



**UNIVERSITÀ DEGLI STUDI
DELL'INSUBRIA**

**DEPARTMENT OF SCIENCE AND HIGH
TECHNOLOGY**

**DESCRIPTION OF THE BACHELOR'S DEGREE COURSE (COURSE RULES)
IN CHEMISTRY AND INDUSTRIAL CHEMISTRY**

2024/2025



I - GENERAL INFORMATION

NAME OF THE DEGREE COURSE	Chemistry and Industrial Chemistry
CLASS	L-27
TYPE	3-year degree
LOCATION	Como
INTERNET ADDRESS	<p>Information on the educational goals of the Degree Course, employment opportunities, admission requirements, admission procedures, expected learning outcomes, educational paths/study plans, final examination, are provided in the Degree Course Annual Report (SUA-CdS), published on the pertinent web page at the following address:</p> <p>https://www.uninsubria.it/formazione/offerta-formativa/corsi-di-laurea/chimica-e-chimica-industriale</p>
DEPARTMENT	<p>Dipartimento di Scienza e Alta Tecnologia, DiSAT</p> <p>https://www.uninsubria.it/rubrica/dipartimento-di-scienza-e-alta-tecnologia</p>
COORDINATOR	Professor Simona Galli
COURSE TEACHING SECRETARIAT	<p>https://www.uninsubria.it/node/620</p>
CALENDAR OF TEACHING ACTIVITIES	<p><u>1st semester</u>: from 23/09/2024 to 17/01/2025</p> <p><u>2nd semester</u>: from 17/02/2025 to 13/06/2025</p> <p><u>Exam session</u>: from 1/12/2024 to 31/3/2026</p> <p>A list of teaching activities interruptions and/or University facilities closures, as approved by the Academic Ruling Bodies, can be found on the University Teaching Calendar at the following address:</p> <p>https://www.uninsubria.it/ateneo/sedi-e-orari/calendario-accademico/calendario-didattico</p>
FURTHER INFORMATION	<ul style="list-style-type: none">• ACCESS TO THE DEGREE COURSE: Open• ISSUING OF DOUBLE DEGREES: Not available• TEACHING LANGUAGE: Italian• PRESENCE OF PATHS/CURRICULA: No paths/curricula are present



<p>ADMISSION, INITIAL PREPARATION AND VERIFICATION OF MANDATORY LEARNING DUTIES (OFA)</p>	<p><i>Admission procedures</i></p> <p>In the academic year 2024/2025, the Bachelor's Degree Course in Chemistry and Industrial Chemistry has no limitation on the size of the enrolling cohort.</p> <p><i>Verification of initial knowledge</i></p> <p>Ministerial Decree 270/2004 indicates as mandatory the verification of the initial preparation for students enrolling in a L-27 Degree Course.</p> <p>As the Degree in Chemistry and Industrial Chemistry is an open-access Course, such a verification does not limit enrollment; however, it must be undertaken, even unsuccessfully, by November 21st, 2024.</p> <p>With respect to the “initial preparation verification” for scientific Degree Courses, the Degree Course in Chemistry and Industrial Chemistry follows the approach proposed by the National Conference of Presidents and Directors of University Structures of Science and Technology (con.Scienze) in collaboration with the Ministry of University and Research (within the National Plan for Scientific Degrees, PLS) and the Interuniversity Consortium for Access Integrated Systems (CISIA). Based on this, the Degree Course in Chemistry and Industrial Chemistry adopts the TOLC-S (CISIA Online Test, in TOLC@Casa mode) to verify the initial preparation. Students may undertake the test even before enrolling and/or at another Italian University. In this case, the successful outcome for the test will be awarded once the enrollment procedure is completed, upon presenting the relevant certification issued by CISIA.</p> <p>Students pass the test upon answering correctly to at least 10 of the 20 questions contained in the Basic Mathematics module.</p> <p>If the test will not be successfully sustained by November 21st, 2024, students will be assigned mandatory learning duties (Obblighi Formativi Aggiuntivi, OFA), which must be fulfilled by September 30th, 2025. If assigned with OFA, students would be provided with dedicated material in the <i>e-learning area</i>.</p> <p>Enrollment in the Degree Course's second year is subject to the following obligations:</p> <ol style="list-style-type: none">1) undertaking the mandatory TOLC-S test to verify the initial preparation on at least one occasion by November 21st, 2024, even without its positive outcome;2) fulfillment of the OFA, if attributed, by achieving one of the following conditions by September 30th, 2025:<ul style="list-style-type: none">• passing the initial preparation verification test;• passing a dedicated test on basic mathematics issued once per academic year by the Board of Studies;• passing the Mathematics 1 exam, a lecture course calendarized during the I year-I semester of the Degree Course.
<p>TRAINING ACTIVITIES FOR THE VERIFICATION OF THE INITIAL PREPARATION</p>	<p>Students' training for the initial preparation verification test, or willing to fill possible knowledge gaps, could take advantage of either the MOOC (Massive Open Online Course) prepared by CISIA, or the pre-course in Mathematics organized by the Degree Course in Mathematics and scheduled in early September. The procedures for accessing the MOOC</p>



