



## (\*)Facultade de Química

### Presentation

The studies of Chemistry have a large tradition at the University of Vigo, where it has been taught during more than 30 years. The establishment of the University System of Galicia in the 90s and the current process of implantation of the European Space of Higher Education (EEES) modified the offer of degrees, but not the pioneering spirit of the chemists in research in the quest for a better service to the society.



### Degrees given in the Faculty

Degree in Chemistry

- Masters And Doctorates:
  - Industry and Chemical Research and Industrial Chemistry
  - Theoretical chemistry and Computational Modelling
- Master:
  - Science and Technology of Conservation of Fishing Products

### Web page

Information about the Faculty of Chemistry:

<http://quimica.uvigo.es>

## (\*)Máster Universitario en Química Teórica e Modelización Computacional

### Subjects

#### Year 1st

Code	Name	Quadmester	Total Cr.
V11M131V01101	European Language	An	5
V11M131V01102	Mathematical Foundations in Quantum Mechanics	An	5
V11M131V01103	Statistical Mechanics and Applications in Simulation	An	5
V11M131V01104	Symmetry in Atoms, Molecules and Solids	An	5

V11M131V01105	Numerical and Computational Techniques	An	5
V11M131V01106	Theoretical Chemistry Methods I	An	5
V11M131V01107	Theoretical Chemistry Methods II	An	5
V11M131V01108	Advanced Theoretical Chemistry Methods	An	5
V11M131V01109	Chemical Reaction Dynamics	An	5
V11M131V01110	Excited States	An	5
V11M131V01111	Solids	An	5
V11M131V01112	Linux and Linux for Management	An	5
V11M131V01113	Applied Theoretical Chemistry Practicals	An	5
V11M131V01114	Lasers	An	5
V11M131V01115	Computational Biochemistry	An	5

**IDENTIFYING DATA****Lingua Europea**

Subject	Lingua Europea			
Code	V11M131V01101			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Mandatory	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel Nieto Faza, Olalla Silva López, Carlos			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject	Training and Learning Results
Mellorar a comunicación oral e escrita en Inglés ou outros idiomas europeos	
Ser capaz de obter e manexar bibliografía científica e técnica	

**Contidos**

Topic

Tema 1: Técnicas de lectura para a comprensión de textos e conferencias científicas

Tema 2: Técnicas de planificación e estructuración de textos en inglés (ou outras linguas europeas)

**Planificación**

	Class hours	Hours outside the classroom	Total hours
Traballo tutelado	5	35	40
Presentación	2	23	25
Eventos científicos	0	50	50
Traballo	0	10	10

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

**Metodoloxía docente**

	Description
Traballo tutelado	Traballaranse as competencias lingüísticas de expresión oral, comprensión oral e expresión escrita. Para isto pedirase ao alumno a lectura de artigos e preparación de redaccións en inglés.
Presentación	O alumno terá que preparar e presentar algún tema en inglés.
Eventos científicos	Asistencia a conferencias en inglés

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
Traballo tutelado Pódese solicitar a realización de memorias sobre algún tema en lingua inglesa	50	

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**Other comments on the Evaluation**

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**Bibliografía. Fontes de información**

**Basic Bibliography**

**Complementary Bibliography**

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**Recomendacións**

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**IDENTIFYING DATA****Fundamentos Matemáticos da Mecánica Cuántica**

Subject	Fundamentos Matemáticos da Mecánica Cuántica			
Code	V11M131V01102			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Mandatory	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

	Class hours	Hours outside the classroom	Total hours
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\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
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**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Mecánica Estadística e Aplicacións en Simulación**

Subject	Mecánica Estadística e Aplicacións en Simulación			
Code	V11M131V01103			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Mandatory	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

	Class hours	Hours outside the classroom	Total hours
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\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
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**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Simetría en Átomos, Moléculas e Sólidos**

Subject	Simetría en Átomos, Moléculas e Sólidos			
Code	V11M131V01104			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Mandatory	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

	Class hours	Hours outside the classroom	Total hours
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**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
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**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Técnicas Computacionais e Cálculo Numérico**

Subject	Técnicas Computacionais e Cálculo Numérico			
Code	V11M131V01105			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Mandatory	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

	Class hours	Hours outside the classroom	Total hours
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**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
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**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**



**IDENTIFYING DATA****Métodos da Química Teórica I**

Subject	Métodos da Química Teórica I			
Code	V11M131V01106			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Mandatory	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

	Class hours	Hours outside the classroom	Total hours
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\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
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**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Métodos da Química Teórica II**

