthcare engineering</td> </tr> <tr> <td data-bbox="632 1003 1034 1093">MICHETTI Alessandro Maria</td> <td data-bbox="1034 1003 1513 1079">1. Elements of geology, hydrogeology and seismic risk</td> </tr> <tr> <td data-bbox="632 1093 1034 1160">MOROSINI Cristiana</td> <td data-bbox="1034 1093 1513 1182">1. Remediation of contaminated sites 2. Environmental impact studies and procedures</td> </tr> <tr> <td data-bbox="632 1160 1034 1227">RUGGIERI Gianluca</td> <td data-bbox="1034 1160 1513 1236">1. Environmental technical physics</td> </tr> <tr> <td data-bbox="632 1227 1034 1294">SIENI Elisabetta</td> <td data-bbox="1034 1227 1513 1317">1. Electrotechnics, electrical plants and electrical risk</td> </tr> <tr> <td data-bbox="632 1294 1034 1406">TORRETTA Vincenzo</td> <td data-bbox="1034 1294 1513 1406">1. Relevant accidents and risk analysis 2. Studies and procedures for environment compatibility</td> </tr> </tbody> </table>	Lecturer	Course	CASSANI Daniele	1. Mathematical analysis A 2. Mathematical analysis B	CAVALLO Domenico Maria Guido ESPA Paolo	1. General and occupational hygiene 1. Hydraulics and hydraulic plants	RADA Elena	1. Environmental healthcare engineering	MICHETTI Alessandro Maria	1. Elements of geology, hydrogeology and seismic risk	MOROSINI Cristiana	1. Remediation of contaminated sites 2. Environmental impact studies and procedures	RUGGIERI Gianluca	1. Environmental technical physics	SIENI Elisabetta	1. Electrotechnics, electrical plants and electrical risk	TORRETTA Vincenzo	1. Relevant accidents and risk analysis 2. Studies and procedures for environment compatibility
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<p>ADMISSION, ASSESSMENT OF EDUCATIONAL BACKGROUND AND ADDITIONAL LEARNING REQUIREMENTS (OFA) REMEDIAL PROCEDURES</p>	<p>Pursuant to current regulations, a secondary high-school diploma or equivalent title obtained abroad is necessary to access the degree course. Required knowledge is not associated to a specific secondary high-school diploma, the following skills being sufficient: good general culture; logical reasoning and reading comprehension skills; good knowledge of the basic mathematical notions.</p> <p>Enrollment in the degree course is open. Enrolled students must take a test to assess their educational background on mathematical topics. The test consists in 20 multiple-choice questions on the following topics: numeric comparisons, symbolic expressions, equations and inequalities, first-degree and quadratic, rational and fractional equations and inequalities, elements of Euclidean and Cartesian geometry, simple probability and combinatorial math problems and mathematical texts comprehension.</p> <p>To pass the test, students have to answer at least 8 questions correctly. The results will be shown immediately after the test.</p> <p>Students may take the test only once, following the schedule compiled by the reference teaching structure, by the first semester of the first year.</p>																		



	<p>The test will take place on the limited access e-learning platform using the credentials provided by the University at the end of the enrollment procedure. Students can register to the test by accessing their restricted area https://uninsubria.esse3.cineca.it/</p> <p>Students who do not pass the educational background assessment test will be assigned an additional learning requirement (OFA) which entails mandatory attendance to a Mathematics remedial course, at the end of which they will have to take a further test. Students who do not pass this test may not take any of the exams of the following years, unless they pass the Mathematical Analysis A exam scheduled for the first year.</p> <p>In case of late enrollment, the Council of the Degree Course may decide whether to organize extra tests and dedicated office hours to support students who have been assigned OFA.</p> <p>Enrollment in the second year in regular position is nonetheless subject to having met the OFA by 30 September of the year after enrollment. Students who do not take the educational background assessment test are subject to a career block and will therefore not be able to take exams.</p> <p>Students in the following conditions do not have to take the test:</p> <ul style="list-style-type: none">- Students transferring from another degree course of the University of Insubria (internal transfer), provided that they have taken an educational background assessment test similar to that provided for the degree course;- Students transferring from another University in which they have already taken an educational background assessment test similar to that provided for the degree course;- Students who enrol after having already obtained a diploma. <p>Students who are interested in obtaining the exoneration must submit a certificate or self-certification to the Student Services Office with the exams taken during their previous career.</p>
<p>ADDITIONAL PREPARATORY TEACHING ACTIVITIES FOR THE EDUCATIONAL BACKGROUND ASSESSMENT TEST</p>	<p>To prepare for the educational background assessment test and fill potential gaps, students may attend two different Mathematics pre-courses that are available online: a University credentials access-only course (available at http://elearning.uninsubria.it/ by registering to the “Pre-corso di matematica”, which means “Mathematics pre-course”; in Italian) and an open course http://precorsodista.uninsubria.it/ (in Italian)</p> <p>A further preparation tool is offered by the CISIA platforms (open access prior to registration at https://allenamento.cisiaonline.it/; in Italian): students may refer to the CISIA’s Engineering and Science Basic Mathematics MOOC, chapters 1, 2.1.4, 2.2.1, 4, 5, 6.1, 6.2, 7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2 (when chapters only are indicated, all their paragraphs are included).</p> <p>Moreover, students may also attend the entry test preparation courses organized by the University in the period between the end of August and the beginning of September: www.uninsubria.it/precorsi (in Italian)</p>