	<p>or attending the pre-course lectures are published on the University website at the following address:</p> <p>https://www.uninsubria.it/formazione/consigli-e-risorse-utili/orientamento/orientamento-ingresso/preparati-alluniversita-5#:~:text=Se%20sei%20immatricolato%20o%20stai,segui%20il%20precorso%20di%20Matematica.&text=Como%20%2D%20Via%20Vall'eggio%2C%2011%20%2D,2023%20%2D%20ore%2010%20%2D%2013.</p>
<p>CAREER GUIDANCE, ENROLLMENT PROCEDURES AND OTHER ADMINISTRATIVE ASPECTS</p>	<p><i>Career Guidance</i></p> <p>Useful information for a conscious choice of a Bachelor's Degree Course can be found on the University website at the following address:</p> <p>https://www.uninsubria.it/formazione/consigli-e-risorse-utili/orientamento</p> <p>For specific information on the Bachelor's Degree Course in Chemistry and Industrial Chemistry, please refer to the web pages of the Course at the following address:</p> <p>https://www.uninsubria.it/formazione/offerta-formativa/corsi-di-laurea/chimica-e-chimica-industriale</p> <p><i>Enrollment procedures</i></p> <p>For the academic year 2024/25, the Degree Course in Chemistry and Industrial Chemistry places no limitation on the cohort's size. To enrol, please refer to the University website at the following address:</p> <p>https://www.uninsubria.it/servizi/vivere-insubria/immatricolarsi-e-isciversi/immatricolazioni-aa-20232024/immatricolazione</p> <p><i>Infostudenti Service</i></p> <p>The INFOSTUDENTI <i>web</i> application offers a communication channel for enrolled and potential students to contact University Offices (Students Secretariats, Teaching Secretariats, Right to Education and Student Services Office, Career Guidance and Placement Office, International Relations Office) for administratively relevant inquires. The application also allows one to send relevant documents, as well as to follow a request status.</p> <p>The service can be accessed at the following address:</p> <p>https://www.uninsubria.it/servizi/tutti-i-servizi/infostudenti-servizio-informazioni-gli-studenti</p>



II - TEACHING PLAN

TEACHING PLAN - Cohort 2024/2025

The teaching plan indicates the panel of lecture courses made available for the entire duration of a Degree Course, as well as the number and type of exams that must be successfully undertaken by all students enrolling in the current academic year (enrollment cohort 2024/2025) to complete the training course and obtain the qualification. All the courses are delivered in Italian.

LES = frontal lesson; EX = tutorial session, LAB = laboratory.

