

# List of Subjects in English at the University of Oviedo

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Vicerrectorado de Internacionalización  
y Postgrado  
Universidad de Oviedo

  
ASTURIAS  
CAMPUS DE EXCELENCIA  
INTERNACIONAL  
AD FUTURUM

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# Arts and Humanities

## Degree in English Studies (Campus Milan, Oviedo)

### **Oral and Written Communication in English I (GESTIN01-1-004)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (14h), Laboratory and field work (42h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2329>

### **Oral and Written Communication in English II (GESTIN01-1-005)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (14h), Laboratory and field work (42h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2330>

### **Cultural Introduction to the English-speaking World (GESTIN01-1-006)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2331>

### **Oral and Written Skills in Spanish (GESTIN01-1-007)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2332>

## **Introduction to European Literatures: Concepts, Genres and Writers (GESTIN01-1-008)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2333>

## **Linguistics (GESTIN01-1-009)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (45h), Practical sessions in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2334>

## **Classical Sources of European Languages and Literatures (GESTIN01-1-010)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (45h), Practical sessions in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2335>

## **Introduction to the Linguistic Study of the English Language (GESTIN01-1-011)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2337>

## **Understanding Literature in English (GESTIN01-1-012)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2338>

## **English I (GESTIN01-2-001)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (14h), Laboratory and field work (42h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5852>

## **English II (GESTIN01-2-002)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (14h), Laboratory and field work (42h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5855>

## **English Lexicology (GESTIN01-2-003)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements:** Given its obligatory nature, the entry requirements to this subject are those to the degree. It is highly recommended that students have previously followed the linguistics subjects in the foundation module of the degree: *Linguistics* and *Introduction to the Linguistic Study of English*. A communicative competence in the English Language is also required which is equivalent to a B2 level as defined by the Common European Framework of Reference. In any event, a passing grade in the subject *English Oral and Written Communication II* is recommended, as the teaching sessions will be delivered in English and students will be required to perform oral and written tasks in which they will have to discuss the properties of the language in a well-reasoned manner.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5859>

### **English Phonetics and Phonology (GESTIN01-2-004)**

**Degree:** Bachelor's Degree in English Studies

**Year: 2 Semester: 2**

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5860>

### **Literatures of the United Kingdom and Ireland (GESTIN01-2-005)**

**Degree:** Bachelor's Degree in English Studies

**Year: 2 Semester: 1**

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5867>

### **Cultures of the British Isles (GESTIN01-2-006)**

**Degree:** Bachelor's Degree in English Studies

**Year: 2 Semester: 1**

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5872>

### **Cultures of the United States (GESTIN01-2-007)**

**Degree:** Bachelor's Degree in English Studies

**Year: 2 Semester: 2**

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5873>

### **English Morphology (GESTIN01-2-008)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5884>

### **Literature in English and Cinema (GESTIN01-2-009)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5891>

### **Theatre in English (GESTIN01-2-010)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5892>

### **Information/Reference Sources and Translation Tools (L2-L1 and L1-L2) (GESTIN01-2-011)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5897>

### **Translation Theory (GESTIN01-2-012)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (45h), Practical sessions in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5898>

### **General Translation (L2-L1 and L1-L2) (GESTIN01-2-013)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5904>

### **Communication: Strategies and Spheres (GESTIN01-2-029)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (45h), Practical sessions in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5950>

### **Spanish Literature and Journalism (GESTIN01-2-030)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5952>



### **Scriptwriting Theory and Practice (GESTIN01-2-031)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5953>

### **Pragmatics and Discourse (GESTIN01-2-039)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5976>

### **Literary Criticism (GESTIN01-2-040)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 2    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (14h), Laboratory and field work (42h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5854>

### **English III (GESTIN01-3-002)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (14h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5980>

### **English IV (GESTIN01-3-003)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (14h), Laboratory and field work (42h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=5856>

### **English Syntax I (GESTIN01-3-004)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=5861>

### **History of the English Language I (GESTIN01-3-005)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=5862>

### **Literatures of the United States (GESTIN01-3-006)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=5868>

### **English Literatures and Gender (GESTIN01-3-007)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5869>

### **Postcolonial Cultures (GESTIN01-3-008)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5874>

### **Applied Linguistics in English (GESTIN01-3-009)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5886>

### **English Intonation (GESTIN01-3-010)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5887>

### **English Syntax II (GESTIN01-3-011)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5888>

### **Classic Works of English Literature (GESTIN01-3-012)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5893>

### **Literature in English in the Classroom (GESTIN01-3-013)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5894>

### **L2-L1 Specialized Translation: Social Sciences and Law (GESTIN01-3-014)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5899>

### **L2-L1 Specialized Translation: Science and Technology (GESTIN01-3-015)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5902>

### **Audiovisual Translation (L2-L1 and L1-L2) (GESTIN01-3-016)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 3    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5903>

### **Advanced Academic English (GESTIN01-4-001)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (14h), Laboratory and field work (42h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5857>

### **English for Professional Communication (GESTIN01-4-002)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (14h), Laboratory and field work (42h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5858>

### **English Semantics (GESTIN01-4-003)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5863>

### **English Pragmatics and Discourse Analysis (GESTIN01-4-004)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5865>

### **Postcolonial Literatures in English (GESTIN01-4-005)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements:** Those established for the Major in English Studies. A better understanding of this course may be achieved if students have attended and passed *Literatures of the Anglophone World* and *Cultures of the Anglophone World*.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5870>

### **Critical Thinking Through English Literatures (GESTIN01-4-006)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5871>

### **Varieties of English (GESTIN01-4-008)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5890>

### **Literature in English and Politics (GESTIN01-4-009)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5895>

### **Literature in English beyond the Book (GESTIN01-4-010)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5896>

### **Literary Translation (GESTIN01-4-011)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5900>

### **Localization and Translation (GESTIN01-4-012)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (28h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5901>

### **Audiovisual Narrative (GESTIN01-4-024)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (24h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5954>

### **Work Placement (GESTIN01-4-025)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 2

**Type:**

**ECTS Credits:** 6

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5955>

### **Final Dissertation (GESTIN01-4-026)**

**Degree:** Bachelor's Degree in English Studies

**Year:** 4    **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 6

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5956>



## Degree in Philosophy (Campus Milan, Oviedo)

### Language, Thought and Reality (GFILOS01-2-003)

**Degree:** Bachelor's Degree in Philosophy

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (35h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Apart from the general requirements for enrolling in the second year of the Degree in Philosophy at the University of Oviedo (RD 1892/2008, 14.11.), there are no extra requirements for registering in this course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1545>

### Meaning and Communication (GFILOS01-3-001)

**Degree:** Bachelor's Degree in Philosophy

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (35h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Apart from the general requirements for enrolling in the second year of the Degree in Philosophy of the University of Oviedo (RD 1892/2008, 14.11.), there are no extra requirements for taking this course

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1557>

### Philosophy and Economics (GFILOS01-3-007)

**Degree:** Bachelor's Degree in Philosophy

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (35h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** There are no specific requirements for this subject, apart from the general ones detailed on the BA Philosophy programme. It is not required to have passed any other subject of the programme prior to study this one. Even though the content would be better understood having gone through the first two years of the BA in Philosophy or having studied Economics, no previous background is needed.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1563>

## **Metaphysics (GFILOS01-3-011)**

**Degree:** Bachelor's Degree in Philosophy

**Year:** 3    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (35h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** In order to register for the English group, all students whose first language is not English must be able to provide recent evidence that their spoken and written command of the English language is at a C2 level or equivalent. Apart from this, only the general requirements detailed on the BA Philosophy programme are applied. There is no obligation to take any particular subject before this one, but a previous background in philosophy is highly recommended.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1567>

# Sciences

## Degree in Biology (Campus Cristo, Oviedo)

### Genetic Improvement and Conservation (GBIOL001-0-005)

**Degree:** Bachelor's Degree in Biology

**Year:** 3    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (14h), Practical sessions in classes/seminars/workshops (14h), Group tutorials (2h)

**Requirements:** Basic knowledge of General Genetics is required.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1483>

### Experimentation in Biotechnology III (GBIOTE01-3-008)

**Degree:** Bachelor's Degree in Biotechnology

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 9

**Structure:** Laboratory and field work (135h)

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1618>

## Degree in Chemistry (Campus Cristo, Oviedo)

### General Chemistry (GQUIMI01-1-001)

**Degree:** Bachelor's Degree in Chemistry

**Year:** 1    **Semester:** Annual

**Type:** Core

**ECTS Credits:** 12

**Structure:** lectures (98h), Practical session in classes/seminars/workshops (14h), Group tutorials (8h).

**Requirements:** Because this is a subject in the first year, it has no administrative or academic pre-requirements, although it is highly recommended that students have completed the subjects of mathematics, physics and chemistry that are offered in the pre-university courses. As a guide, a set of chemical concepts that students should know at the beginning of this course would be: (i) Chemical nomenclature (ii) Determination of chemical formulas (iii) Solutions. Ways to express the concentration (iv) Chemical equations. Stoichiometric calculations. Limiting reagent. Reaction yields (v) Chemical equilibrium (vi) Acids and bases. Neutralization (vii) Oxidation-reduction reactions.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=374>

## **Basic Operations in the Laboratory and Informatic Tools (GQUIMI01-1-002)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 1 **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (7h), Laboratory and field work (69h), Practical session in classes/seminars/workshops (14h).

**Requirements:** Since it is a first year course, no administrative requirements are needed. However, previous experience in Chemistry and Chemistry laboratory courses is very advisable. Many of the concepts provided in the course are also taught in the "General Chemistry" course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=377>

## **General Physics I (GQUIMI01-1-003)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 1 **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Laboratory and field work (7h), Practical session in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements:** There are no mandatory specific requirements, although it is necessary to be acquainted with the most basic phenomena, concepts, laws and results in Physics, corresponding to the contents of the Physics courses followed by the students while in high school, and specially the chapters on Mechanics and Waves. Additionally, it is necessary to master essential mathematical concepts (Algebra, Geometry, Trigonometry) and be fluent with and good at mathematical operations, as well as to understand the concepts and know the elemental techniques of differential and integral calculus.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=378>

## **General Physics II (GQUIMI01-1-004)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 1 **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Laboratory and field work (7h), Practical session in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements:** There are no compulsory requirements, but the students are recommended to be able to describe the most important physical phenomena, as well as to know the main concepts, laws and results of a basic course in Physics, as usually followed at a pre-university level. Essential knowledge of mathematical concepts and fluency in mathematical operations are needed, as well as acquaintance with the elemental techniques of differential and integral calculus.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=383>

### **Mathematics (GQUIMI01-1-005)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 1    **Semester:** Annual

**Type:** Core

**ECTS Credits:** 12

**Structure:** lectures (98h), Practical session in classes/seminars/workshops (14h), Group tutorials (8h).

**Requirements:** It is recommended that students have taken Mathematics in their last two years at High School, either in Natural Science and Health or in Science and Technology. Although key concepts of Calculus and Algebra (limits, derivatives, integrals, matrices) will be reviewed, a good prior knowledge of these concepts is highly recommended.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=386>

### **Numerical Calculus and Applied Statistics (GQUIMI01-1-006)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (4h).

**Requirements:** Students must know and apply correctly the mathematical concepts introduced in the scientific high school. Any knowledge obtained at the Mathematics course of this first year will be helpful and appreciated for the comprehension of this course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=388>

### **Analytical Chemistry I (GQUIMI01-2-001)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (49h), Practical session in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1410>

### **Experimentation in Analytical Chemistry I (GQUIMI01-2-002)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Laboratory and field work (66h), Practical session in classes/seminars/workshops (9h).