**ORIENTATION, ENROLLMENT
PROCEDURES AND OTHER
ADMINISTRATIVE ASPECTS**

INFOSTUDENTI SERVICE

The INFOSTUDENTI service is a web application that offers a communication channel through which students and future students can obtain some useful information by contacting the different offices of the University (Student Services office, Right to Study and Student Services, Orientation and Placement, Academic Offices and International Relations). With this system students can ask questions and receive answers, attach documents and follow the status of their requests.

The service may be accessed by clicking on the following link:

www.uninsubria.it/infostudenti (in Italian)



II. STUDY PLAN

MANDATORY TEACHING ACTIVITIES - 2022/2023 COHORT

Mandatory courses refer to all the courses provided for the entire degree course, which will have to be taken by all students enrolling in the current A.Y. (Enrollment cohort) in order to complete the degree program and obtain the qualification.

1st YEAR							
SEM.	INTEGRATED COURSE / COURSE Title	COURSE / MODULE Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD*
First	MATHEMATICAL ANALYSIS A		MAT/05	Basic / Mathematics, Computer science and statistics	9	EXE:32 LEC:56	M
First	GENERAL, INORGANIC AND ORGANIC CHEMISTRY	Module A	CHIM/03	Basic / Physics and chemistry	9	EXE:24 LECT:56	M
Second		Module B	CHIM/06	Related/Supplementary / Related or supplementary educational activities	6	LEC:48	M
First	PHYSICS	Module A	FIS/01	Basic / Physics and chemistry	6	EXE:20 , LEC:40	M
Second		Module B			6	EXE:20 , LEC:40	M
Second	MATHEMATICAL ANALYSIS B		MAT/05	Basic / Mathematics, Computer science and statistics	9	EXE:32 LEC:56	M
First	WORKING ENVIRONMENT AND CONSTRUCTION SITES SAFETY		ICAR/03	Characterizing / Environmental and territory engineering	6	LEC:48	M
Second	ELEMENTS OF GEOLOGY, HYDROGEOLOGY AND SEISMIC RISK		GEO/03	Related/Supplementary / Related or supplementary educational activities	6	LEC:48	M
ND	OTHER EU LANGUAGE		NN	For the knowledge of at least one foreign language	3	LEC:24	J
ND	EDUCATIONAL BACKGROUND ASSESSMENT TEST		NN	NN	0	LEC:0	Q

2nd YEAR							
SEM.	INTEGRATED COURSE / COURSE Title	COURSE / MODULE Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD*
First	ELECTROTECHNICS, ELECTRICAL PLANTS AND ELECTRICAL RISK		ING-IND/31	Characterizing / Safety, civil protection, environmental and territory engineering	6	EXE:24 LEC:32	M