YEAR	SEM ^(a)	LECTURE COURSE TITLE	LECTURE MODULE TITLE	SUBDISCIPLINE (SSD)	TAF / SUBJECT AREA	UNIVERSITY CREDITS (CFU)	HOURS ^(b)	VERIFICATION METHODS ^(c)
1	I	FUNDAMENTALS OF GENERAL CHEMISTRY		CHIM/03	A / CHEMICAL DISCIPLINES	9	LES: 72	V
1	A	COMPLEMENTS OF GENERAL CHEMISTRY		CHIM/03	A + B / CHEMICAL DISCIPLINES + CHEMICAL-INORGANIC AND CHEMICAL-PHYSICAL DISCIPLINES	6 (3+3)	LES: 48 LAB: 24	V
1	I	MATHEMATICS 1		MAT/05	A / MATHEMATICAL, COMPUTER SCIENCE AND PHYSICS DISCIPLINES	6	LES: 24 EX: 36	V
1	I	SCIENTIFIC ENGLISH		L-LIN/12	FOR KNOWLEDGE OF AT LEAST ONE FOREIGN LANGUAGE	3	EX: 48	V
1	II	MATHEMATICS 2		MAT/05	A / MATHEMATICAL, COMPUTER SCIENCE AND PHYSICS DISCIPLINES	6	LES: 24 ESE: 36	V
1	II	PHYSICS 1		FIS/03	A / MATHEMATICAL, COMPUTER SCIENCE AND PHYSICS DISCIPLINES	6	LES: 48	V
1	II	ORGANIC CHEMISTRY 1		CHIM/06	A / CHEMICAL DISCIPLINES	9	LES: 72	V



YEAR	SEM ^(a)	LECTURE COURSE TITLE	LECTURE MODULE TITLE	SUBDISCIPLINE (SSD)	TAF / SUBJECT AREA	UNIVERSITY CREDITS (CFU)	HOURS ^(b)	VERIFICATION METHODS ^(c)
1	II	CHEMICAL THERMODYNAMICS		CHIM/02	A / CHEMICAL DISCIPLINES	6	LES: 48	V
1		INFORMATION AND COMMUNICATION TECHNOLOGIES		NN	F / COMPUTER SKILLS	2		I
2	I	PHYSICS 2		FIS/03	A / MATHEMATICAL, COMPUTER SCIENCE AND PHYSICS DISCIPLINES	6	LES: 48	V
2	I	PHYSICAL CHEMISTRY 1		CHIM/02	A + B / CHEMICAL DISCIPLINES + CHEMICAL-INORGANIC AND CHEMICAL-PHYSICAL DISCIPLINES	9(6+3)	LES: 72	V
2	I	ANALYTICAL CHEMISTRY	ANALYTICAL CHEMISTRY: FUNDAMENTALS	CHIM/01	A / CHEMICAL DISCIPLINES	7	LES: 56	V
			ANALYTICAL CHEMISTRY: LABORATORY	CHIM/01	A / CHEMICAL DISCIPLINES	5	LAB: 60	V
2	II	INORGANIC CHEMISTRY		CHIM/03	B / CHEMICAL-INORGANIC AND CHEMICAL-PHYSICAL DISCIPLINES	9	LES: 56 LAB: 24	V
2	II	ORGANIC CHEMISTRY 2	ORGANIC CHEMISTRY 2: FUNDAMENTALS	CHIM/06	A + B / CHEMICAL DISCIPLINES + CHEMICAL-ORGANIC AND BIOCHEMICAL DISCIPLINES	9(3+6)	LES: 72	V
			ORGANIC CHEMISTRY 2: LABORATORY	CHIM/06	B / CHEMICAL-ORGANIC AND BIOCHEMICAL DISCIPLINES	6	LAB: 72	V
2	II	CHEMISTRY AND TECHNOLOGY OF POLYMERS		CHIM/04	B / CHEMICAL-INDUSTRIAL AND TECHNOLOGICAL DISCIPLINES	6	LES: 48	V