**Requirements:** As a prerequisite, the student must have passed the subjects: "General Chemistry" and "Basic Laboratory Operations and Computer Tools" in the first course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1412>

### **Physical Chemistry I (GQUIMI01-2-002)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (49h), Practical session in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements:** Students must have passed the following first-year courses: General Chemistry, Laboratory Basic Operations and Computer Tools. General Physics I and II. Mathematics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1414>

### **Experimentation in Physical Chemistry I (GQUIMI01-2-004)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Laboratory and field work (66h), Practical session in classes/seminars/workshops (9h).

**Requirements:** Students must have passed the following first-year courses: General Chemistry, Laboratory Basic Operations and Information Technology Tools. General Physics I and II. Mathematics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1416>

### **Concepts and Models in Inorganic Chemistry (GQUIMI01-2-005)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (49h), Practical session in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements:** Since this course is part of the Degree Basic Module, to register for this course it is necessary to have passed the first year courses "General Chemistry" and "Basic Laboratory Operations and Computing Tools".

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1420>

### **Chemistry of the Representative Elements (GQUIMI01-2-006)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (49h), Practical session in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements:** To take this subject, it is mandatory that the student has passed the subjects "General Chemistry", and "Basic Laboratory Operations and Information Technology Tools". In addition, as stated above, it is strongly recommended to have a good knowledge of the subject "Concepts and Models in Inorganic Chemistry", which is developed in the first term of the same academic year.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1421>

## **Organic Chemistry I (GQUIMI01-2-007)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 2    **Semester:** Annual

**Type:** Compulsory

**ECTS Credits:** 12

**Structure:** lectures (98h), Practical session in classes/seminars/workshops (14h), Group tutorials (8h).

**Requirements:** As for the rest of courses in the module, it will be mandatory to have passed the basic general chemistry subjects (topics: General Chemistry; Basic Laboratory Operations and Information Technology Tools).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1425>

## **Chemical Engineering (GQUIMI01-2-008)**

**Degree:** Bachelor's Degree in Chemistry

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (49h), Practical session in classes/seminars/workshops (7h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1429>

# Medicine and Health Sciences

## Degree in Nursing (Campus Cristo/HUCA, Oviedo)

**English for Nursing** (GENFER01-4-004)

**Degree:** Bachelor's Degree in Nursing

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure** Lectures (14h)Laboratory and field work (42h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1621>

# Social and Legal Sciences

## Degree in Accounting and Finance (Campus Cristo, Oviedo)

**Introduction to Economic Statistics** (GCONFI01-1-001)

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Laboratory and field work (4h).

**Requirements:** The course has no prerequisites. It is recommended that the student should be competent in mathematics, in any of its options, at secondary (high school) level.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1961>



### **Introduction to Accounting (GCONFI01-1-002)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** None

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1962>

### **Mathematics (GCONFI01-1-003)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Laboratory and field work (4h).

**Requirements:** It is recommended that students understand basic mathematical language, the concepts of number sets and matrices and that they understand and are able to work in an intuitive, geometrical formal way with the functions of one variable (elementary functions).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1963>

### **World Economic History (GCONFI01-1-004)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** A minimum knowledge of history, mathematics and statistics and a prior course in Economics would be recommendable, though not necessary

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1964>

### **World Economy (GCONFI01-1-005)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** None

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1965>

### **Sociology (GCONFI01-1-006)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** those relating to access to the Grade.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1966>

### **Introductory Microeconomics (GCONFI01-1-007)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Prerequisites for the subject are a high-school level of mathematics (for Spanish students, equivalent to the Bachillerato de Ciencias Sociales). The student should be capable of solving systems of equations, calculating derivatives, and representing and interpreting functions.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1967>

### **Introduction to Business (GCONFI01-1-009)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** those that regulate admission into the degree.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1969>

### **Business English I: Social Skills and Business Documents (GCONFI01-3-001)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 3    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (14h), Laboratory and field work (35h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3312>

### **Business Statistics (GCONFI01-3-002)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Laboratory and field work (4h).

**Requirements:** None

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3313>

### **Business English II: Oral Presentations and Intercultural Communication (GCONFI01-4-001)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (14h), Laboratory and field work (35h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3331>

### **Final Year Project (GCONFI01-4-016)**

**Degree:** Bachelor's Degree in Accounting and Finance

**Year:** 4    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Group tutorials (11h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3359>

## **Degree in Management and Business Administration (Campus Cristo, Oviedo)**

### **Sociology (GADEMP01-1-001)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), practical session in classes/seminars/workshops (21h), Group tutorials (4h)

**Requirements:** As a basic core subject, SOCIOLOGY does not demand specific skills or competencies apart from those relating to access to the Grade.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1980>

### **World Economic History (GADEMP01-1-002)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h); practical session in classes/seminars/workshops (21h); Group tutorials (4h)

**Requirements:** A minimum knowledge of history, mathematics and statistics and a prior course in Economics would be recommendable, though not necessary.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1981>

### **Introduction to Economic Statistics (GADEMP01-1-003)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Laboratory and field work (4h)

**Requirements:** The course has no prerequisites. It is recommended that the student should be competent in mathematics, in any of its options, at secondary (high school) level.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1994>

### **Mathematics (GADEMP01-1-004)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Laboratory and field work (4h).

**Requirements:** It is recommended that students understand basic mathematical language, the concepts of number sets and matrices and that they understand and are able to work in an intuitive, geometrical formal way with the functions of one variable (elementary functions).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1996>

### **World Economy (GADEMP01-1-006)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** "World Economy" is an introductory course and does not require students to have previous knowledge in the field.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1999>

### **Introductory Macroeconomics (GADEMP01-1-007)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Prerequisites for the subject are a high-school level of mathematics (for Spanish students, equivalent to the Bachillerato de Ciencias Sociales). The student should be capable of solving systems of equations, calculating derivatives, and representing and interpreting functions.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2000>

### **Introductory Microeconomics (GADEMP01-1-008)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Prerequisites for the subject are a high-school level of mathematics (for Spanish students, equivalent to the Bachillerato de Ciencias Sociales). The student should be capable of solving systems of equations, calculating derivatives, and representing and interpreting functions.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2001>

### **Introduction to Accounting (GADEMP01-1-009)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:**

The course requires no previous knowledge.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2002>

### **Introduction to Business (GADEMP01-1-010)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Laboratory and field work (4h).

**Requirements:** The prerequisites to follow this subject are just those that regulate admission into the degree.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2003>

### **Statistical Methods for Business (GADEMP01-2-001)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 2      **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Basic statistical knowledge (e.g., averages, dispersion measures, two-dimensional distributions), discussed in the Introduction to Economic Statistics course. Mathematical knowledge to understand proofs.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3127>

### **The Spanish and European Union Economy (GADEMP01-2-003)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 2      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 9

**Structure:** Lectures (42h), Practical sessions in classes/seminars/workshops (31,5h), Group tutorials (6h).

**Requirements:** No prior knowledge is required further than the typical of a student who has successfully passed the first year of the degree in ADE.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3138>

### **Economic Analysis for Business (GADEMP01-2-004)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 2      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 9

**Structure:** Lectures (42h), Practical sessions in classes/seminars/workshops (31,5h), Group tutorials (6h).

**Requirements:** Students should have completed introductory courses in microeconomics and macroeconomics equivalent to the first-year subjects of Introductory Microeconomics and Introductory Macroeconomics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3139>

## **Fundamentals of Marketing (GADEMP01-2-005)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 2      **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** There are no specific prerequisites beyond those in relation to the position of the subject on the second semester of the second academic year, as stated by the syllabus of the Degree in Business Administration. Specifically, the student would benefit from the understanding of the concepts explained in the First Year subjects "Introduction to Business" and "Introductory Microeconomics". The following competencies are desirable as well: ability for analysis and decision taking for the proposed cases, ability for teamwork and entrepreneurial skills, ability to search and access to different sources of information and ability to make oral presentations using the basic tools.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3141>

## **Corporate Finance (GADEMP01-2-006)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 2      **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** There are no mandatory requirements to take this subject but it is considered appropriate to be able to master the content of the subject Business Economics, first-year core subject in the Degree in Business Administration, as this subject gives the student an overview of the company, presenting the different functional areas and their interrelationships. On the other hand, it is advisable to have knowledge of the financial information prepared by the company as well as knowledge of financial mathematics. Also, as an instrumental aid, it is recommended some training in the management of basic computer programs, internet, as it facilitates reference consultation, organization, processing and presentation of information to be managed by students.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3143>

## **Cost Accounting and Management Control (GADEMP01-2-007)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 2      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** The contents of this course are tightly related to subjects like Organization and Management and Marketing. It is highly recommended that the student has previously studied Introduction to Accounting. The course also requires knowledge of the microeconomic models which describe how a company works. In addition, the student should be competent in basic mathematical and statistical operations.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3145>

### **Production Management (GADEMP01-2-008)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 2      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Although specific prerequisites have not been established to follow this subject, it is convenient for students to have passed the course "Introduction to Business", which is a core subject during the first year. Besides, in order to fully contribute to class discussion and follow the practical content of the course, students are expected to have basic computer skills to search for additional material for work assignments.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3146>

### **Human Resource Management (GADEMP01-2-009)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 2      **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** None.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3241>

### **Financial Markets and Institutions (GADEMP01-3-005)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 3      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Students require knowledge of the contents of the first-year mathematics course (especially knowledges concerning the third block: Financial Mathematics), and the contents of the first year 'course Introduction to Macroeconomics (especially the contents that refer to Item 4: Financial Markets). It would also be useful the knowledge acquired in the subjects of the first year's courses: World Economic History and the World Economy, as well as the knowledge acquired in the course of Corporate Finance (second year).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3180>



### **Financial Investments (GADEMP01-3-006)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 3      **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** There are no mandatory requirements to take this subject, although mastery of the content matter of the subjects Corporate Finance and Markets and Financial Institutions, compulsory subjects of the second and third year, respectively, in the Degree in Management and Business Administration (ADE) is considered appropriate. The reason is that the former subject gives students an overview of corporate financial decisions, while the latter provides knowledge about the financial environment in which firms make their financial decisions. It is likewise advisable to have knowledge of the financial information that companies draw up, as well as knowledge of financial mathematics. Moreover, as an instrumental aid, some training in the management of basic computer programs and the Internet is recommendable, as this facilitates reference consultation, organization, processing and presentation of information to be managed by students. Of course, prior knowledge of English is very important. This subject forms part of the Bilingual Itinerary which offers students the opportunity to study a substantial part of their subjects in English and take part in mobility programmes at foreign universities, where they can continue their education in this language.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3193>

### **Organizational Design (GADEMP01-3-007)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 3      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Basic notions of Business Administration are required; the ones that are typically taught in the "Introduction to Business" subject.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3147>

### **Strategic Management (GADEMP01-3-008)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 3      **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Although specific prerequisites have not been established to follow this subject, it is convenient for students to have passed the course Introduction to Business, which is a core subject during the first year. Besides, we will build on insights developed in other courses, such as understanding managerial economics, organization, and accountancy. Finally, to fully contribute to class discussion and follow the practical content of the course, students are expected to have basic computer skills to search for additional material for work assignments.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3306>

### **Analysis of Financial Statements (GADEMP01-3-009)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 3      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Although no mandatory prerequisites have been established to take this course, it is highly advisable that students review the content of the first-year course "Introduction to Accounting".

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3406>

### **Final Year Project (GADEMP01-4-001)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 4      **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 6

**Structure:** Lectures (0h), Group tutorials (11h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3123>

### **Political Science (GADEMP01-4-004)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 4      **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** The subject does not demand specific skills or competencies apart from those relating to access to the Grade.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3248>

### **Sociology of Work and Labour Relations (GADEMP01-4-005)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 4      **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** No specific requirements, apart from the general ones to the 4th year in the Economics and Business Administration Degrees.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3254>

### **Labour and Social Security Law (GADEMP01-4-010)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** None.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3279>

### **Financial Mathematics (GADEMP01-4-012)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Laboratory and field work (4h).