2nd YEAR

SEM.	INTEGRATED COURSE / COURSE Title	COURSE / MODULE Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD*
Second	COMPUTRE SCIENCE AND STATISTICS FOR ENGINEERING		MAT/08	Basic / Mathematics, Computer science and statistics	6	LEC:48	M
First	TECHNICAL ENVIRONMENTAL PHYSICS		ING-IND/11	Characterizing / Safety, civil protection, environmental and territory engineering	9	EXE:42 LEC:44	M
First	HYDRAULICS AND HYDRAULIC PLANTS		ICAR/01	Characterizing / Civil engineering	9	EXE:24 LECT:56	M
First	HEALTHCARE AND ENVIRONMENT ENGINEERING		ICAR/03	Characterizing / Environmental and territory engineering	9	EXE:36 LEC:48	M
Second	REMEDIAION OF CONTAMINATED SITES		ICAR/03	Characterizing / Environmental and territory engineering	9	EXE:24 LECT:56	M
First	PROCESS ENGINEERING, RELIABILITY AND SAFETY		ING-IND/25	Characterizing / Environmental and territory engineering	9	LEC:72	M
Second	CONSTRUCTION SCIENCE		ICAR/08	Characterizing / Civil engineering	9	LEC:72	M

3rd YEAR

SEM.	INTEGRATED COURSE / COURSE Title	COURSE / MODULE Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD*
First	CONSTRUCTION TECHNIQUES		ICAR/09	Characterizing / Environmental and territory engineering	6	LEC:48	M
First	STUDIES AND PROCEDURES FOR ENVIRONMENT COMPATIBILITY		ICAR/03	Characterizing / Environmental and territory engineering	6	EXE:18 LEC:36	M
Second	GENERAL AND OCCUPATIONAL HYGIENE		MED/44	Related/Supplementary / Related or supplementary educational activities	6	LEC:48	M

One course among:

Second	FIRE PROTECTION SYSTEMS		ICAR/03	Characterizing / Environmental and territory engineering	6	LEC:48	M
First	RELEVANT ACCIDENTS AND RISK ANALYSIS		ICAR/03	Characterizing / Environmental and territory engineering	6	LEC:48	M

One course among:



3rd YEAR

SEM.	INTEGRATED COURSE / COURSE Title	COURSE / MODULE Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD*
Second	ENVIRONMENT-APPLIED MICROBIOLOGY		AGR/16	Related/Supplementary / Related or supplementary educational activities	6	LEC:48	M
Second	MANAGEMENT OF HYGIENIC-TOXICOLOGICAL EMERGENCIES		MED/44	Related/Supplementary / Related or supplementary educational activities	6	LEC:48	M

*J - JUDGMENT M - EXAM Q - QUALIFICATION A - ATTENDANCE

FURTHER MANDATORY COURSES

3rd YEAR							
SEM.	INTEGRATED COURSE / COURSE Title	COURSE / MODULE Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD*
Annual	ELECTIVE		NN	Elective	12		M
Annual	EDUCATIONAL INTERNSHIP		NN	Other / Educational and orientation internships	9	INT:225	J
ND	FINAL EXAM		FINEX_S	Language / Final Exam / For the final exam	3	FNE:75	M

III - RULES FOR THE CURRICULUM

PREREQUISITES

In order to be admitted to the exams of the degree course, students must follow the following rules:

COURSE THAT CANNOT BE TAKEN	IF STUDENTS HAVE NOT PASSED THE COURSE OF:
- HYDRAULICS AND HYDRAULIC PLANTS	- MATHEMATICAL ANALYSIS B AND PHYSICS
- CONSTRUCTION SCIENCE	- MATHEMATICAL ANALYSIS B AND PHYSICS
- CONSTRUCTION TECHNIQUES	- CONSTRUCTION SCIENCE
- ELECTROTECHNICS, ELECTRICAL PLANTS AND ELECTRICAL RISK	- MATHEMATICAL ANALYSIS A, MATHEMATICAL ANALYSIS B AND PHYSICS

VALIDATION OF LINGUISTIC CERTIFICATIONS

The validation of the ECTS for the "Other EU language" may be carried out according to one of the following procedures:

- by submitting to the Student Services Office a certificate attesting that students have obtained a B1 or higher level certification. This certificate must have been obtained within the last 5 years, with the exception of IGCSE, IELTS and TOEFL certifications, which, instead, have a validity of only 2 years. For the complete list of recognized certifications, please visit: www.uninsubria.it/sites/default/files/Didattica/DiSTA/Riconoscimento_Certificazioni_Inglese_DISTA_ISLA.pdf (in Italian)
- by acquiring the ECTS through the University, by passing one EU language exam among those offered by the University. Students may take this exam during the entire academic year in one of the specific exam sessions.