Subject	Métodos da Química Teórica II			
Code	V11M131V01107			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Mandatory	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

	Class hours	Hours outside the classroom	Total hours
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**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
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**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Profundización nos Métodos da Química Teórica**

Subject	Profundización nos Métodos da Química Teórica			
Code	V11M131V01108			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Optional	1	An
Teaching language				
Department				
Coordinator	Mandado Alonso, Marcos			
Lecturers	Mandado Alonso, Marcos			
E-mail	mandado@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

	Class hours	Hours outside the classroom	Total hours
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**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
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**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Dinámica das Reaccións Químicas**

Subject	Dinámica das Reaccións Químicas			
Code	V11M131V01109			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Optional	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**Expected results from this subject Training and Learning Results

Adquirir competencias para tomar decisións a nivel estratéxico e de política comercial nos mercados internacionais

**Contidos**

Topic

**Planificación**

Class hours	Hours outside the classroom	Total hours
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**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
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**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Estados Excitados**

Subject	Estados Excitados			
Code	V11M131V01110			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Optional	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

	Class hours	Hours outside the classroom	Total hours
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**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description Qualification Training and Learning Results

**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Sólidos**

Subject	Sólidos			
Code	V11M131V01111			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Optional	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

	Class hours	Hours outside the classroom	Total hours
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**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
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**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Linux e Linux de Xestión**

Subject Linux e Linux de Xestión

Code V11M131V01112

Study programme Máster Universitario en Química Teórica e Modelización Computacional

Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Optional	1	An

Teaching language

Department

Coordinator Hermida Ramón, José Manuel

Lecturers Hermida Ramón, José Manuel

E-mail jose\_hermida@uvigo.es

Web

General description

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject

Training and Learning Results

**Contidos**

Topic

**Planificación**

Class hours

Hours outside the classroom

Total hours

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description

Qualification

Training and Learning Results

**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Laboratorio de Química Teórica Aplicada**

Subject	Laboratorio de Química Teórica Aplicada			
Code	V11M131V01113			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Optional	1	An
Teaching language				
Department	Química Física Química orgánica			
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Flores Rodríguez, Jesús Ramón Hermida Ramón, José Manuel Mandado Alonso, Marcos Nieto Faza, Olalla Peña Gallego, María de los Ángeles Silva López, Carlos			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

	Class hours	Hours outside the classroom	Total hours
Obradoiro	10	10	20
Titoría en grupo	10	10	20
Prácticas en aulas informáticas	40	40	80
Probas de resposta curta	3	10	13

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

**Metodoloxía docente**

Description

Obradoiro

Titoría en grupo

Prácticas en aulas informáticas

**Atención personalizada****Methodologies****Description**

Prácticas en aulas informáticas

Obradoiro

Titoría en grupo

**Avaliación**

Description Qualification Training and Learning Results



Obradoiro	0
Prácticas en aulas informáticas	0

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**Other comments on the Evaluation**

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**Bibliografía. Fontes de información**

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**Basic Bibliography**

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**Complementary Bibliography**

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**Recomendacións**

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**IDENTIFYING DATA****Láseres**

Subject	Láseres			
Code	V11M131V01114			
Study programme	Máster Universitario en Química Teórica e Modelización Computacional			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Optional	1	An
Teaching language				
Department				
Coordinator	Hermida Ramón, José Manuel			
Lecturers	Hermida Ramón, José Manuel			
E-mail	jose_hermida@uvigo.es			
Web				
General description				

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject Training and Learning Results

**Contidos**

Topic

**Planificación**

Class hours	Hours outside the classroom	Total hours
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\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description	Qualification	Training and Learning Results
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**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**

**IDENTIFYING DATA****Bioquímica Computacional**

Subject Bioquímica  
Computacional

Code V11M131V01115

Study Máster  
programme Universitario en  
Química Teórica e  
Modelización  
Computacional

Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Optional	1	An

Teaching  
language

Department

Coordinator Hermida Ramón, José Manuel

Lecturers Hermida Ramón, José Manuel

E-mail jose\_hermida@uvigo.es

Web

General  
description

**Competencias**

Code

**Resultados de aprendizaxe**

Expected results from this subject	Training and Learning Results
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**Contidos**

Topic

**Planificación**

Class hours

Hours outside the  
classroom

Total hours

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

**Metodoloxía docente**

Description

**Atención personalizada****Avaliación**

Description

Qualification

Training and Learning Results

**Other comments on the Evaluation****Bibliografía. Fontes de información****Basic Bibliography****Complementary Bibliography****Recomendacións**