**Requirements:** Mathematics (code: GADEMP01-1-004). Foreign students should take into account that basic knowledge of financial mathematics is required. A summary of these prerequisites is available on the web: Niesen, J. (2012), Financial Mathematics I, University of Leeds, Chapter 1. Laws and examples focus on the financial markets of Spain. Therefore, at least an A2 level of Spanish is recommended.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3282>

### **Foreign Trade (GADEMP01-4-013)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** For proper monitoring of the course, knowledge on World Economics and Microeconomics are required. It is also desirable to have a basic knowledge on the tools of differential calculus. Additionally, it is recommended monitoring of the course International Economic Relations, for students of the Degree in Business Administration, and the course International Economy, in the case of the Grade in Economics. The combination of these courses allows the student to develop a curriculum oriented to foreign trade and international economic relations. However, it is not necessary to study neither previously mentioned subjects.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3283>

### **Competitive Analysis (GADEMP01-4-026)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 4      **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** The prerequisites to follow this subject are just those that regulate admission into the degree.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3404>

### **Statistical Analysis Data (GADEMP01-4-028)**

**Degree:** Bachelor's Degree in Management and Business Administration

**Year:** 4      **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (7h), Laboratory and field work (16h).

**Requirements:** A basic knowledge of descriptive and inferential statistics is required. Basic statistical knowledge (e.g., averages, dispersion measures, two-dimensional distributions), discussed in courses Introduction to Economic Statistics course. Basic knowledge on inferential statistics (courses on Statistical Methods for Business in the degree of Business, or Statistical and Econometric Methods in the degree of Economics). Mathematical knowledge to understand proofs.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3409>

## **Degree in Economics (Campus Cristo, Oviedo)**

### **Introduction to Accounting (GECONO01-1-002)**

**Degree:** Bachelor's Degree in Economics

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** None

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1977>

### **Introduction to Business (GECONO01-1-003)**

**Degree:** Bachelor's Degree in Economics

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** those that regulate admission into the degree

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1978>

### **Sociology (GECONO01-1-004)**

**Degree:** Bachelor's Degree in Economics

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** those that regulate admission into the degree.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1979>

### **World Economic History (GECONO01-1-005)**

**Degree:** Bachelor's Degree in Economics

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** A minimum knowledge of history, mathematics and statistics and a prior course in Economics would be recommendable, though not necessary.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1985>

### **Introduction to Economic Statistics (GECONO01-1-006)**

**Degree:** Bachelor's Degree in Economics

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Laboratory and field work (4h).

**Requirements:** The course has no prerequisites. It is recommended that the student should be competent in mathematics, in any of its options, at secondary (high school) level.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1988>

### **Mathematics (GECONO01-1-007)**

**Degree:** Bachelor's Degree in Economics

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Laboratory and field work (4h).

**Requirements:** It is recommended that students understand basic mathematical language, the concepts of number sets and matrices and that they understand and are able to work in an intuitive, geometrical formal way with the functions of one variable (elementary functions).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1989>

### **Introductory Microeconomics (GECONO01-1-008)**

**Degree:** Bachelor's Degree in Economics

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** It is recommended that students understand basic mathematical language, the concepts of number sets and matrices and that they understand and are able to work in an intuitive, geometrical formal way with the functions of one variable (elementary functions).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1991>

### **Introductory Macroeconomics (GECONO01-1-009)**

**Degree:** Bachelor's Degree in Economics

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** Prerequisites for the subject are a high-school level of mathematics (for Spanish students, equivalent to the Bachillerato de Ciencias Sociales). The student should be capable of solving systems of equations, calculating derivatives, and representing and interpreting functions.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1992>

### **World Economy (GECONO01-1-010)**

**Degree:** Bachelor's Degree in Economics

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** None

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=1993>

### **Financial Statement Analysis and Management Control (GECONO01-2-001)**

**Degree:** Bachelor's Degree in Economics

**Year:** 2      **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** It is highly recommended that students review the content of the first-year course Introduction to Accounting. The course also requires knowledge of the microeconomic models which describe how a company works. In addition, the student should be competent in basic mathematical and statistical operations.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3175>

### **Economy of the European Union (GECONO01-2-002)**

**Degree:** Bachelor's Degree in Economics

**Year:** 2      **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:**

No particular requirements are needed. Knowledge of other subjects, such as 'World Economy' and 'Spanish Economy' would be useful.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3202>

### **Statistical and Econometric Methods (GECONO01-2-008)**

**Degree:** Bachelor's Degree in Economics

**Year:** 2      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 9

**Structure:** Lectures (42h), Practical sessions in classes/seminars/workshops (21h), Laboratory and field work (13h).

**Requirements:** None

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3259>

### **Organizational Economics (GECONO01-3-002)**

**Degree:** Bachelor's Degree in Economics

**Year:** 3     **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** Basic notions of Business Administration are required; the ones that are typically taught in the "Introduction to Business" subject.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3206>

### **International Economics (GECONO01-3-003)**

**Degree:** Bachelor's Degree in Economics

**Year:** 3     **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** In principle, the requirements are the corresponding for a third year course Grade: have successfully taken advantage of the previous studies of the two previous years. Particularly, International Economics is closely related to: World Economy, Economy of the European Union, and the subjects about micro and macroeconomics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3231>

### **Public Economics I (GECONO01-3-004)**

**Degree:** Bachelor's Degree in Economics

**Year:** 3     **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** Although there are no prerequisites, it is highly advisable to have some basic abilities on microeconomics and statistics. In particular, it is recommendable that students get by welfare economics, probabilities and some techniques to evaluate distribution. Additionally, they might be used to operate on E-Campus.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3234>



## **Public Economics II (GECONO01-3-005)**

**Degree:** Bachelor's Degree in Economics

**Year:** 3      **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** Although there are no prerequisites, it is highly advisable to have some basic abilities on microeconomics and statistics. In particular, it is recommendable that students get by welfare economics, probabilities and some techniques to evaluate distribution. Additionally, they might be used to operate on E-Campus.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3236>

## **Competitive Analysis of the Firm (GECONO01-4-001)**

**Degree:** Bachelor's Degree in Economics

**Year:** 4      **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** The prerequisites to follow this subject are just those that regulate admission into the degree.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3134>

## **Statistical Data Analysis (GECONO01-4-002)**

**Degree:** Bachelor's Degree in Economics

**Year:** 4      **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Laboratory and field work (16h), Practical sessions in classes/seminars/workshops (7h).

**Requirements:** A basic knowledge of descriptive and inferential statistics is required. Basic statistical knowledge (e.g., averages, dispersion measures, two-dimensional distributions), discussed in courses Introduction to Economic Statistics course. Basic knowledge on inferential statistics (courses on Statistical Methods for Business in the degree of Business, or Statistical and Econometric Methods in the degree of Economics). Mathematical knowledge to understand proofs.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3172>

### **Political Science (GECONO01-4-003)**

**Degree:** Bachelor's Degree in Economics

**Year:** 4     **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** those relating to access to the Grade.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3176>

### **Foreign Trade (GECONO01-4-004)**

**Degree:** Bachelor's Degree in Economics

**Year:** 4     **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** For proper monitoring of the course, knowledge on World Economics and Microeconomics are required. It is also desirable to have a basic knowledge on the tools of differential calculus. Additionally, it is recommended monitoring of the course International Economic Relations, for students of the Degree in Business Administration, and the course International Economy, in the case of the Grade in Economics. The combination of these courses allows the student to develop a curriculum oriented to foreign trade and international economic relations. However, it is not necessary to study neither previously mentioned subjects.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3178>

### **Labour Law and Social Security (GECONO01-4-006)**

**Degree:** Bachelor's Degree in Economics

**Year:** 4     **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** None

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3186>

### **Sociology of Work and Labour Relations (GECONO01-4-020)**

**Degree:** Bachelor's Degree in Economics

**Year:** 4      **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** No specific requirements, apart from the general ones to the 4th year in the Economics and Business Administration Degrees.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3267>

### **Final Year Project (GECONO01-4-022)**

**Degree:** Bachelor's Degree in Economics

**Year:** 4      **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 6

**Structure:** Group Tutorials (11h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5809>

## **Degree in Public Administration and Management (Campus Cristo, Oviedo)**

### **Entrepreneurship (GGEADP01-4-016)**

**Degree:** Bachelor's Degree in Public Administration Management

**Year:** 4      **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group Tutorials (4h).

**Requirements:** Although not a requirement, it is recommended that the student has successfully completed an introduction to business course. Moreover, it will be easier to follow the course if the student has previously studied subjects such as accounting, finance, marketing, human resources and strategy.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19329>

## Degree in Law (Campus Cristo, Oviedo)

### Fundamental Rights and Democratic Citizenship (GDEREC01-3-008)

**Degree:** Bachelor's Degree in Law

**Year:** 3    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** Lectures (35h), Practical sessions in classes/seminars/workshops (21h).

**Requirements:** Students must have passed the compulsory subjects Constitutional Law I and Constitutional Law II. Proof of B2 English level required according to the following criteria: Escuela Oficial de Idiomas: Advance Level 2, TOEFL: > 87 points, IELTS: > 5,5 points, Cambridge First certificate. Other private or public intensive English courses: advanced conversation level, mentioning the equivalence to B2 level. Only 20 students (plus Erasmus students) are admitted (selection according to average mark of the Law Degree)

Students must have basic computer knowledge and have private or public (through the University Libraries) access to the internet, then most of the course's contents will be delivered through the Virtual Campus Platform.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2598>

## Degree in Commerce and Marketing (Campus Gijón)

### Introduction to Statistics (GCOMAR01-1-003)

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2223>

### Business Economics (GCOMAR01-1-004)

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** The prerequisites to follow this course are just those that regulate admission into the degree.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2227>

### **Introduction to Microeconomics (GCOMAR01-1-006)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Prerequisites for the subject are a high-school level of mathematics (for Spanish students, equivalent to the Bachillerato de Ciencias Sociales). The student should be capable of solving systems of equations, calculating derivatives, and representing and interpreting functions.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2234>

### **Introduction to Accounting (GCOMAR01-1-007)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** None.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2243>

### **Sociology (GCOMAR01-1-008)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** those that regulate admission into the degree.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2248>

### **World Economics (GCOMAR01-1-009)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** None.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2250>

### **English for Commerce I (GCOMAR01-2-002)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 2     **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure** Lectures (14h), Laboratory and field work (35h)

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3113>

### **International Economic Relations (GCOMAR01-2-003)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 2     **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** It is highly recommended that students have previously followed the three previous semesters and acquired the competences expected from 2nd year university students: reading, writing and oral expression capacities, team work capability, English language knowledge, use of ICT tools and, mainly, a true interest for learning. Also, a good knowledge of the 1st year subject World Economy is recommended.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3114>

### **Commercial Statistics (GCOMAR01-2-004)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 2     **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (14h), Group tutorials (2h), Laboratory and field work (7h).