YEAR	SEM ^(a)	LECTURE COURSE TITLE	LECTURE MODULE TITLE	SUBDISCIPLINE (SSD)	TAF / SUBJECT AREA	UNIVERSITY CREDITS (CFU)	HOURS ^(b)	VERIFICATION METHODS ^(c)
3	A	INSTRUMENTAL ANALYTICAL CHEMISTRY	INSTRUMENTAL ANALYTICAL CHEMISTRY: FUNDAMENTALS	CHIM/01	B / CHEMICAL-ANALYTICAL AND ENVIRONMENTAL DISCIPLINES	6	LES: 48	V
			INSTRUMENTAL ANALYTICAL CHEMISTRY: LABORATORY	CHIM/01	B / CHEMICAL-ANALYTICAL AND ENVIRONMENTAL DISCIPLINES	6	LAB: 72	V
3	I	PHYSICAL CHEMISTRY 2		CHIM/02	B / CHEMICAL-INORGANIC AND CHEMICAL-PHYSICAL DISCIPLINES	9	LES: 48 LAB: 36	V
3	II	BIOCHEMISTRY		BIO/10	B / CHEMICAL-ORGANIC AND BIOCHEMICAL DISCIPLINES	6	LES: 48	V
3	I or II	CURRICULAR ELECTIVE COURSES (see Table A)			C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	18		V
3	I or II	ELECTIVE COURSES			D / STUDENTS' CHOICE	12		V
3		CURRICULAR TRAINEESHIP		NN	F / TRAINING AND CAREER GUIDANCE INTERNSHIPS	10		
3		FINAL DEFENSE		NN	E/FINAL EXAM	3		

(a) I = first semester; II = second semester; A = annual.

(b) 1 CFU of lectures (LES) = 8 hours; 1 CFU of tutorial session (EX) or laboratory practice (LAB) = 12 hours.

(c) G = qualitative evaluation; V = examination; I = suitability; F = frequency.



TABLE A

CURRICULAR ELECTIVE COURSES of TAF C to be selected up to a total of 18 CFU

YEAR	SEM ^(a)	LECTURE COURSE TITLE	LECTURE MODULE TITLE	SUBDISCIPLINE (SSD)	TAF / SUBJECT AREA	UNIVERSITY CREDITS (CFU)	HOURS ^(b)	VERIFICATION METHODS ^(c)
3	II	GREEN METHODS IN ANALYTICAL CHEMISTRY		CHIM/01	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 48	V
3	II	APPLIED ANALYTICAL CHEMISTRY	APPLIED ANALYTICAL CHEMISTRY: ENVIRONMENT	CHIM/01	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	3	LES: 24	V
			APPLIED ANALYTICAL CHEMISTRY: INDUSTRIAL STRATEGIES	CHIM/01	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	3	LES: 24	V
3	I	MICELLES, COLLOIDS AND SURFACES		CHIM/02	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 40 LAB: 12	V
3	II	PROGRAMMING AND MOLECULAR VISUALIZATION	PROGRAMMING AND MOLECULAR VISUALIZATION: FUNDAMENTALS	CHIM/02	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	3	LES: 24	V
			PROGRAMMING AND MOLECULAR VISUALIZATION: APPLICATIONS	CHIM/02	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	3	LES: 24	V
3	I	SYNTHESIS TECHNIQUES IN INORGANIC CHEMISTRY		CHIM/03	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 16 LAB: 48	V
3	I	CHARACTERIZATION TECHNIQUES IN INORGANIC CHEMISTRY		CHIM/03	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 48	V
3	II	PHYSICAL METHODS IN ORGANIC CHEMISTRY		CHIM/06	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 48	V
3	I	COMPLEMENTS OF ORGANIC CHEMISTRY		CHIM/06	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 48	V



YEAR	SEM ^(a)	LECTURE COURSE TITLE	LECTURE MODULE TITLE	SUBDISCIPLINE (SSD)	TAF / SUBJECT AREA	UNIVERSITY CREDITS (CFU)	HOURS ^(b)	VERIFICATION METHODS ^(c)
3	I	APPLIED ORGANIC CHEMISTRY		CHIM/06	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 16 LAB: 48	V
3	II	DEVELOPMENT AND OPTIMIZATION IN ORGANIC SYNTHESIS		CHIM/06	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 48	V
3	I	FORENSIC CHEMISTRY		CHIM/06	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 48	V
3	I	CHEMISTRY AND TECHNOLOGY OF DYES AND PIGMENTS		CHIM/04	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 48	V
3	II	CHEMISTRY AND TECHNOLOGY OF FORMULATIONS		CHIM/04	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 16 LAB: 48	V
3	I	CHEMISTRY AND TECHNOLOGY OF THE TEXTILE INDUSTRY		CHIM/04	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 48	V
3	I	WASTE AND WASTEWATER TREATMENT		CHIM/04	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 24 EX: 36	V
3	I	CHEMISTRY AND TECHNOLOGY OF FOOD		ING-IND/27	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	6	LES: 48	V
3	II	QUALITY AND SAFETY IN PRODUCTION SITES	QUALITY AND SAFETY IN PRODUCTION SITES (MODULE A)	MED/44	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	3	LES: 24	V
			QUALITY AND SAFETY IN PRODUCTION SITES (MODULE B)	MED/44	C / ELECTIVE SUPPLEMENTARY TRAINING ACTIVITIES	3	LES: 24	V

(a) I = first semester; II = second semester; A = annual.