VALIDATION OF PROFESSIONAL ABILITIES

Pursuant to article 5, paragraph 7 of the Ministerial Decree 270/04, the Council of the DC may validate:

- professional knowledge and skills certified pursuant to current regulations;
- knowledge and skills developed in educational activities at a post-secondary level in the organization and implementation of which the University was involved.

The validation application, to which students will have to attach the syllabi of the exams taken in their previous career, even if taken at our University, will be assessed by a Committee appointed by the Council of the Degree Course. The validation may take place if the activity is related to the specific educational objectives of the Degree Course and of the educational activities for which the validation is being requested, also taking into consideration the content and duration in terms of hours of the activity.

The maximum number of ECTS that may be validated is 12.

ATTENDANCE OBLIGATIONS: Not applicable

TRANSFER PROCEDURES FROM OTHER DEGREE COURSES

Students from other Universities or from another Degree Course of the University of Insubria or from previous systems can apply for a transfer/change to the Degree Course. Transfer/change applications will be assessed by the Council of the Degree Course, which will proceed to the validation of the ECTS according to the following criteria:

- analysis of the curriculum
- assessment of the adequacy of the academic fields and of the contents of the activities undertaken by the student in their previous career, with regard to the specific educational objectives of the degree course and of the individual educational activities provided for in the curriculum.

The abovementioned validation is carried out in accordance with the provisions of article no. 3, paragraphs 8 and 9 of the ministerial decree of Class redefinition (16 March 2007). The validation is carried out until the ECTS required by the curriculum are reached.

EDUCATIONAL INTERNSHIP

The curricular internship can be undertaken by students once they have obtained at least 120 ECTS for the exams provided for in their study plan and the 3 ECTS for the “other EU language”.

For further information, please refer to the “Regulations for graduating in Engineering for work and environment safety”, available at:

www.uninsubria.it/sites/default/files/Didattica/DiSTA/Regolamento_conseguimento_laurea_ISLA.pdf (in Italian)

FINAL EXAM

The final exam consists in writing and presenting to a specific Degree Committee a dissertation, written under the guidance of a lecturer, who acts as supervisor. The degree mark, expressed out of 110 and summa cum laude, if applicable, will be attributed by assessing the overall preparation of the students as attested by the exams results and by the maturity demonstrated in the final exam.

To determine the final mark students will have to calculate the weighted average score, according to the ECTS of the marks obtained in the individual exams, out of 110, pursuant to the provisions of the University's Students Regulations:

www.uninsubria.it/sites/default/files/Statuto_e_regolamenti/regolamenti_studenti/Regolamento%20di%20Ateneo%20per%20Ogli%20Studenti.pdf (in Italian)

Up to 8 points may be added to the average score expressed out of 110 by the Degree Committee according to the assessment of the candidate's dissertation and presentation.

If, after this calculation, students have reached 110/110, the Committee can decide whether to assign the summa cum laude for students with a minimum starting mark of 103/110.

For further information, please refer to the “Regulations for graduating in the Bachelor's degree course in “Engineering for Work and Environment Safety”, available at:

www.uninsubria.it/sites/default/files/Didattica/DiSTA/Regolamento_conseguimento_laurea_ISLA.pdf (in Italian)



RULES FOR THE SUBMISSION OF STUDY PLANS AND INDIVIDUAL STUDY PLANS

Students will have to submit their Study Plan in their second year, with the possibility to modify it in the following year, following the University administrative fulfillments calendar.

Information on how to submit and fill in the study plan are available on the Student Services Office webpage (www.uninsubria.it/servizi/presentazione-piano-di-studio; in Italian). Elective educational activities may be chosen among all courses activated by the University with the exception of some integrated courses offered by the limited access healthcare degree courses. The Council of the Degree Course will assess the coherence of these elective activities with the educational curriculum students have enrolled in. Please note that the lessons of elective courses taken from other Degree courses of the University may take place at the same time as the lessons of the Degree course.

For further information please refer to the degree course webpage.

www.uninsubria.eu/bachelor-eose

For students with disabilities and/or specific learning disorders, please visit:

www.uninsubria.it/studentidisabilidsa (in Italian)