**Requirements:** It would be interesting that the student does the subjects following the timetables established in the curriculum. In particular it is desirable that the student has passed the subject Introduction to Statistics, in the first academic year. As previously explained, many concepts and techniques developed in the present subject are based on fundamental statistical topics included in that subject.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3115>

### **Marketing Strategy (GCOMAR01-2-007)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 2      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** There are no specific prerequisites beyond those in relation to the position of the subject on the first semester of the second academic year, as stated by the syllabus of the Degree in Commerce and Marketing. Specifically, a basic understanding of the fundamentals of Business Administration, acquired in the first course – second semester subject “Introduction to Business” is convenient.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3119>

### **English for Commerce II (GCOMAR01-3-003)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 3      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure** Lectures (14h), Laboratory and field work (35h)

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3131>

### **International Trade (GCOMAR01-3-013)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 3      **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** As it is established in the Degree Programme (Memoria de Verificación del Grado), there are no requirements to follow this course. However, knowledge of prior courses contents is recommended.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3194>

### **English for Commerce III (GCOMAR01-4-003)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 4      **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure** Lectures (14h), Laboratory and field work (35h)

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3227>

### **Publicity and Public Relations (GCOMAR01-4-012)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 4      **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** There are no specific prerequisites beyond those in relation to the position of the subject on the schedule of the Degree in Commerce and Marketing. Specifically, a basic understanding of the fundamentals of other Marketing subjects, such as Strategic Marketing, Política de Marca y Producto, or Política de Promoción y Precios, Comercio Electrónico, Distribución y Canales de Comercialización, Investigación Comercial o Marketing Internacional can help the student to have a wider and deeper comprehension on the subject.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3276>

### **Business Creation (GCOMAR01-4-013)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 4      **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Although not a requirement, it is recommended that the student has successfully completed an introduction to business course. Moreover, it will be easier to follow the course if the student has previously studied subjects such as accounting, finance, marketing, human resources and strategy.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3280>

### **External Placement (GCOMAR01-4-016)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 4      **Semester:** Annual

**Type:** Internships

**ECTS Credits:** 12

**Structure**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3368>

### **Bachelor Degree Thesis (GCOMAR01-4-013)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 4      **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 6

**Structure**

**Requirements:**

**Course description and schedule:**



<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3369>

### **Introduction to Microeconomics (GCOMAR01-1-006)**

**Degree:** Bachelor's Degree in Commerce and Marketing

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Prerequisites for the subject are a high-school level of mathematics (for Spanish students, equivalent to the Bachillerato de Ciencias Sociales). The student should be capable of solving systems of equations, calculating derivatives, and representing and interpreting functions.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2234>

## **Degree in Tourism (Campus Gijón)**

### **Business Economics (GTURIS01-1-001)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** The prerequisites to follow this course are just those that regulate admission into the degree.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2240>

### **Sociology (GTURIS01-1-002)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** As a basic core subject, Sociology does not demand specific skills or competences apart from those relating to access to the degree.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2241>

### **Introduction to Economics (GTURIS01-1-004)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure** Lectures (35h), Practical sessions in classes/seminars/workshops (14h), Group tutorials (4h).

**Requirements:** Since all the students must fulfil the access requirements to the official university degrees established in the existing regulation, there is no additional compulsory requirement for those students interested in studying the subject of Introduction to Economics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2244>

### **Introduction to Accounting (GTURIS01-1-005)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** The course requires no previous knowledge

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2245>

### **Introduction to Statistics (GTURIS01-1-006)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2246>

### **English I. Social Skills for Tourism (GTURIS01-1-007)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure** Lectures (14h), Laboratory and field work (35h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2247>

### **World Economics (GTURIS01-1-009)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 1     **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** "World Economy" is an introductory course and does not require students to have previous knowledge in the field.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2251>

### **English II. Professional Writing for Tourism (GTURIS01-2-004)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 2     **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure** Lectures (14h), Laboratory and field work (35h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3878>

### **English III. Oral Presentations in Tourism (GTURIS01-3-001)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 3     **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure** Lectures (14h), Laboratory and field work (35h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3899>

### **Bachelor Degree Thesis (GTURIS01-4-006)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 4     **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 6

**Structure**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3934>

## **English IV. Professional Negotiations and Meetings for Tourism (GTURIS01-4-007)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 4    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure** Lectures (14h), Laboratory and field work (35h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3942>

## **Entrepreneurship (GTURIS01-4-012)**

**Degree:** Bachelor's Degree in Tourism

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure** Lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Although not a requirement, it is recommended that the student has successfully completed an introduction to business course. Moreover, it will be easier to follow the course if the student has previously studied subjects such as accounting, finance, marketing, human resources and strategy.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3947>

## **Degree in Infant Teaching Education (Campus Llamaquique, Oviedo)**

### **Workshop o Storytelling, Games and Songs for the Foreign Language Classroom (English) (GMEDIN01-0-001)**

**Degree:** Bachelor's Degree in Infant Teaching Education

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical sessions in classes/seminars/workshops (28h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3529>

## **Degree in Primary Teaching Education (Campus Llamaquique, Oviedo)**

### **Developmental Psychology (GMEDPR01-1-001)**

**Degree:** Bachelor's Degree in Primary Teaching Education

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2156>

### **Educational Psychology (GMEDPR01-1-002)**

**Degree:** Bachelor's Degree in Primary Teaching Education

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2175>

### **Communication in English for the Primary Education Bilingual Classroom (GMEDPR01-0-012)**

**Degree:** Bachelor's Degree in Primary Teaching Education

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** lectures (14h), Laboratory and field work (42h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3543>

### **Teaching Training for the Foreign Language Classroom I (English) (GMEDPR01-0-013)**

**Degree:** Bachelor's Degree in Primary Teaching Education

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3546>

## **Teaching Training for the Foreign Language Classroom II (English) (GMEDPR01-0-014)**

**Degree:** Bachelor's Degree in Primary Teaching Education

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3547>

## **Degree in Infant Teaching Education (Campus Padre Ossó, Oviedo)**

### **Developmental Psychology (AMEDIN01-1-003)**

**Degree:** Bachelor's Degree in Infant Teaching Education

**Year:** 1    **Semester:** Annual

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (38h), Practical session in classes/seminars/workshops (21h), Group tutorials (1h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2293>

## **Degree in Primary Teaching Education (Campus Padre Ossó, Oviedo)**

### **Developmental Psychology (AMEDPR01-1-001)**

**Degree:** Bachelor's Degree in Primary Teaching Education

**Year:** 1    **Semester:** Annual

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (38h), Practical session in classes/seminars/workshops (21h), Group tutorials (1h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2270>

## **Degree in Labour Relations and Human Resources (Campus Cristo, Oviedo)**

### **Introduction to Business (GRLYRH01-1-005)**

**Degree:** Bachelor's Degree in Labour Relations and Human Resources

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** The prerequisites to follow this subject are just those that regulate admission into the degree.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2305>

### **Introduction to Economic Statistics (GRLYRH01-1-006)**

**Degree:** Bachelor's Degree in Labour Relations and Human Resources

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** The course has no prerequisites. It is recommended that the student should be competent in mathematics, in any of its options, at secondary (high school) level.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2307>

### **Introduction to Accounting (GRLYRH01-1-007)**

**Degree:** Bachelor's Degree in Labour Relations and Human Resources

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** The course requires no previous knowledge.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2309>

### **Sociology (GRLYRH01-1-008)**

**Degree:** Bachelor's Degree in Labour Relations and Human Resources

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** As a basic core subject, Sociology does not demand specific skills or competencies apart from those relating to access to the Grade.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2312>

### **Business English I: Social Skills and Business Documents (GRLYRH01-0-016)**

**Degree:** Bachelor's Degree in Labour Relations and Human Resources

**Year:** 3    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** lectures (14h), Laboratory and field work (35h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3465>

### **Business Language II (GRLYRH01-0-017)**

**Degree:** Bachelor's Degree in Labour Relations and Human Resources

**Year:** 3    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** lectures (14h), Laboratory and field work (35h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3466>

## **Degree in Social Work (Campus Gijón)**

### **Introduction to Economics (GTRASO01-1-001)**

**Degree:** Bachelor's Degree in Social Work

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical sessions in classes/seminars/workshops (14h), Group tutorials (4h).

**Requirements:** Since all the students must fulfil the access requirements to the official university degrees established in the existing regulation, there is no additional compulsory requirement for those students interested in studying the subject of Introduction to Economics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2037>



### **Sociology (GTRASO01-1-003)**

**Degree:** Bachelor's Degree in Social Work

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** As a basic core subject, Sociology does not demand specific skills or competencies apart from those relating to access to the Grade.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2040>

### **Introduction to Statistics (GTRASO01-1-008)**

**Degree:** Bachelor's Degree in Social Work

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** As a basic core subject, Sociology does not demand specific skills or competencies apart from those relating to access to the Grade.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2049>

### **Entrepreneurship (GTRASO01-4-018)**

**Degree:** Bachelor's Degree in Social Work

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical sessions in classes/seminars/workshops (21h), Group tutorials (4h).

**Requirements:** Although not a requirement, it is recommended that the student has successfully completed an introduction to business course. Moreover, it will be easier to follow the course if the student has previously studied subjects such as accounting, finance, marketing, human resources and strategy.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19328>

# Engineering and Architecture

## Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering (Campus Mieres)

### Linear algebra (2GCIVMIN-1-001)

**Degree:** PCEO Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h); practical session in classes/seminars/workshops (21h); Laboratory and field work (9h)

**Requirements:** The student should have studied basic mathematics in secondary education (in the case of Spanish students, the courses Matemáticas I and II).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19727>

### Calculus (2GCIVMIN-1-002)

**Degree:** PCEO Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h); practical session in classes/seminars/workshops (21h); Laboratory and field work (9h)

**Requirements:** The student needs only knowledge of the contents of Mathematics I and II of high school to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19729>

### Statistics (2GCIVMIN-1-006)

**Degree:** PCEO Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1      **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h); practical session in classes/seminars/workshops (14h); Laboratory and field work (14h), Group tutorials (2h)

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19733>

### **Numerical Methods (2GCIVMIN-1-010)**

**Degree:** PCEO Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h); practical session in classes/seminars/workshops (7h); Laboratory and field work (23h)

**Requirements:** Knowledge of the basic elements of Algebra and Calculus is advisable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19737>

### **Mechanics & Thermodynamics (2GCIVMIN-1-005)**

**Degree:** PCEO Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h); practical session in classes/seminars/workshops (14h); Laboratory and field work (9h)

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19732>

### **Waves and Electromagnetism (2GCIVMIN-1-007)**

**Degree:** PCEO Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h); practical session in classes/seminars/workshops (14h); Laboratory and field work (9h)

**Requirements:** Studies on Physics during the last secondary year are strongly recommended. Previous mathematical knowledge on vector calculus, trigonometry and single variable function derivation and integration are regarded as essential.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19734>

### **Foundations of Computer Science (2GCIVMIN-1-004)**

**Degree:** PCEO Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** Studies on Physics during the last secondary year are strongly recommended. Previous mathematical knowledge on vector calculus, trigonometry and single variable function derivation and integration are regarded as essential.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19731>

### **Chemistry (2GCIVMIN-1-009)**

**Degree:** PCEO Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Laboratory and field work (14h), practical session in classes/seminars/workshops (7h), Group tutorials (2h).

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19736>

### **Thermal Engineering (2GCIVMIN-2-012)**

**Degree:** PCEO Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h); practical session in classes/seminars/workshops (7h); Laboratory and field work (14h), Group tutorials (2).

**Requirements:** In order to enroll of the subject it is strongly advisable that students have previously passed the subject "Mechanics and Thermodynamics" that belongs to the first year of the degree. It is also essential that they have acquired basic knowledge in "Calculus", "Linear Algebra" and "Mathematical Methods", subjects taught also in the first year of the degree. Specifically, they will have to master basic mass and heat balances, as well as the application of the First and Second Laws of Thermodynamics to closed systems and simple thermodynamics cycles.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19750>

### **Bachelor Thesis (Mention in Civil Construction) (GINGCI01-4-011)**

**Degree:** PCEO Bachelor's Degree in Civil Engineering

**Year:** 4      **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

**Structure:** practical session in classes/seminars/workshops (26h),

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=7658>

## **Degree in Mining & Energy Resources Engineering (Campus Mieres)**

### **Fundamental & Applied Geology (2GCIVMIN-2-001)**

**Degree:** Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 2      **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h); practical session in classes/seminars/workshops (7h); Laboratory and field work (21h), Group tutorials (2).