(b) 1 CFU of frontal lectures (LES) = 8 hours; 1 CFU of tutorial session (EX) or laboratory practice (LAB) = 12 hours.

(c) G = qualitative evaluation; V = examination; I = suitability; F = frequency.



III - RULES OF THE DEGREE COURSE

PREREQUISITES

Mandatory prerequisites to sustain the exam of specific lecture courses:

COURSE EXAM	SUCCESSFUL LECTURE COURSE EXAMS PREREQUISITES
- ORGANIC CHEMISTRY 1 - CHEMICAL THERMODYNAMICS	- FUNDAMENTALS OF GENERAL CHEMISTRY
- PHYSICAL CHEMISTRY 1 - ANALYTICAL CHEMISTRY - INORGANIC CHEMISTRY - ORGANIC CHEMISTRY 2 - POLYMER CHEMISTRY AND TECHNOLOGY - INSTRUMENTAL ANALYTICAL CHEMISTRY - PHYSICAL CHEMISTRY 2 - BIOCHEMISTRY - GREEN METHODS IN ANALYTICAL CHEMISTRY - APPLIED ANALYTICAL CHEMISTRY - MICELLES, COLLOIDS AND SURFACES - PROGRAMMING AND MOLECULAR VISUALIZATION - SYNTHESIS TECHNIQUES IN INORGANIC CHEMISTRY - CHARACTERIZATION TECHNIQUES IN INORGANIC CHEMISTRY - PHYSICAL METHODS IN ORGANIC CHEMISTRY - COMPLEMENTS OF ORGANIC CHEMISTRY - APPLIED ORGANIC CHEMISTRY - DEVELOPMENT AND OPTIMIZATION IN ORGANIC SYNTHESIS - FORENSIC CHEMISTRY - CHEMISTRY AND TECHNOLOGY OF DYES AND PIGMENTS - CHEMISTRY AND TECHNOLOGY OF FORMULATION - CHEMISTRY AND TECHNOLOGY OF THE TEXTILE INDUSTRY - WASTE AND WASTEWATER TREATMENT - CHEMISTRY AND TECHNOLOGY OF FOOD - QUALITY AND SAFETY IN PRODUCTION SITES	- FUNDAMENTALS OF GENERAL CHEMISTRY - COMPLEMENTS OF GENERAL CHEMISTRY
- MATHEMATICS 2	- MATHEMATICS 1
- PHYSICS 2	- PHYSICS 1
- ORGANIC CHEMISTRY 2	- ORGANIC CHEMISTRY 1
- PHYSICAL CHEMISTRY 2	- PHYSICAL CHEMISTRY 1
- INSTRUMENTAL ANALYTICAL CHEMISTRY	- ANALYTICAL CHEMISTRY



VALIDATION OF LANGUAGE AND COMPUTER CERTIFICATIONS

Validation of language certifications

3 university credits (CFU) associated with the lecture course on Scientific English are automatically awarded upon submitting to the StudentS Secretariat *via* the Infostudenti service (<https://www.uninsubria.it/servizi/tutti-i-servizi/infostudenti-servizio-informazioni-gli-studenti>) certificates demonstrating the successful undertaking of one of the following English language tests independently sustained by the students:

- University of Cambridge Examinations (PET, FCE, CAE, CPE, BEC 1-3, CELS - all levels);
- Trinity College London Examinations (ESOL Grade 5-12, ISE level I–III);
- TOEFL Examinations (Paper Based Test Score > 457, Computer Based Test Score > 137);
- City & Guilds Pitman Qualifications (ESOL Intermediate–Advanced, SESOL Intermediate–Advanced).

