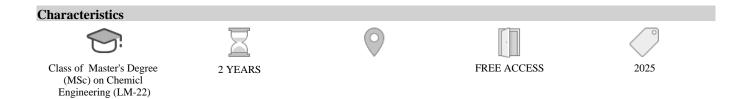


UNIVERSITÀ DEGLI STUDI DI PALERMO

Department: null A.Y. 2009/2010 DEGREE COURSE IN CHEMICAL ENGINEERING



Educational objectives

The 2nd cycle degree course aims at providing advanced knowledge in the area of traditional Chemical engineering, as well as advanced competences enabling graduates to interact with other advanced sectors in the field of scientific and technological innovation.

The course will therefore provide for mandatory and elective courses, related to applied kinetics and chemical reactors, safety and process optimization, equipment design,together with other subjects which are functional to the acquisition of useful knowledge tools for the design and management of traditional as well as innovative chemical processes.

Individual courses (and, in particular, elective courses) aim at providing basic knowledge with respect to those sectors which represent the trends in the development of chemical engineering, in close synergy with other disciplines, such as nanotechnologies, biotechnologies, energetics and environment.

The course will also provide for other educational activities, with particular emphasis on advanced seminars, both in traditional chemical engineering and in innovative technologies.

The natural completion of such educational programme is an extensive work for the experimental dissertation, awarded with 30 credits.

Professional opportunities

Professional opportunities for 2nd cycle chemical engineers are characterised by high flexibility.

Based on the acquired competences and on the knowledge and capability of interpreting complex chemical engineering issues, graduates of this course will find professional opportunities in the chemical, food technology, pharmaceutical and make up sectors, in the production and transformation of materials, in industrial laboratories and in technical facilities of the public administration.

Final examination features

The degree course should end with an important design or research work, corresponding to 30 credits. The final dissertation should demonstrate the candidates command of subjects as well as his/her capability of working autonomously and good communication skills. The dissertation may be related to theoretical design studies or experimental research on advanced chemical engineering topics, with respect in particular to innovative issues.

Subjects 1 ° year	CFU	Sem.	Val.	SSD	TAF
06205 - CHEMICAL REACTORS Augugliaro(PO)	9	Ann.	V	ING-IND/24	В
12660 - PRINCIPLES OF MATERIAL MECHANICS <i>Pitarresi(PO)</i>	6	Ann.	V	ING-IND/14	C
06328 - SCIENCE AND TECHNOLOGY OF MATERIALS <i>Piccarolo(CU)</i>	9	Ann.	V	ING-IND/22	В
12659 - UNIT OPERATIONS AND SAFETY FOR THE CHEMICAL INDUSTRY Grisafi(PA)	9	Ann.	V	ING-IND/25	В

Legenda: Per. = periodo o semestre, Val. = Valutazione (V=voto, G=giudizio), TAF= Tipologia Attività Formativa (A=base, B=caratterizzante, C=Affine, S=stages, D=a scelta, F=altre)

Subjects 1 ° year	CFU	Sem.	Val.	SSD	TAF
07620 - PRACTICE OR OTHER EDUCATIONAL ACTIVITIES	3	Ann.	G		Х
02939 - APPLIED ELECTROCHEMISTRY Di Quarto(CU)	9	Ann.	V	ING-IND/23	С
01886 - PHYSICAL CHEMISTRY OF SOLID MATERIALS Piazza(PO)	6	Ann.	V	ING-IND/23	С
Free subjects (suggested)	6				D
	57				
Subjects 2 ° year	CFU	Sem.	Val.	SSD	TAF
Subjects 2 year				002	
01914 - INDUSTRIAL CHEMISTRY Galia(PO)	9	Ann.	V	ING-IND/27	В
01914 - INDUSTRIAL CHEMISTRY			V V		
01914 - INDUSTRIAL CHEMISTRY Galia(PO) 12661 - PROCESS CONTROL 1	9	Ann.		ING-IND/27	В
01914 - INDUSTRIAL CHEMISTRY Galia(PO) 12661 - PROCESS CONTROL 1 Galluzzo(CU) 07417 - THEORY OF DEVELOPMENT OF CHEMICAL PROCESSES	9 9	Ann. Ann.	V	ING-IND/27 ING-IND/26	B B
01914 - INDUSTRIAL CHEMISTRY Galia(PO) 12661 - PROCESS CONTROL 1 Galluzzo(CU) 07417 - THEORY OF DEVELOPMENT OF CHEMICAL PROCESSES Rizzuti(PQ)	9 9 9	Ann. Ann. Ann.	V	ING-IND/27 ING-IND/26	B B B

OPTIONAL SUBJECTS

Free subjects (suggested)	CFU	Sem.	Val.	SSD	TAF
02213 - CORROSION AND PROTECTION OF METALLIC MATERIALS Di Paola(PA)	6	Ann.	V		D
10067 - ELEMENTS OF BIOCHEMICAL ENGINEERING La Carrubba(PA)	6	Ann.	V		D
10074 - MICROTECHNOLOGIES	6	Ann.	V		D
10066 - PHOTOELECTROCHEMISTRY Di Quarto(CU)	6	Ann.	V		D
07298 - POLYMERS TECHNOLOGY La Mantia(PQ)	6	Ann.	V		D
13655 - PROCESS CONTROL 2 Cosenza(PC)	6	Ann.	V		D
10069 - PROCESS DESIGN Micale(PO)	6	Ann.	V		D
07340 - SPECIAL CHEMICAL TECHNOLOGIES Galia(PO)	6	Ann.	V		D
10068 - TREATMENT PROCESSES OF INDUSTRIAL WASTEWATERS Scialdone(PO)	6	Ann.	V		D
Free subjects (suggested) II	CFU	Sem.	Val.	SSD	TAF
02213 - CORROSION AND PROTECTION OF METALLIC MATERIALS Di Paola(PA)	6	Ann.	V		D
10067 - ELEMENTS OF BIOCHEMICAL ENGINEERING La Carrubba(PA)	6	Ann.	V		D
10074 - MICROTECHNOLOGIES	6	Ann.	V		D

Legenda: Per. = periodo o semestre, Val. = Valutazione (V=voto, G=giudizio), TAF= Tipologia Attività Formativa (A=base, B=caratterizzante, C=Affine, S=stages, D=a scelta, F=altre)

OPTIONAL SUBJECTS

Free subjects (suggested) II	CFU	Sem.	Val.	SSD	TAF
10066 - PHOTOELECTROCHEMISTRY Di Quarto(CU)	6	Ann.	V		D
07298 - POLYMERS TECHNOLOGY La Mantia(PQ)	6	Ann.	V		D
13655 - PROCESS CONTROL 2 Cosenza(PC)	6	Ann.	V		D
10069 - PROCESS DESIGN Micale(PO)	6	Ann.	V		D
07340 - SPECIAL CHEMICAL TECHNOLOGIES Galia(PO)	6	Ann.	V		D
10068 - TREATMENT PROCESSES OF INDUSTRIAL WASTEWATERS Scialdone(PO)	6	Ann.	V		D

Legenda: Per. = periodo o semestre, Val. = Valutazione (V=voto, G=giudizio), TAF= Tipologia Attività Formativa (A=base, B=caratterizzante, C=Affine, S=stages, D=a scelta, F=altre)