**Requirements:** No pre-requisites are needed. however it is advisable to have a basic knowledge on topographic maps and principles of geology from high school.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19739>

### **Bachelor Thesis (Speciality in Mining Drilling Prospecting) (GIMINA01-4-019)**

**Degree:** Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 4      **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

**Structure:** practical session in classes/seminars/workshops (26h),

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3979>

### **Bachelor Thesis (Speciality in Mine Operation/Electro-mechanical Mining Facilities) (GIMINA01-4-024)**

**Degree:** Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 4      **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

**Structure:** practical session in classes/seminars/workshops (26h),

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19458>

### **Bachelor Thesis (Speciality in Mineral Processing and Metallurgy) (GIMINA01-4-025)**

**Degree:** Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 4    **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

**Structure:** practical session in classes/seminars/workshops (26h),

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19459>

### **Bachelor Thesis (Speciality in Energy Resources, Material Combustible and Explosives) (GIMINA01-4-025)**

**Degree:** Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 4    **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

**Structure:** practical session in classes/seminars/workshops (26h),

**Requirements**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19460>

## **Degree in Industrial Technologies Engineering (Campus Gijón)**

### **Numerical Methods (GITECI01-1-001)**

**Degree:** Bachelor's Degree in Industrial Technologies Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h); practical session in classes/seminars/workshops (7h); Laboratory and field work (23h).

**Requirements:** It is advisable to have basic knowledge of Linear Algebra and Calculus.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2136>

### **Calculus (GITECI01-1-002)**

**Degree:** Bachelor's Degree in Industrial Technologies Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h); practical session in classes/seminars/workshops (21h); Laboratory and field work (9h).

**Requirements:** The student is supposed to be proficient in the high school courses Mathematics I and II. In case that another way of access to the University has been chosen, an equivalent previous mathematical preparation is required.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2137>

**Statistics (GITECI01-1-003)**

**Degree:** Bachelor's Degree in Industrial Technologies Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h); practical session in classes/seminars/workshops (14h); Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** The recommended previous competences are: ability to move from colloquial to mathematical language, and viceversa, use and understanding of basic mathematical symbols, understand and use real-valued functions, ability to perform elementary applications of the concept of derivative, and of the concept of integral in one variable, basic knowledge of the applications of the concept of limit of a function, ability to solve linear equation systems, ability to solve second grade equations, use of the logarithmic function and ability to make transformations between different measurement scales. The recommended previous knowledge are: the contents of the subject Matemáticas II or Matemáticas aplicadas a las Ciencias Sociales from the last year of high school studies and those of the courses in Mathematics within the High School Studies.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2138>

**Mechanics and Thermodynamics (GITECI01-1-004)**

**Degree:** Bachelor's Degree in Industrial Technologies Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h); practical session in classes/seminars/workshops (14h); Laboratory and field work (9h)

**Requirements:** It is advisable for students to have taken Physics in secondary school, and to have mathematical previous knowledge of vector calculus, trigonometry, derivation and integration of functions of a variable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2139>

**Waves and Electromagnetism (GITECI01-1-005)**

**Degree:** Bachelor's Degree in Industrial Technologies Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h); practical session in classes/seminars/workshops (14h); Laboratory and field work (9h)

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2140>

### **Foundations of Computer Science (GITECI01-1-006)**

**Degree:** Bachelor's Degree in Industrial Technologies Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h)

**Requirements:** None.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2141>

### **Graphic Expression (GITECI01-1-007)**

**Degree:** Bachelor's Degree in Industrial Technologies Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (14h), practical session in classes/seminars/workshops (14h), Group tutorials (2h)

**Requirements:** No previous knowledge needed. Nevertheless, it is recommended to have studied geometry and technical drawing subjects in High School.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2142>

### **Business (GITECI01-1-008)**

**Degree:** Bachelor's Degree in Industrial Technologies Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Practical session in classes/seminars/workshops (14h), Group tutorials (2h)

**Requirements:** Given that it is a first year subject, there are no particular prerequisites for attending this course. However, the Degree general entry requirements apply.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2145>

### **Linear Algebra (GITECI01-1-009)**

**Degree:** Bachelor's Degree in Industrial Technologies Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h)

**Requirements:** Students are expected to be proficient in the contents of Mathematics I and II of high school in order to be able to follow the course.



**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2148>

**Thermal Engineering (GITECI01-2-004)**

**Degree:** Bachelor's Degree in Industrial Technologies Engineering

**Year:** 2 **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h)

**Requirements:** In order to enroll of the subject it is strongly advisable that students have previously passed the subject "Mechanics and Thermodynamics" that belongs to the first year of the degree. It is also essential that they have acquired basic knowledge in "Calculus", "Linear Algebra" and "Mathematical Methods", subjects taught also in the first year of the degree. Specifically, they will have to master basic mass and heat balances, as well as the application of the First and Second Laws of Thermodynamics to closed systems and simple thermodynamics cycles.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2838>

## Degree in Electrical Engineering (Campus Gijón)

**Calculus (GIELEC01-1-001)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 1 **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h)

**Requirements:** The student is supposed to be proficient in the high school courses Mathematics I and II. In case that another way of access to the University has been chosen, an equivalent previous mathematical preparation is required.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2082>

**Numerical Methods (GIELEC01-1-002)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 1 **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (23h)

**Requirements:** It is advisable to have basic knowledge of Linear Algebra and Calculus.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2083>

### **Statistics (GIELEC01-1-003)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h)

**Requirements:** The recommended previous competences are: ability to move from colloquial to mathematical language, and viceversa, use and understanding of basic mathematical symbols, understand and use real-valued functions, ability to perform elementary applications of the concept of derivative, and of the concept of integral in one variable, basic knowledge of the applications of the concept of limit of a function, ability to solve linear equation systems, ability to solve second grade equations, use of the logarithmic function and ability to make transformations between different measurement scales. The recommended previous knowledge are: the contents of the subject Matemáticas II or Matemáticas aplicadas a las Ciencias Sociales from the last year of high school studies and those of the courses in Mathematics within the High School Studies.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2085>

### **Mechanics and Thermodynamics (GIELEC01-1-004)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:** It is advisable for students to have taken Physics in secondary school, and to have mathematical previous knowledge of vector calculus, trigonometry, derivation and integration of functions of a variable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2086>

### **Waves and Electromagnetism (GIELEC01-1-005)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2087>

### **Foundations of Computer Science (GIELEC01-1-006)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h)

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2088>

### **Graphic Expression (GIELEC01-1-007)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** No previous knowledge needed. Nevertheless, it is recommended to have studied geometry and technical drawing subjects in High School.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2089>

### **Business (GIELEC01-1-008)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Practical session in classes/seminars/workshops (14h), Group tutorials (2h).

**Requirements:** Given that it is a first year subject, there are no particular prerequisites for attending this course. However, the Degree general entry requirements apply.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2092>

### **Linear Algebra (GIELEC01-1-009)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** Students are expected to be proficient in the contents of Mathematics I and II of high school in order to be able to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2099>

### **Strength of Materials (GIELEC01-2-001)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is advisable that students have knowledge of the basics of the general laws of mechanics of rigid bodies and their subsequent application to solving the problems of engineering.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3242>

### **Theory of Machines and Mechanisms (GIELEC01-2-002)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is recommended prior knowledge of the basics of the general laws of mechanics of rigid bodies and their subsequent application to solving the problems of engineering. It is highly desirable that students have taken the subjects of "Mechanics and Thermodynamics", "Linear Algebra" and "Calculation" of the 1st semester of 1st year. Students should have knowledge of: elementary vector calculus. Concept of derivative and integral, with application to the elementary functions, system of linear equations and matrices, basic concepts of kinematics and dynamics of the particle, concept of force and Newton's laws. Work, kinetic and potential energy and energy conservation, kinematics and dynamics of rigid bodies. Geometry of masses. Inertias and management of software at user level.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3244>

### **Advanced Calculus (GIELEC01-2-004)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The prerequisites to this subject are integral calculus in one variable, differential calculus in simple and multiple variables, and vector spaces. All of these contents are included in the subjects Calculus and Algebra in the first year.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3252>

### **Electronic Technology (GIELEC01-2-005)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3258>

### **Automation and Control Systems (GIELEC01-2-006)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** It is recommended to have basic knowledge on Linear Algebra, Differential and Integral Calculus, Numerical Methods, Chemistry, Graphic Expression, Mechanics and Thermodynamics, Waves and Electromagnetism and Computer Basics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3260>

### **Electrical Engineering Fundamentals (GIELEC01-2-007)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** Knowledge of Circuit Theory is essential in order for the student to adequately follow this course. Additionally, basic notions of the following concepts are advisable: Linear Algebra, Differential and Integral Calculus, Numerical Methods, Waves and Electromagnetics, Electrical Technology and Computer Basics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3264>

### **Manufacturing Processes (GIELEC01-2-008)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is recommended that students have previous knowledge about Physics, Chemistry, Material Science, Graphics and Mathematics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3268>

### **Fluid Mechanics (GIELEC01-2-009)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** Being a subject based upon other different and basic subjects, it is strongly recommended for the students to have previous knowledge on the topics: linear algebra, vector and matrix calculus, derivatives, integrals and solution of differential equations, mechanics and thermodynamics: kinematics, dynamics and energy transfer fundamentals, thermal engineering: thermodynamic properties of materials and thermal processes and resistance of materials: states of stress and strain in continuous media.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3271>

### **Thermal Engineering (GIELEC01-2-010)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** In order to enroll of the subject it is strongly advisable that students have previously passed the subject "Mechanics and Thermodynamics" that belongs to the first year of the degree. It is also essential that they have acquired basic knowledge in "Calculus", "Linear Algebra" and "Mathematical Methods", subjects taught also in the first year of the degree. Specifically, they will have to master basic mass and heat balances, as well as the application of the First and Second Laws of Thermodynamics to closed systems and simple thermodynamics cycles.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3273>

### **Introduction to Design of Rotating Electrical Machines (GIELEC01-4-019)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 4    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (21h), Group tutorials (2h).

**Requirements:** To course this subject basic knowledge about Electrical Rotating Machines is needed. It is strongly recommended to have coursed "Máquinas Eléctricas I" or any other general course in this branch of studies. Since the topics of the course are strongly specialized no other requirement exists. In fact, the industrial orientation of this course allows the students to success even in the case they are not specialists, provided they have a basic knowledge about the principles of operation of electrical motors, especially about the induction motor.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3505>

### **External Practices (GIELEC01-4-022)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 4    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3758>

### **Graduation Final Work (GIELEC01-4-023)**

**Degree:** Bachelor's Degree in Electrical Engineering

**Year:** 4    **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3760>

## **Degree in Industrial Electronics and Automatics Engineering (Campus Gijón)**

### **Calculus (GIELIA01-1-001)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h)

**Requirements:** The student is supposed to be proficient in the high school courses Mathematics I and II. In case that another way of access to the University has been chosen, an equivalent previous mathematical preparation is required.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2062>

### **Numerical Methods (GIELIA01-1-002)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (23h)

**Requirements:** It is advisable to have basic knowledge of Linear Algebra and Calculus.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2063>

### **Statistics (GIELIA01-1-003)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h)

**Requirements:** The recommended previous competences are: ability to move from colloquial to mathematical language, and viceversa, use and understanding of basic mathematical symbols, understand and use real-valued functions, ability to perform elementary applications of the concept of derivative, and of the concept of integral in one variable, basic knowledge of the applications of the concept of limit of a function, ability to solve linear equation systems, ability to solve second grade equations, use of the logarithmic function and ability to make transformations between different measurement scales. The recommended previous knowledge are: the contents of the subject Matemáticas II or Matemáticas aplicadas a las Ciencias Sociales from the last year of high school studies and those of the courses in Mathematics within the High School Studies.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2066>

### **Mechanics and Thermodynamics (GIELIA01-1-004)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:** It is advisable for students to have taken Physics in secondary school, and to have mathematical previous knowledge of vector calculus, trigonometry, derivation and integration of functions of a variable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2067>

### **Waves and Electromagnetism (GIELIA01-1-005)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2068>



### **Foundations of Computer Science (GIELIA01-1-006)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2070>

### **Graphic Expression (GIELIA01-1-007)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h)..

**Requirements:** No previous knowledge needed. Nevertheless, it is recommended to have studied geometry and technical drawing subjects in High School.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2071>

### **Business (GIELIA01-1-008)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Practical session in classes/seminars/workshops (14h), Group tutorials (2h).

