



**Allegato n° 3 - Schemi di Piano di studio ad approvazione automatica**

**Master's Degree Programme in Chemical and Process Engineering (2025 Cohort)  
Automatic Study Plan**

Students are required to submit their study plan through the **UNIWEB** platform as early as the first enrolment year. The submission period commonly goes from November to June.

<b>COMPULSORY ACTIVITIES - FIRST YEAR</b>		
<b>Codes</b>	<b>Course Units</b>	<b>Credits</b>
INQ2100373	CHEMICAL REACTION ENGINEERING	12
INQ2100375	INDUSTRIAL CHEMICAL PROCESSES	12
INQ2100371	MULTIPHASE THERMODYNAMICS AND TRANSPORT PHENOMENA	9
INQ3103841	PROCESS AND FLUID DYNAMICS SIMULATION	9
INQ2100479	PROCESS DYNAMICS AND CONTROL	9
INQ3103843	SEPARATION UNIT OPERATIONS	9
INP9087943	ENGLISH LANGUAGE B2 (PRODUCTIVE SKILLS)	3
<b>COMPULSORY ACTIVITIES - SECOND YEAR</b>		
<b>Codes</b>	<b>Course Units</b>	<b>Credits</b>
INQ2100463	PROCESS DESIGN	6
INQ1097318	INDUSTRIAL PROCESS SAFETY AND RISK ANALYSIS	6
<b>ELECTIVE ACTIVITIES (12 credits) Attività affini opzionali</b>		
<b>Codes</b>	<b>Course Units</b>	<b>Credits</b>
INQ3103840	MACHINE LEARNING FOR PROCESS ENGINEERING	6
INQ4106341	GREEN CHEMISTRY AND ENGINEERING	6



INQ1097338	PROCESS TECHNOLOGIES FOR CARBON-NEUTRAL FUELS	6
INQ1097605	POLYMER PROCESSING AND RECYCLING	6
INQ0091518	STRATEGIC ENVIRONMENTAL MANAGEMENT	6
INQ2100464	PARTICLE TECHNOLOGY FOR THE FOOD AND PHARMACEUTICAL INDUSTRIES	6
INQ4106362	LIFE CYCLE ENGINEERING OF CONTAMINATED SITES	6
INP4069539	MEMBRANE SEPARATION PROCESSES	6
INP4069598	FOOD AND BIOPROCESS TECHNOLOGIES	6
INQ3103844	INDUSTRIAL PROCESSES FOR BIOBASED AND SPECIALTY CHEMICALS	6
INQ3103845	FUNDAMENTALS OF 3D BIOPRINTING	6
INQ0093081	ELECTROCHEMICAL ENERGY STORAGE TECHNOLOGIES	6
INQ2100361	BUSINESS MANAGEMENT	6
INQ4106162	ELECTROHEAT SCIENCE FOR MATERIALS TECHNOLOGIES AND CHEMICAL PROCESSES	6
Da assegnare	BIOPROCESS ENGINEERING	6
Da assegnare	PROCESS OPTIMIZATION AND SCHEDULING	6

FREE ELECTIVE ACTIVITIES (min 12 credits – max 15 credits)		
Codes	Course Units	Credits
Da assegnare	INDUSTRIAL APPLICATIONS AND METHODS IN CHEMICAL ENGINEERING	6



You may include elective activities (*attività affini opzionali*) not already selected or course units from other Master's Degree programmes as follow:

<b><u>From Master's Degree Programme in Materials Engineering</u></b>		
<b>Codes</b>	<b>Course Units</b>	<b>Credits</b>
INQ1099019	BIOPOLYMERS ENGINEERING	6
INQ1099079	CORROSION AND PROTECTION OF MATERIALS	6
INQ1099059	GLASS SCIENCE AND TECHNOLOGY	6
INQ1099021	MATERIALS SELECTION AND DESIGN	6
INP9086686	COMPOSITE MATERIALS	9
INQ0092839	MANUFACTURING TECHNOLOGY	6
INP9087849	NANOSTRUCTURED MATERIALS	6

<b><u>From Master's Degree Programme in Energy Engineering</u></b>		
<b>Codes</b>	<b>Course Units</b>	<b>Credits</b>
INQ0091663	COMBUSTION	6
INQ0091679	COGENERATION AND COMBINED PLANTS	6
INQ0091702	ENERGY ECONOMICS	9
INQ0091664	NUCLEAR FISSION AND FUSION PLANTS	9
INP9087853	PHOTOVOLTAIC SCIENCE AND TECHNOLOGY	6



<b><u>From Laurea Magistrale in Ingegneria Meccanica</u></b>		
<b>Codes</b>	<b>Course Units</b>	<b>Credits</b>
INP8083897	GESTIONE STRATEGICA D'IMPRESA	6
IN03103830	IMPIANTI INDUSTRIALI	6
INQ4106340	MICRO-PRODUCT DESIGN AND MANUFACTURING	6
INQ0091708	PROGETTO DEL PRODOTTO IN MATERIALE POLIMERICO PER IMPIEGHI STRUTTURALI	9
INQ4106342	PRODUZIONE SOSTENIBILE CON I MATERIALI POLIMERICI	9
INP5071880	GESTIONE DELL'INNOVAZIONE DI PRODOTTO	6
IN02120412	LOGISTICA INDUSTRIALE	6
IN02106203	MOTORI A COMBUSTIONE INTERNA	6
INQ2100440	REFRIGERATION AND HEAT PUMP TECHNOLOGY	9
INP5071977	MATERIALI NON METALLICI E CRITERI DI SELEZIONE DEI MATERIALI	9

<b><u>From Laurea Magistrale in Aerospace Engineering</u></b>		
<b>Codes</b>	<b>Course Units</b>	<b>Credits</b>
INQ4106220	ADVANCED AERODYNAMICS	9

<b><u>From Laurea Magistrale in Ingegneria della Sicurezza Civile e Industriale</u></b>		
<b>Codes</b>	<b>Course Units</b>	<b>Credits</b>



INP8083772	ANALISI POST INCIDENTALE: METODOLOGIE E CASI DI STUDIO	6
INP6075205	GESTIONE DEI RIFIUTI RADIOATTIVI	6

From Laurea Magistrale in Bioingegneria (Department of Information Engineering)		
Codes	Course Units	Credits
INQ0092861	TECNOLOGIE DEI BIOMATERIALI	9

MASTER'S THESIS		
Code	Activity	Credits
INQ1098160	MASTER'S THESIS	21