The validation of language certificates other than those listed is carried out by the Board of Studies following their submission to the Students Secretariat.

Validation of computer skills

The 2 CFU associated with Information and Communication Technologies are automatically awarded following the successful undertaking of the exam for the lecture course on Complements of General Chemistry delivered during the first year.

VALIDATION OF PROFESSIONAL SKILLS OR EXAMS OBTAINED IN PREVIOUS CAREERS

Validation of professional skills

Professional skills do not concur to the awarding of university credits for the Degree Course in Chemistry and Industrial Chemistry.

Validation of exams sustained during a previous study career

Students transferring from other Degree Courses may ask for the validation of their previous career to the Students Secretariat at the time of enrollment, indicating all undertaken educational activities for which they have successfully sustained the pertinent exams, providing also the respective syllabi. Validation requests will be evaluated by the Board of Studies following the listed criteria:

- analysis of the syllabus of the training activities for which validation is requested;
- evaluation of the congruence between the subdiscipline topics or training activities content of their previous career and the specific training goals of the Master's Degree Course or its single activities.

Requests for exam validations after enrollment are not accepted.

Validation is performed following what indicated in the art. 3, paragraphs 8 and 9, of the Ministerial Decree for the redefinition of the Classes (March 16th, 2007). The number of CFU granted is limited by the amount of CFU that can be awarded by the Degree Course

ATTENDANCE OBLIGATIONS

Attendance is compulsory for all tutorials in the classroom and in the laboratory.

ENROLLMENT IN THE YEARS FOLLOWING THE FIRST

There are no barriers for enrolling in years following the first, apart from the one related to the failure in sustaining the initial preparation test by November 21th, 2024 and/or the failure to fulfill any assigned OFA by September 30th, 2025.



HOW TO TRANSFER FROM OTHER DEGREE COURSES

Students enrolled in other Universities or in different Degree Courses of the University of Insubria, as well as in cohorts of previous academic years, may request a transfer to the Bachelor's Degree Course in Chemistry and Industrial Chemistry. In these cases, simultaneously with the application students may request the validation of their previous career to the Students Secretariat. Requests from students previously enrolled in different universities (*i.e.* incoming transfer) must be accompanied by the syllabi of the exams successfully undertaken: without the latter, no CFU would be awarded. To speed up the evaluation, exam syllabi should also be provided by students previously enrolled in different Degree Courses the University of Insubria.

The transfer requests are evaluated by the Board of Studies, which awards university credits basing on of the following criteria:

- analysis of the program of the training activities for which validation is requested;
- evaluation of the congruence between the subdiscipline topics or training activities content of their previous career and the specific training goals of the Master's degree course or its single activities.

Validation is performed following what indicated in the art. 3, paragraphs 8 and 9 of the Ministerial Decree for the redefinition of the Classes (March 16th, 2007). The number of CFU granted is limited by the amount of CFU that can be awarded by the Degree Course.

HOW TO SUBMIT INDIVIDUAL STUDY PLANS

During the I semester of the III year, and in accordance with the University calendar of administrative obligations, students must submit their Individual Study Plan; in this, students are expected to select:

- 1) 3 TAF-C elective supplementary lecture courses, for a total of 16 CFU (see Table A above);
- 2) "freely chosen" activities (TAF D), for a total of 12 CFU. These CFU are acquired upon passing the exams of lecture courses freely selected by the students, this including lecture courses active in other Degree Courses of the University of Insubria, provided that they are consistent with the educational path of the Bachelor's Degree Course in Chemistry and Industrial Chemistry and have a different title from those featured by the Master's Degree Course in Chemistry

The Board of Studies, following the positive assessment of the Individual Study Plan consistency with the educational objectives of the Bachelor's Degree Course in Chemistry and Industrial Chemistry, deliberates its approval.

Information on the submission and compilation of Individual Study Plans can be found on the University web pages at the following address: <https://www.uninsubria.it/formazione/consigli-e-risorse-utili/piano-di-studio>.

For further information and insights, you can consult the web pages of the Degree Course at the following address:

<https://www.uninsubria.it/formazione/offerta-formativa/corsi-di-laurea/chimica-e-chimica-industriale>