**Requirements:** Given that it is a first year subject, there are no particular prerequisites for attending this course. However, the Degree general entry requirements apply.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2073>

### **Linear Algebra (GIELIA01-1-009)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** Students are expected to be proficient in the contents of Mathematics I and II of high school in order to be able to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2074>

### **Strength of Materials (GIELIA01-2-001)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is advisable that students have knowledge of the basics of the general laws of mechanics of rigid bodies and their subsequent application to solving the problems of engineering.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2566>

### **Theory of Machines and Mechanisms (GIELIA01-2-002)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is recommended prior knowledge of the basics of the general laws of mechanics of rigid bodies and their subsequent application to solving the problems of engineering. It is highly desirable that students have taken the subjects of "Mechanics and Thermodynamics", "Linear Algebra" and "Calculation" of the 1st semester of 1st year. Students should have knowledge of: elementary vector calculus. Concept of derivative and integral, with application to the elementary functions, system of linear equations and matrices, basic concepts of kinematics and dynamics of the particle, concept of force and Newton's laws. Work, kinetic and potential energy and energy conservation, kinematics and dynamics of rigid bodies. Geometry of masses. Inertias and management of software at user level.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2567>

### **Advanced Calculus (GIELIA01-2-004)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h)

**Requirements:** The prerequisites to this subject are integral calculus in one variable, differential calculus in simple and multiple variables, and vector spaces. All of these contents are included in the subjects Calculus and Algebra in the first year.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2578>

### **Electronic Technology (GIELIA01-2-005)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 2 **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** Knowledge of Circuit Theory is essential in order for the student to adequately follow this course. Additionally, basic notions of the following concepts are advisable: Linear Algebra, Differential and Integral Calculus, Numerical Methods, Waves and Electromagnetics, Electrical Technology and Computer Basics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2580>

### **Electrical Engineering Fundamentals (GIELIA01-2-006)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 2 **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2582>

### **Automation and Control Systems (GIELIA01-2-007)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 2 **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** It is recommended to have basic knowledge on Linear Algebra, Differential and Integral Calculus, Numerical Methods, Chemistry, Graphic Expression, Mechanics and Thermodynamics, Waves and Electromagnetism and Computer Basics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2585>

### **Manufacturing Processes (GIELIA01-2-008)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 2 **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is recommended that students have previous knowledge about Physics, Chemistry, Material Science, Graphics and Mathematics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2950>

### **Fluid Mechanics (GIELIA01-2-009)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** Being a subject based upon other different and basic subjects, it is strongly recommended for the students to have previous knowledge on the topics: linear algebra, vector and matrix calculus; derivatives, integrals and solution of differential equations; mechanics and thermodynamics: kinematics, dynamics and energy transfer fundamentals; thermal engineering: thermodynamic properties of materials and thermal processes and resistance of materials: states of stress and strain in continuous media.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2951>

### **Thermal Engineering (GIELIA01-2-010)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** In order to enroll of the subject it is strongly advisable that students have previously passed the subject "Mechanics and Thermodynamics" that belongs to the first year of the degree. It is also essential that they have acquired basic knowledge in "Calculus", "Linear Algebra" and "Mathematical Methods", subjects taught also in the first year of the degree. Specifically, they will have to master basic mass and heat balances, as well as the application of the First and Second Laws of Thermodynamics to closed systems and simple thermodynamics cycles.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2954>

### **Process Monitoring and Control (GIELIA01-4-004)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:**

It is highly recommendable that the student has already done the subject "Control Systems" scheduled in the third year (or having studied an equivalent introductory control course from other studies) that covers classic control techniques, including root locus controller design, design of controllers in the frequency domain and an introduction to state space control. In this subject all these matters will be complemented with supplementary material, with a special focus on industrial processes and introducing new concepts and techniques for monitoring and supervision of this kind of processes.

It is also highly convenient that the student has a background on Matlab/Simulink and specially in the Matlab control toolbox that has been introduced in the subject of "Control Systems".

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2853>

### **Degree Final Project (GIELIA01-4-022)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 4    **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3978>

### **Internship (GIELIA01-4-023)**

**Degree:** Bachelor's Degree in Industrial Electronics and Automatics Engineering

**Year:** 4    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3986>

## **Degree in Engineering in Geomatic and Topography (Campus Mieres)**

### **Linear Algebra (GIGETO01-1-001)**

**Degree:** Bachelor's Degree in Engineering in Geomatic and Topography

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h)

**Requirements:** The student should have studied basic mathematics in secondary education (in the case of Spanish students, the courses Matemáticas I and II).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2157>

### **Calculus (GIGETO01-1-002)**

**Degree:** Bachelor's Degree in Engineering in Geomatic and Topography

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h)

**Requirements:** The student needs only knowledge of the contents of Mathematics I and II of high school to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2158>

### **Informatics Fundamentals (GIGETO01-1-004)**

**Degree:** Bachelor's Degree in Engineering in Geomatic and Topography

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2162>

### **Mechanics and Thermodynamics (GIGETO01-1-005)**

**Degree:** Bachelor's Degree in Engineering in Geomatic and Topography

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2164>

### **Statistics (GIGETO01-1-006)**

**Degree:** Bachelor's Degree in Engineering in Geomatic and Topography

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2166>

### **Waves and Electromagnetism (GIGETO01-1-007)**

**Degree:** Bachelor's Degree in Engineering in Geomatic and Topography

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h)

**Requirements:** Studies on Physics during the last secondary year are strongly recommended. Previous mathematical knowledge on vector calculus, trigonometry and single variable function derivation and integration are regarded as essential.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2168>

### **Chemistry (GIGETO01-1-009)**

**Degree:** Bachelor's Degree in Engineering in Geomatic and Topography

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2173>

### **Numeric Methods (GIGETO01-1-010)**

**Degree:** Bachelor's Degree in Engineering in Geomatic and Topography

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (23h).

**Requirements:** Knowledge of the basic elements of Algebra and Calculus is advisable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2176>

### **Bachelor Thesis (GIGETO01-4-014)**

**Degree:** Bachelor's Degree in Engineering in Geomatics and Topography

**Year:** 4    **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 6

**Structure:** Practical session in classes/seminars/workshops (26h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=4014>

## **Degree in Telecommunication Technologies and Services Engineering (Campus Gijón)**

### **Foundations of Computer Science (GITELE01-1-004)**

**Degree:** Bachelor's Degree in Telecommunication Technologies and Services Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2147>

### **Mechanics and Thermodynamics (GITELE01-1-005)**

**Degree:** Bachelor's Degree in Telecommunication Technologies and Services Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h)

**Requirements:** It is advisable for students to have taken Physics in secondary school, and to have mathematical previous knowledge of vector calculus, trigonometry, derivation and integration of functions of a variable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2149>

### **Statistics (GITELE01-1-006)**

**Degree:** Bachelor's Degree in Telecommunication Technologies and Services Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h)

**Requirements:** The recommended previous competences are: ability to move from colloquial to mathematical language, and viceversa, use and understanding of basic mathematical symbols, understand and use real-valued functions, ability to perform elementary applications of the concept of derivative, and of the concept of integral in one variable, basic knowledge of the applications of the concept of limit of a function, ability to solve linear equation systems, ability to solve second grade equations, use of the logarithmic function and ability to make transformations between different measurement scales. The recommended previous knowledge are: the contents of the subject Matemáticas II or Matemáticas aplicadas a las Ciencias Sociales from the last year of high school studies and those of the courses in Mathematics within the High School Studies.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2150>

### **Waves and Electromagnetism (GITELE01-1-007)**

**Degree:** Bachelor's Degree in Telecommunication Technologies and Services Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2151>



### **Linear Algebra (GITELE01-1-008)**

**Degree:** Bachelor's Degree in Telecommunication Technologies and Services Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** Students are expected to be proficient in the contents of Mathematics I and II of high school in order to be able to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2153>

### **Calculus (GITELE01-1-009)**

**Degree:** Bachelor's Degree in Telecommunication Technologies and Services Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The student is supposed to be proficient in the high school courses Mathematics I and II. In case that another way of access to the University has been chosen, an equivalent previous mathematical preparation is required.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2154>

### **Business (GITELE01-1-010)**

**Degree:** Bachelor's Degree in Telecommunication Technologies and Services Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Practical session in classes/seminars/workshops (14h), Group tutorials (2h).

**Requirements:** Given that it is a first year subject, there are no particular prerequisites for attending this course. However, the Degree general entry requirements apply. **Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2155>

### **Business (GITELE01-1-010)**

**Degree:** Bachelor's Degree in Telecommunication Technologies and Services Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Practical session in classes/seminars/workshops (14h), Group tutorials (2h).

**Requirements:** Given that it is a first year subject, there are no particular prerequisites for attending this course. However, the Degree general entry requirements apply. **Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2155>

## **Degree in Forestry and Sustainable Natural Resources Management (Campus Mieres)**

### **Linear Algebra (GIFOMN01-1-001)**

**Degree:** Bachelor's Degree in Forestry and Sustainable Natural Resources Management

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** Students are expected to be proficient in the contents of Mathematics I and II of high school in order to be able to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&assignatura=2126>

### **Calculus (GIFOMN01-1-002)**

**Degree:** Bachelor's Degree in Forestry and Sustainable Natural Resources Management

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The student needs only knowledge of the contents of Mathematics I and II of high school to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&assignatura=2127>

### **Statistics (GIFOMN01-1-004)**

**Degree:** Bachelor's Degree in Forestry and Sustainable Natural Resources Management

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&assignatura=2129>

### **Computer Fundamentals (GIFOMN01-1-005)**

**Degree:** Bachelor's Degree in Forestry and Sustainable Natural Resources Management

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&assignatura=2130>

### **Mechanics and Thermodynamics (GIFOMN01-1-006)**

**Degree:** Bachelor's Degree in Forestry and Sustainable Natural Resources Management

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2131>

### **Numeric Methods (GIFOMN01-1-007)**

**Degree:** Bachelor's Degree in Forestry and Sustainable Natural Resources Management

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (23h).

**Requirements:** Knowledge of the basic elements of Algebra and Calculus is advisable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2132>

### **Waves and Electromagnetism (GIFOMN01-1-008)**

**Degree:** Bachelor's Degree in Forestry and Sustainable Natural Resources Management

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:** Studies on Physics during the last secondary year are strongly recommended. Previous mathematical knowledge on vector calculus, trigonometry and single variable function derivation and integration are regarded as essential.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2133>

### **Chemistry (GIFOMN01-1-009)**

**Degree:** Bachelor's Degree in Forestry and Sustainable Natural Resources Management

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2134>

### **Bachelor Thesis (GIFOMN01-4-015)**

**Degree:** Bachelor's Degree in Forestry and Sustainable Natural Resources Management

**Year:** 4    **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

Practical session in classes/seminars/workshops (26h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2749>

## **Degree in Computer Science - Software Engineering (Campus Llamaquique, Oviedo)**

**Foundations of Computer Science (GIISOF01-1-001)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** As a basic course, it doesn't require any specific prior knowledge. However, being familiar with the computer environment will make the student feel more comfortable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2159>

**Linear Algebra (GIISOF01-1-002)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (28h), Laboratory and field work (9h).

