BE AMBITIOUS!!

MASTER IN INDUSTRIAL CHEMISTRY AND CHEMICAL RESEARCH

Universidade Vigo

USC UNIVERSIDADE DE SANTIAGO DE COMPOSTELA

UNIVERSIDADE DA CORUÑA

MODULE 1. *Advanced Training (AT) in Chemistry* (compulsory 15 ECTS)

AT Physical Chemistry (3 ECTS)
AT Inorganic Chemistry (3 ECTS)
AT Structural Analysis (3 ECTS)
AT Organic Chemistry (3 ECTS)
AT Analytical Chemistry (3 ECTS)

MODULE 2. *Specialized training*

- ✓ Compulsory for the chemical research track
- ✓ 12 ECTS to be taken and 60 ECTS offered

5 Profiles

Structural Chemistry and Reactivity
Synthetic Chemistry
Biological Chemsitry
Nanochemistry and New Materials
Advanced Analytical Techniques

MODULE 3. *Specialized training*

- ✓ Compulsory for the professional track
- ✓ 18 ECTS to be taken and 21 ECTS offered

Subjects

Industrial Chemistry: Process Control
Quality Control in Chemical Laboratories
Industrial Safety
Management in Chemical Industries
Industrial Legislation
Economics and Industry
Human Resources

MODULE 4. *Introduction to research and professional training*

MODULE 4.1
(compulsory for the chemical research track)

Master Seminar (3 ECTS)
Academic Training (12 ECTS)

MODULE 4.2
(compulsory for the professional track)

Project Management (3 ECTS)
Professional Training (6 ECTS)

Master Thesis (18 ECTS)

60 ECTS to be taken and 135 ECTS offered!!

1.- Master general structure

Chemical research track (60 ECTS)	*Professional track (60 ECTS)*
Advanced training (15 ECTS)	Advanced training (15 ECTS)
Specialized training (12 ECTS)	Specialized training (18 ECTS)
Module 4.1 (15 ECTS)	Module 4.2 (9 ECTS)
Master Thesis (18 ECTS)	Master Thesis (18 ECTS)

2.- Ideal student profiles

Chemistry and degrees related to Chemistry or Biochemistry, Chemical Engineering, Industrial Engineering, Materials Science, Pharmacy, Marine Sciences and other degrees With equivalent profiles.

Intermediate knowledge of English.

3. Training objectives

✓Students acquire, among other competencies, advanced learning in chemistry and they practice with the fundamental techniques related to research, development and chemical innovation.

✓They will be able to apply the scientific method. They will acquire skills in handling legislation, information sources, literature search, development of protocols and other aspects that are deemed necessary for the design and critical evaluation of tests, experiments and chemical processes.

- ✓ They will also master economic concepts, as well as those relating to human and technological resources currently required by companies from the chemical industry to guarantee product quality, as well as management techniques for institutions or companies in this sector.

4.- Places offered

- ✓ University of Santiago de Compostela: **80**
- ✓ University of A Coruña: **20**
- ✓ University of Vigo: **20**

5. Academic calendar September 2014-July 2015 (one year)

CONTACT

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First edition (2014-2015)

CHEMICAL RESEARCH TRACK

PROFESSIONAL TRACK

Master

INDUSTRIAL CHEMISTRY AND CHEMICAL RESEARCH

The aim of this degree

✓Train professionals capable of competing in areas as dynamic as chemistry, pharmacy, biomedicine, production of new materials, agrifood, environmental study and control, quality analysis and control, plant and bio-health research and in the field of renewable energies.

✓Provide specialized advanced training, primarily in instrumental techniques, that will be useful to apply with a greater advantage for jobs in the public and private sectors.

✓Be an on-going training instrument for professionals in the various areas of Chemistry.

✓Provide advanced theoretical and experimental training that will enable graduates to prepare a doctoral thesis in the various areas of Chemistry.

http://www.usc.es/gl/centros/quimica