



Universidad Autónoma
de Madrid

CHEMICAL ENGINEERING DEGREE

ACADEMIC YEAR 2020/2021

Studies	Chemical Engineering Degree
Centre	Faculty of Sciences C/ Darwin, 2 Campus de Cantoblanco 28049 – Madrid Phone: 914978264 Web page
Knowledge Branch	Engineering and Architecture
ECTS Credits	240

ECTS CREDITS	
Basic training (FB)	66
Compulsory (OB)	138
Optional (OP)	24
External practical (PE)	-
End-of-degree Project (TFG)	12
Total	240

FIRST YEAR

Code	Subject	Credits	Type	Semester
<u>16533</u>	MATHEMATICS I	9	FB	1
<u>16535</u>	CHEMISTRY	9	FB	1
<u>16536</u>	FUNDAMENTALS OF CHEMICAL ENGINEERING	6	OB	1
<u>19339</u>	PHYSICS I	6	FB	1
<u>16537</u>	MATHEMATICS II	6	FB	2



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Code	Subject	Credits	Type	Semester
<u>16538</u>	STATISTICS	6	FB	2
<u>16539</u>	COMPUTER-AIDED DESIGN	6	FB	2
<u>16540</u>	COMPUTER METHODS	6	FB	2
<u>19340</u>	PHYSICS II	6	FB	2

SECOND YEAR

Code	Subject	Credits	Type	Semester
<u>16543</u>	FLUID ENGINEERING	6	OB	1
<u>19341</u>	EXPERIMENTATION IN CHEMISTRY	6	FB	1
<u>19342</u>	THERMODYNAMICS OF INDUSTRIAL PROCESSES	6	OB	1
<u>19343</u>	INDUSTRIAL ANALYTICAL CHEMISTRY	6	OB	1
<u>19344</u>	INDUSTRIAL ORGANIC CHEMISTRY	6	OB	1
<u>16545</u>	ECONOMY AND BUSINESS ADMINISTRATION	6	FB	2
<u>19345</u>	ENGINEERING LABORATORY	6	OB	2
<u>16547</u>	BIOLOGY AND BIOCHEMISTRY	6	OB	2
<u>16548</u>	HEAT TRANSFER ENGINEERING	6	OB	2
<u>16553</u>	MATERIAL SCIENCE AND ENGINEERING	6	OB	2

THIRD YEAR

Code	Subject	Credits	Type	Semester
<u>16552</u>	SEPARATION PROCESSES	6	OB	1
<u>16557</u>	MECHANICAL DESIGN	6	OB	1
<u>19346</u>	CHEMICAL REACTION ENGINEERING: HOMOGENEOUS PROCESSES	6	OB	1
<u>19347</u>	PROCESS AND PRODUCT ENGINEERING	6	OB	1
<u>19348</u>	ECHANISMS AND MACHINES SCIENCE	6	OB	1
<u>16556</u>	ENVIRONMENTAL ENGINEERING	6	OB	2
<u>19349</u>	EXPERIMENTATION IN CHEMICAL ENGINEERING	6	OB	2
<u>19350</u>	CHEMICAL REACTION ENGINEERING: HETEROGENEOUS PROCESSES	6	OB	2
<u>19351</u>	ANALYSIS OF INDUSTRIAL-CHEMICAL PROCESSES	6	OB	2
<u>19352</u>	ELECTRICAL ENGINEERING	6	OB	2

FOURTH YEAR

Code	Subject	Credits	Type	Semester
<u>19353</u>	ELECTRONICS, AUTOMATION AND CONTROL	9	OB	Annual
<u>19354</u>	PROCESS PLANT DESIGN	9	OB	Annual
<u>16559</u>	CHEMICAL ENGINEERING LABORATORY III	6	OB	1
	OPTIONAL SUBJECTS	24	OP	1 and 2
<u>19355</u>	END-OF-DEGREE PROJECT	12	TFG	Annual



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OPTIONAL SUBJECTS

ROUTE: SCIENTIFIC INTENSIFICATION

Code	Subject	Credits	Type	Semester
<u>16561</u>	ENVIRONMENTAL CHEMISTRY*	6	OP	1
<u>16564</u>	INSTRUMENTAL TECHNIQUES OF ANALYSIS	6	OP	1
16562	AGROCHEMISTRY*	6	OP	
16563	MINERALS AND INDUSTRIAL ROCKS *	6	OP	

* Subject not offered in 2020-2021

ROUTE: TECHNOLOGICAL INTENSIFICATION

Code	Subject	Credits	Type	Semester
<u>16567</u>	ELECTROCHEMICAL ENGINEERING	6	OP	1
<u>16568</u>	BIOTECHNOLOGY PROCESS ENGINEERING	6	OP	1
<u>16571</u>	COMPUTATIONAL METHODS IN CHEMICAL ENGINEERING	6	OP	1
<u>16572</u>	INDUSTRIAL WASTES TREATMENT AND DISPOSAL	6	OP	1
<u>16565</u>	WATER AND WASTEWATER TREATMENT PLANT DESIGN	6	OP	2
<u>16566</u>	TECHNOLOGY FOR WASTE GAS TREATMENT	6	OP	2
<u>16569</u>	PROCESS SIMULATION AND OPTIMIZATION	6	OP	2
<u>16570</u>	ALTERNATIVE ENERGY RESOURCES	6	OP	2

INTERNSHIP

Code	Subject	Credits	Type	Semester
<u>16573</u>	EXTERNAL PRACTICAL	6	OP	Annual