**Requirements:** The student will need the accomplishment of Mathematics I and II acquired at baccalaureate in high school to follow properly this subject.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2163>

**Business (GIISOF01-1-003)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Practical session in classes/seminars/workshops (14h), Group tutorials (2h).

**Requirements:** Since it is a first year subject, there are no formal prerequisites to undertake this course. However, the Degree general entry requirements apply.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2169>

### **Calculus (GIISOF01-1-004)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The student needs only knowledge of the contents of Mathematics I and II of high school to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2170>

### **Waves and Electromagnetism (GIISOF01-1-005)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:** It is advisable that students have taken Physics in their 2nd course of Secondary School and have previous knowledge on mathematical vector calculus, trigonometry and differential and integral of functions of one variable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2174>

### **Statistics (GIISOF01-1-006)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** The recommended previous competences are: ability to move from colloquial to mathematical language, and viceversa, use and understanding of basic mathematical symbols, understand and use real-valued functions, ability to perform elementary applications of the concept of derivative, and of the concept of integral in one variable, basic knowledge of the applications of the concept of limit of a function, ability to solve linear equation systems, ability to solve second grade equations, use of the logarithmic function and ability to make transformations between different measurement scales. The recommended previous knowledge are: the contents of the subject Matemáticas II or Matemáticas aplicadas a las Ciencias Sociales from the last year of high school studies and those of the courses in Mathematics within the High School Studies.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2177>

## **Introduction to Programming/ Programming Fundamentals (GIISOF01-1-007)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** None.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2179>

## **Computers and Networks Fundamentals (GIISOF01-1-008)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** Students registered in this course are supposed to have completed *Foundations of Computer Science*, taught in the first half of the year.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2183>

## **Automatas and Discrete Mathematics (GIISOF01-1-009)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 1    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** The training provided by technical subjects in high-school is enough to understanding the concepts presented in this subject. Anyway, as this is a 2nd semester subject, the student should have already completed the course on *Computing Basics* and *Introduction to Programming*, so he has enough computer and programming skills to successfully solve the assignments of *Automata and Discrete Mathematics*. It would also be advisable to have successfully completed *Algebra*, which is also taught in the first semester.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2185>

### **Programming Methodology (GIISOF01-1-010)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 1    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** The major requirement is to have fulfilled (totally or partially) the learning objectives of the subject Introduction to Programming taught in the first semester of the first year.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2186>

### **Electronic Technology of Computers (GIISOF01-2-001)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** It is recommended that students have completed the first year courses: "Waves and Electromagnetism", "Fundamentals of Computers and Networks" and the subject "Introduction to Programming"..

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2975>

### **Computer Architecture (GIISOF01-2-002)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** Computer Architecture students are supposed to be taught in Computer and Network Fundamentals in the first year, as well as in Programming Fundamentals.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2976>

### **Data Structures (GIISOF01-2-003)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** This course requires previous knowledge and skills on computer programs design and writing. Students are expected to have succeeded in first year programming courses, specially: "Introduction to Programming" and "Programming Methodology".

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2977>

## **Programming Technologies and Paradigms (GIISOF01-2-004)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** The prerequisites for this course are: Knowledge of imperative procedure-based programming, being skillful in the development of applications in an imperative language, preferably in C, Knowledge of the object-oriented paradigm, experience in the development of object-oriented software, preferably in Java, little knowledge of concurrent programming. Considering the subjects of the Software Engineering degree, the student must have passed the following courses: "Computer Science Foundations", "Introduction to Programming", "Programming Methodology".

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2978>

## **Computability (GIISOF01-2-005)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** As this course is a continuation of the Automata and Discrete Mathematics course, it requires the students to demonstrate that they are able to apply a collection of skills that they should have learned in this prior course. In addition, it is strongly recommended to have acquired the skills provided by the Programming Methodology course as well as some notions about math language.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2979>



## **Operating Systems (GIISOF01-2-006)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** To properly understand the subject being treated and to study the course in good condition is required that students follow the recommended route in memory check. Specifically, it is important that the student has previously completed the following courses: "Computer Basics", "Computer Architecture", "Statistics", "Computer Electronics Technology" These courses introduce concepts that will be taken for granted.

Students must have these skills prior to taking this course: ability to solve math problems that may arise in engineering, ability to apply knowledge of statistics and optimization, ability to design, develop, select and evaluate applications and systems, ensuring reliability, safety and quality, according to ethical principles and the laws and regulations; knowledge and application of basic algorithmic procedures of information technology to design solutions to problems by analyzing the appropriateness and complexity of the proposed algorithms; knowledge, design and efficient use of data types and structures to solve a problem, ability to learn, understand and evaluate the structure and architecture of computers and the basic components that comprise them.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2980>

## **Human Computer Interaction (GIISOF01-2-007)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** To have passed every learning goal corresponding to the programming courses of the first year.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2981>

## **Databases (GIISOF01-2-008)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** First year and first semester of the second year taken (with an emphasis in Introduction to Programming, Programming Methodology, and Automata and Discrete Mathematics), and specially Data Structures. It is also a bonus to be enrolled in the Operating Systems course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2988>

### **Numerical Computation (GIISOF01-2-009)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (23h).

**Requirements:** It is advisable to have basic knowledge of linear algebra and calculus.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2990>

### **Algorithmics (GIISOF01-2-010)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** To address this course it is recommended to have acquired the competences of the following courses of first year: Introduction to Programming, Automata and Discrete Mathematics, and Programming Methodology, and the following course of second year: Data Structures. Note that it is also important to study Technologies and Programming Paradigms simultaneously with Algorithms since the latter one is also a second term course of the second year.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2992>

### **Software Architecture (GIISOF01-3-008)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 3    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** To take this course, it is recommended to have successfully acquired the learning objectives established in the subjects "Software Process Engineering" and "Software Design" of the first semester of the third year.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3011>

### **Programming Languages Design (GIISOF01-3-009)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 3    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (21h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** The prerequisites for this course are: experience in the development of object-oriented software, using the Java programming language; being skillful in object-oriented software design; experience using and identifying the classical object-oriented design patterns; knowledge of the foundations of software architecture; knowledge of basic programming language theory, grammars and automata; experience programming an assembly language and knowledge of computer structure and architecture

Considering the subjects of the Software Engineering degree, the student must have passed the following courses: "Programming Technology and Paradigms", "Automata and Discrete Mathematics", "Software Design", "Data and Information Structure", "Computer Architecture".

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3013>

### **Degree Project (GIISOF01-4-007)**

**Degree:** Bachelor's Degree in Computer Science - Software Engineering

**Year:** 4    **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3029>

## **Degree in Informatics Engineering in Information Technology (Campus Llamaquique, Oviedo)**

### **Linear Algebra (GIITIN01-1-001)**

**Degree:** Bachelor's Degree in Informatics Engineering in Information Technology

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** Students are expected to be proficient in the contents of Mathematics I and II of high school in order to be able to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2008>

### **Calculus (GIITIN01-1-002)**

**Degree:** Bachelor's Degree in Informatics Engineering in Information Technology

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The student is supposed to be proficient in the high school courses Mathematics I and II. In case that another way of access to the University has been chosen, an equivalent previous mathematical preparation is required.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2011>

### **Enterprise (GIITIN01-1-003)**

**Degree:** Bachelor's Degree in Informatics Engineering in Information Technology

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Practical session in classes/seminars/workshops (14h), Group tutorials (2h).

**Requirements:** Given that it is a first year subject, there are no particular prerequisites for attending this course. However, the Degree general entry requirements apply.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2028>

### **Fundamentals of Informatics (GIITIN01-1-004)**

**Degree:** Bachelor's Degree in Informatics Engineering in Information Technology

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2033>

### **Statistics (GIITIN01-1-003)**

**Degree:** Bachelor's Degree in Informatics Engineering in Information Technology

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** The recommended previous competences are: ability to move from colloquial to mathematical language, and viceversa; use and understanding of basic mathematical symbols; understand and use real-valued functions; ability to perform elementary applications of the concept of derivative, and of the concept of integral in one variable; basic knowledge of the applications of the concept of limit of a function; ability to solve linear equation systems: ability to solve second grade equations; use of the logarithmic function; ability to make transformations between different measurement scales.

The recommended previous knowledge are: the contents of the subject "Matemáticas II" or "Matemáticas aplicadas a las Ciencias Sociales" from the last year of high school studies; and those of the courses in Mathematics within the High School Studies.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2043>

### **Waves and Electromagnetics (GIITIN01-1-007)**

**Degree:** Bachelor's Degree in Informatics Engineering in Information Technology

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2045>

## **Degree in Mechanical Engineering (Campus Gijón)**

### **Calculus (GIMECA01-1-001)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The student is supposed to be proficient in the high school courses Mathematics I and II. In case that another way of access to the University has been chosen, an equivalent previous mathematical preparation is required.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2104>

### **Numerical Methods (GIMECA01-1-002)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (23h).

**Requirements:** It is advisable to have basic knowledge of Linear Algebra and Calculus.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2110>

### **Foundations of Computer Science (GIMECA01-1-003)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2112>

### **Linear Algebra (GIMECA01-1-004)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h),

**Requirements:** Students are expected to be proficient in the contents of Mathematics I and II of high school in order to be able to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2114>

### **Business (GIMECA01-1-005)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Practical session in classes/seminars/workshops (14h), Group tutorials (2h).

**Requirements:** Given that it is a first year subject, there are no particular prerequisites for attending this course. However, the Degree general entry requirements apply.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2116>

### **Statistics (GIMECA01-1-006)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** The recommended previous competences are: ability to move from colloquial to mathematical language, and viceversa; use and understanding of basic mathematical symbols; understand and use real-valued functions; ability to perform elementary applications of the concept of derivative, and of the concept of integral in one variable; basic knowledge of the applications of the concept of limit of a function; ability to solve linear equation systems: ability to solve second grade equations; use of the logarithmic function; ability to make transformations between different measurement scales.

The recommended previous knowledge are: the contents of the subject "Matemáticas II" or "Matemáticas aplicadas a las Ciencias Sociales" from the last year of high school studies; and those of the courses in Mathematics within the High School Studies.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2117>

### **Graphic Expression (GIMECA01-1-007)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** No previous knowledge needed. Nevertheless, it is recommended to have studied geometry and technical drawing subjects in High School.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2120>

### **Mechanics and Thermodynamics (GIMECA01-1-008)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:** It is advisable for students to have taken Physics in secondary school, and to have mathematical previous knowledge of vector calculus, trigonometry, derivation and integration of functions of a variable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2122>

### **Waves and Electromagnetism (GIMECA01-1-009)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2124>

### **Strength of Materials (GIMECA01-2-001)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is advisable that students have knowledge of the basics of the general laws of mechanics of rigid bodies and their subsequent application to solving the problems of engineering.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3304>

### **Theory of Machines and Mechanisms (GIMECA01-2-002)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is recommended prior knowledge of the basics of the general laws of mechanics of rigid bodies and their subsequent application to solving the problems of engineering. It is highly desirable that students have taken the subjects of "Mechanics and Thermodynamics", "Linear Algebra" and "Calculus" of the 1st semester of 1st year.

