Why study this Master at UAM?

The Master's Degree in Theoretical Chemistry and Computational Modelling (TCCM) is a programme of recognised international prestige not only for having been selected under the framework of the Erasmus Mundus, but also for having obtained the European Thematic Network of Chemistry (ECTN) quality certification. In addition, it has been selected for 6 consecutive years as one of the 5 Master's degrees in experimental and technological sciences in the ranking of the newspaper El Mundo.

The UAM acts as coordinator in a national level and internationally. Therefore, its infrastructures and personnel make it stand out within the program. Students enrolled in the UAM are assigned a work space and tutor since the first year of the master. This tutor will guide the student both in the subjects studied and in his/her research work.

On the top of that, we must add that the UAM is one of the most prestigious universities in Spain, so its graduates will have a double recognition. On the one hand, TCCM's own program and on the other hand, its success at this university.

1968_2018

Cincuenta Aniversario

excelencia Campus Internacional UAM CSIC+

UAM Universidad Autónoma de Madrid

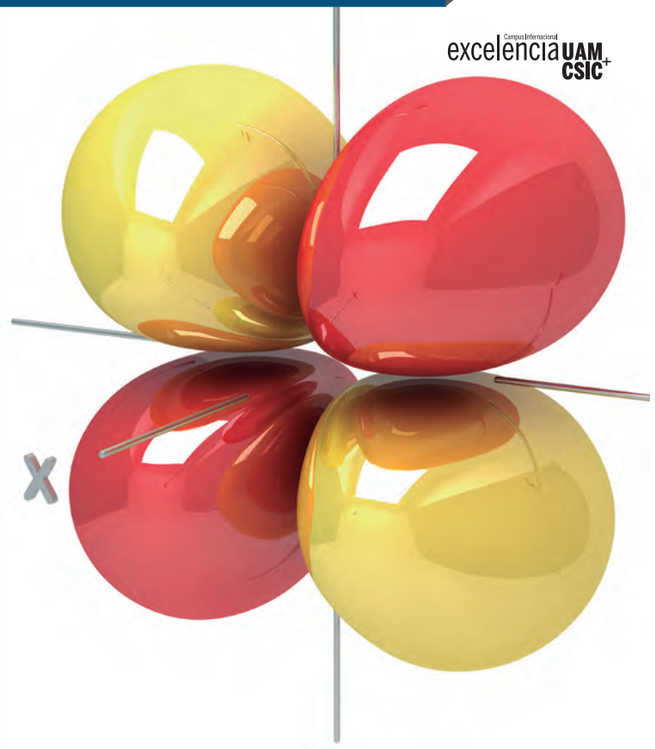
Universitat de Barcelona
Universidad de Cantabria
Universidad de Extremadura
Universitat de les Illes Balears
Universitat Jaume I
Universidad de Murcia
Universidad de Oviedo
Universidad del País Vasco/Euskal Herriko Unibertsitatea
Universidad de Salamanca
Universidad de Santiago de Compostela
Universitat de València (Estudi General)
Universidad de Valladolid
Universidade de Vigo

Sciences

MASTER'S DEGREE IN THEORETICAL CHEMISTRY AND COMPUTATIONAL MODELLING

M

UAM Universidad Autónoma de Madrid



Overview

Degree: Master's Degree in Theoretical Chemistry and Computational Modelling

Academic discipline: Sciences

Number of ECTS credits: 120

Public fees: The minimum set by the Community of Madrid[2]

Character: Research-oriented.

Modality: Classroom teaching

Language of instruction: It may be teached in English [3]

Place: Faculty of Sciences

Web of the Master:
www.uam.es/muquimicateoricamodelizacion

Contact: informacion.master.quimicateorica@uam.es

Number of ECTS by type of subject:

Type of subject	ECTS
Compulsory	65
Optional	25
Master Thesis	30
Total	120

[1] *According to Spanish regulation this Master qualifies Level 7 in the European Qualifications Framework (EQF), which gives access to PhD studies.*

[2] *Updated information at www.uam.es*

[3] *If there is any not Spanish speaking student, it is taught in English.*

Description and Objectives

Master's Degree in Theoretical Chemistry and Computational Modelling is a Master programme of 120 ECTS not only national scope, with the participation of 14 Spanish universities, but also has an international dimension with the participation of different European universities under the Erasmus Mundus programme.

First course: begins with a two-week course, in which the students' knowledge of programming, Linux and software applied to theoretical chemistry is homogenized. After this, the lessons follow two formats: face-to-face sessions and videoconference. Students will be informed in the schedule when they will have one modality or another. In January, an intensive 3-week course is held at one of the consortium's universities, which is organised on a rotating basis. The elective courses are mostly given in the form of one-week intensive courses.

Second course: begins with an international intensive course, organised on a rotating basis, in which both Spanish and European universities involved in the programme participate.

During the second semester the students carry out a research stay of 3 months, the results of which are presented in their master's thesis.

