

REALIZZATO CON IL SOSTEGNO DI



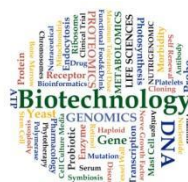
UNIONE EUROPEA
Fondo sociale europeo



**Regione
Lombardia**



POR FSE 2014-2020 / OPPORTUNITÀ E INCLUSIONE



Fondazione Istituto Tecnico Superiore
per le Nuove Tecnologie della Vita

INDUSTRIAL CHEMISTRY

Study Program location: Bergamo/Lainate

Duration: 2000 Hours

Goal of the program:

The Industrial Chemistry program trains a proficient specialized in chemical processes applied to the development of products in the field of materials, construction, textiles, paints and plant engineering. The program guarantees theoretical, experimental and applicative training in the main sectors of chemistry providing relevant knowledge of the tools and deep knowledge of the experimental methods in the chemical and industrial field.

Career opportunities (Possible Departments):

- Laboratory
- Research and Development
- Quality Control
- Material testing
- Chemical analysis on matrices
- Process optimization
- Commercial
- Testing
- Technical
- Management and production
- Finishing workshop



SUPERIOR SPECIALIST FOR INDUSTRIAL CHEMICAL PRODUCTION			
REALIGNMENT	Name of the discipline	Hours	
	GENERAL CHEMISTRY STOICHIOMETRIC FUNDAMENTALS	32	
	ORGANIC CHEMISTRY	32	
	MATHEMATICAL PHYSICS	48	
	ETHICS, SOFT SKILLS OF BUSINESS COMMUNICATION	12	
	ENGLISH LANGUAGE	40	
	FUNDAMENTALS OF COMPUTER SCIENCE	48	
	Total realignment hours	212	
MODULES	Name of the discipline	Hours	
	<u>ECONOMICS AND BUSINESS ORGANIZATION</u>		
	MARKETING	32	
	BUSINESS PLANNING	16	
	CIRCULAR ECONOMY AND TECHNOLOGY TRANSFER	48	
	BUSINESS ORGANIZATION, LEAN PRODUCTION	42	
	SAFETY AND ENVIRONMENTAL LEGISLATION	16	
	<u>BASIC CHEMISTRY</u>		
	GENERAL CHEMISTRY	30	
	ORGANIC CHEMISTRY	40	
	ADVANCED ORGANIC CHEMISTRY	24	
	INSTRUMENTAL CHEMICAL ANALYSIS AND MATERIAL CONTROL	48	
	PHYSICAL CHEMISTRY OF COLLOIDS AND INTERPHASES	48	
	FORMULATION CHEMISTRY	40	
	<u>MATHEMATICS AND APPLIED PHYSICS</u>		
	MATHEMATICAL METHODS FOR CHEMISTRY	50	
	CHEMICAL PLANT CONTROL INSTRUMENTS	72	
	LINEAR SYSTEMS	48	
	THERMODYNAMICS	40	
	HEAT TRANSFER	32	
	TRANSPORT PHENOMENA	48	
	<u>INDUSTRIAL CHEMISTRY</u>		
	CHEMICALS AND PLANTS FOR PLASTICS	38	
	CHEMISTRY OF AERIAL BINDERS AND HYDROCARBONS	22	
	RHEOLOGY OF MORTARS	16	
	POLYAMIDE CHEMISTRY	20	
	CHEMISTRY OF PAINTS AND THEIR FORMULATIONS	24	
	TECHNICAL AND MEDICAL GASES	30	
	ENHANCEMENT OF SECONDARY RAW MATERIALS	36	
	CHEMISTRY OF AUXILIARIES AND DYES	20	
	TEXTILE TECHNOLOGIES AND ORGANIZATION OF PRODUCTION	30	
	HETEROCYCLIC CHEMISTRY	30	
	<u>TECHNOLOGIES 4.0</u>		
	CAD/CAM	48	
	INDUSTRIAL AUTOMATION	48	
	CHEMICAL PLANTS 4.0	72	
	FINITE ELEMENTS AND THEIR APPLICATIONS	46	
	Total		1.154
	TRAINING		846
	Total with training		2.000