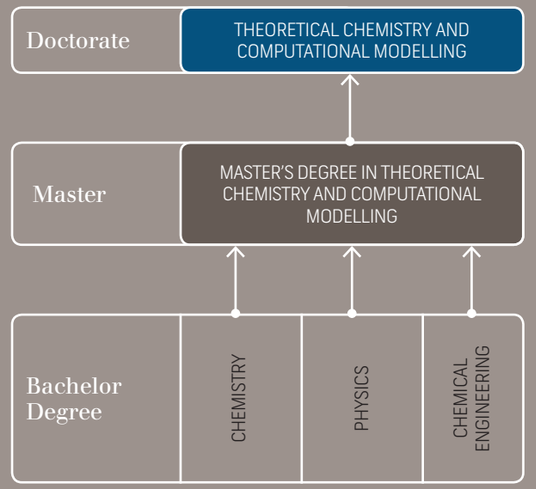
Admission profile

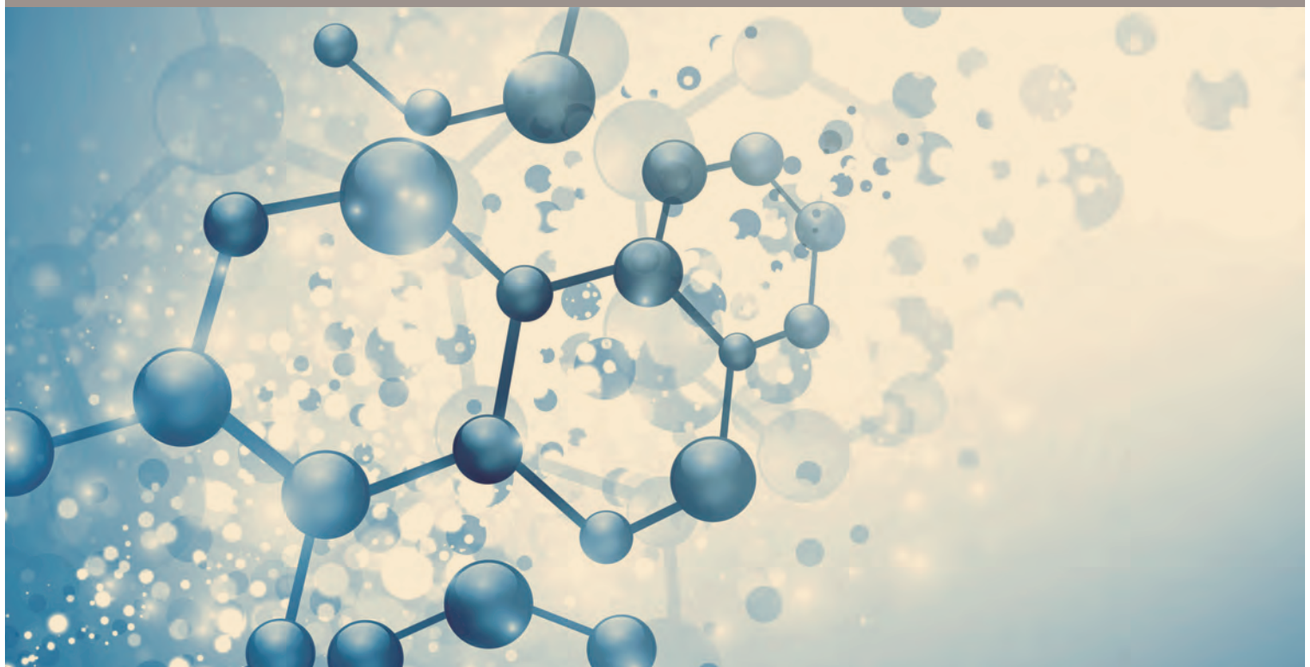
It is mainly aimed at students who have completed their Bachelor's Degree in Chemistry, Physics, Chemical Engineering, Pharmacy or Materials Science.

Graduates and Employability

This master's program is essentially focused on a research profile and therefore our graduates, in 90%, decide to continue their career by pursuing a doctorate. The doctorate is awarded through a contract or research grant.

Context of these studies at UAM





Research Internships

Students of the second year of the master's degree have the opportunity to stay for 3 months in the following foreign universities: Paul Sabatier Toulouse III, Pierre et Marie Curie Paris VI, Bordeaux, Porto, Perugia, Pisa, Trieste, Groningen, Catholic University of Leuven, among others.

Featured Activities

Given the inter-university nature of the degree, the face-to-face courses are organised in the different universities participating in the programme, giving students the opportunity to get to know the facilities of other institutions and not only the one in which they are enrolled and to interact with other masters' students at both national and international level. Besides the mobility between universities, the student will be able to stay for 3 months in one of the universities of the consortium.

Partner Companies

- UAM-FUJITSU Sponsorship Chair: Scientific Computing and Big Data
- Association for the promotion of theoretical and molecular chemistry. (APQTC)
- European Atomic and Molecular Calculation Centre (CECAM)