Students should have knowledge of: Elementary vector calculus. Concept of derivative and integral, with application to the elementary functions; system of linear equations and matrices; basic concepts of kinematics and dynamics of the particle. Concept of force and Newton's laws. Work, kinetic and potential energy and energy conservation; kinematics and dynamics of rigid bodies. Geometry of masses. Inertias and management of software at user level.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3305>



### **Advanced Calculus (GIMECA01-2-004)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year: 2 Semester: 1**

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The prerequisites to this subject are integral calculus in one variable, differential calculus in simple and multiple variables, and vector spaces. All of these contents are included in the subjects Calculus and Algebra in the first year.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3310>

### **Automation and Control Systems (GIMECA01-2-005)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year: 2 Semester: 2**

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** It is recommended to have basic knowledge on Linear Algebra, Differential and Integral Calculus, Numerical Methods, Chemistry, Graphic Expression, Mechanics and Thermodynamics, Waves and Electromagnetism and Computer Basics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3325>

### **Electronic Technology (GIMECA01-2-006)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year: 2 Semester: 2**

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** Knowledge of Circuit Theory is essential in order for the student to adequately follow this course. Additionally, basic notions of the following concepts are advisable: Linear Algebra, Differential and Integral Calculus, Numerical Methods, Waves and Electromagnetics, Electrical Technology and Computer Basics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3327>

### **Manufacturing Processes (GIMECA01-2-007)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is recommended that students have previous knowledge about Physics, Chemistry, Material Science, Graphics and Mathematics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3330>

### **Fluid Mechanics (GIMECA01-2-008)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** Being a subject based upon other different and basic subjects, it is strongly recommended for the students to have previous knowledge on the topics: Linear algebra, vector and matrix calculus; Derivatives, integrals and solution of differential equations; Mechanics and thermodynamics: kinematics, dynamics and energy transfer fundamentals; Thermal engineering: thermodynamic properties of materials and thermal processes; Resistance of materials: states of stress and strain in continuous media.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3333>

### **Thermal Engineering (GIMECA01-2-009)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** In order to enrol of the subject it is strongly advisable that students have previously passed the subject "Mechanics and Thermodynamics" that belongs to the first year of the degree. It is also essential that they have acquired basic knowledge in "Calculus", "Linear Algebra" and "Mathematical Methods", subjects taught also in the first year of the degree. Specifically, they will have to master basic mass and heat balances, as well as the application of the First and Second Laws of Thermodynamics to closed systems and simple thermodynamics cycles.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3727>

### **Electrical Engineering Fundamentals (GIMECA01-2-010)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5756>

### **Environmental Technology (GIMECA01-3-001)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3334>

### **Fluid Machinery and Systems (GIMECA01-3-003)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** It is strongly recommended that the students have passed the subject "Fluid Mechanics" previously, in order to have acquired the skills and competences needed to apply the basic principles in a technological field. Particularly, it is highly recommended that the students have the following: knowledge of the basic equations that govern the flow motion; concepts on the boundary layer, potential flow and energy conservation equation; viscous flow in pipes and turbulence; unsteady flows and dimensional analysis, similitude and model theory.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3342>

### **Applied Heat Transfer (GIMECA01-3-004)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** In order to enroll for the subject it is strongly advisable that students have previously passed the subject "Thermal Engineering" that belongs to the second year of the degree. It is also essential that they have acquired basic knowledge in "Calculus", "Linear Algebra" and "Mathematical Methods", subjects taught in the first-year degree. Specifically, they will have to master the main characteristics and fundamental laws of the three modes of heat transfer (conduction, convection and radiation), as well as to set out the equations that describe the heat transfer in a physical problem from the application of basic balances (mass, momentum and energy) and heat transfer laws.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3344>

### **Machine Design (GIMECA01-3-007)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** It is highly desirable that students have completed previous courses such as Mechanics, Strength of Materials, Theory of Machines and Mechanisms, to understand the theory and practices taught in the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3349>

### **Industrial Drawing (GIMECA01-3-008)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 3    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (14h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** It is recommended to have studied Graphic Expression. On the other hand, it is advisable to know how to sketch, use drawing software and get by with references.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3352>

### **Theory of Structures and Industrial Constructions (GIMECA01-3-009)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 3    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** It is recommended that before attending this subject, the students have passed the modules of Basic Knowledge and the common subjects in the Industrial Speciality.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3354>

### **Operations Management (GIMECA01-3-011)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 3    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=5838>

### **Fluid Power: Hydraulic and Pneumatic Technologies (GIMECA01-4-008)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 4    **Semester:** 1

**Type:** Optional

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** It is strongly recommended that the students have passed previously the subjects "Fluid Mechanics" and "Fluid Machinery and Systems" of second and third year, in order to have acquired the skills and competences needed to apply the basic principles in a technological field. Particularly, it would be required to have knowledge on: Basic fluid mechanics and thermodynamics governing equations; Dynamic equilibrium; Energy equation and head losses; Viscous fluid flow in piping systems; Unsteady flow phenomena.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3458>

### **External Practices (GIMECA01-4-023)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 4    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=3734>

### **Graduation Final Work (GIMECA01-4-024)**

**Degree:** Bachelor's Degree in Mechanical Engineering

**Year:** 4    **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=3736>

## **Degree in Industrial Chemical Engineering (Campus Gijón)**

### **Calculus (GIIQUI01-1-001)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The student is supposed to be proficient in the high school courses Mathematics I and II. In case that another way of access to the University has been chosen, an equivalent previous mathematical preparation is required.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2064>

### **Numerical Methods (GIIQUI01-1-002)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (23h).

**Requirements:** It is advisable to have basic knowledge of Linear Algebra and Calculus.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2065>

### **Foundations of Computer Science (GIIQUI01-1-003)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&signatura=2069>

### **Linear Algebra (GIIQUI01-1-004)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** Students are expected to be proficient in the contents of Mathematics I and II of high school in order to be able to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2072>

### **Business (GIIQUI01-1-005)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (42h), Practical session in classes/seminars/workshops (14h), Group tutorials (2h).

**Requirements:** Given that it is a first year subject, there are no particular prerequisites for attending this course. However, the Degree general entry requirements apply.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2075>

### **Statistics (GIIQUI01-1-006)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** The recommended previous competences are: ability to move from colloquial to mathematical language, and viceversa; use and understanding of basic mathematical symbols; understand and use real-valued functions; ability to perform elementary applications of the concept of derivative, and of the concept of integral in one variable; basic knowledge of the applications of the concept of limit of a function; ability to solve linear equation systems: ability to solve second grade equations; use of the logarithmic function; ability to make transformations between different measurement scales.

The recommended previous knowledge are: the contents of the subject "Matemáticas II" or "Matemáticas aplicadas a las Ciencias Sociales" from the last year of high school studies; and those of the courses in Mathematics within the High School Studies.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2077>

### **Graphic Expression (GIIQUI01-1-007)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** No previous knowledge needed. Nevertheless, it is recommended to have studied geometry and technical drawing subjects in High School.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2078>

### **Mechanics and Thermodynamics (GIIQUI01-1-008)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:** It is advisable for students to have taken Physics in secondary school, and to have mathematical previous knowledge of vector calculus, trigonometry, derivation and integration of functions of a variable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2079>

### **Waves and Electromagnetism (GIIQUI01-1-009)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2080>



### **Theory of Machines and Mechanisms (GIIQUI01-2-003)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is recommended prior knowledge of the basics of the general laws of mechanics of rigid bodies and their subsequent application to solving the problems of engineering. It is highly desirable that students have taken the subjects of "Mechanics and Thermodynamics", "Linear Algebra" and "Calculation" of the 1st semester of 1st year. Students should have knowledge of: elementary vector calculus. Concept of derivative and integral, with application to the elementary functions. System of linear equations and matrices. Basic concepts of kinematics and dynamics of the particle. Concept of force and Newton's laws. Work, kinetic and potential energy and energy conservation. Kinematics and dynamics of rigid bodies. Geometry of masses. Inertias. Management of software at user level.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2682>

### **Advanced Calculus (GIIQUI01-2-005)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The prerequisites to this subject are integral calculus in one variable, differential calculus in simple and multiple variables, and vector spaces. All of these contents are included in the subjects Calculus and Algebra in the first year. **Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2691>

### **Electrical Engineering Fundamentals (GIIQUI01-2-006)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2692>

### **Strength of Materials (GIIQUI01-2-009)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is advisable that students have knowledge of the basics of the general laws of mechanics of rigid bodies and their subsequent application to solving the problems of engineering.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2695>

### **Fluid Mechanics (GIIQUI01-2-010)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** Being a subject based upon other different and basic subjects, it is strongly recommended for the students to have previous knowledge on the topics: linear algebra, vector and matrix calculus, derivatives, integrals and solution of differential equations, mechanics and thermodynamics: kinematics, dynamics and energy transfer fundamentals; thermal engineering: thermodynamic properties of materials and thermal processes; resistance of materials: states of stress and strain in continuous media.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2697>

### **Thermal Engineering (GIIQUI01-2-011)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** In order to enrol of the subject it is strongly advisable that students have previously passed the subject "Mechanics and Thermodynamics" that belongs to the first year of the degree. It is also essential that they have acquired basic knowledge in "Calculus", "Linear Algebra" and "Mathematical Methods", subjects taught also in the first year of the degree. Specifically, they will have to master basic mass and heat balances, as well as the application of the First and Second Laws of Thermodynamics to closed systems and simple thermodynamics cycles.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2698>

### **Manufacturing Processes (GIIQUI01-2-012)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 2    **Semester:** 1

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:** It is recommended that students have previous knowledge about Physics, Chemistry, Material Science, Graphics and Mathematics.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2750>

### **External Practices (GIIQUI01-4-024)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 4    **Semester:** 2

**Type:** Optional

**ECTS Credits:** 6

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2890>

### **Graduation Final Work (GIIQUI01-4-025)**

**Degree:** Bachelor's Degree in Industrial Engineering Chemical

**Year:** 4    **Semester:** 2

**Type:** Degree Final Project

**ECTS Credits:** 12

**Structure:**

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=2892>

## **Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering (Mieres/Minas)**

### **Linear Algebra (2GCIVMIN-1-001)**

**Degree:** Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The student should have studied basic mathematics in secondary education (in the case of Spanish students, the courses Matemáticas I and II).

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19727>

### **Calculus (2GCIVMIN-1-002)**

**Degree:** Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (21h), Laboratory and field work (9h).

**Requirements:** The student needs only knowledge of the contents of Mathematics I and II of high school to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19729>

### **Foundations of Computer Science (2GCIVMIN-1-004)**

**Degree:** Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Laboratory and field work (28h), Group tutorials (2h).

**Requirements:** The student needs only knowledge of the contents of Mathematics I and II of high school to follow the course.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19731>

### **Mechanics & Thermodynamics (2GCIVMIN-1-005)**

**Degree:** Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19732>

### **Statistics (2GCIVMIN-1-006)**

**Degree:** Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19733>

### **Waves and Electromagnetism (2GCIVMIN-1-007)**

**Degree:** Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (9h).

**Requirements:** Studies on Physics during the last secondary year are strongly recommended. Previous mathematical knowledge on vector calculus, trigonometry and single variable function derivation and integration are regarded as essential.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19734>

### **Chemistry (2GCIVMIN-1-009)**

**Degree:** Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (14h), Laboratory and field work (7h), Group tutorials (2h).

**Requirements:**

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19736>

### **Numerical Methods (2GCIVMIN-1-010)**

**Degree:** Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 1    **Semester:** 2

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (23h).

**Requirements:** Knowledge of the basic elements of Algebra and Calculus is advisable.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19737>

## **Fundamental & Applied Geology (2GCIVMIN-2-001)**

**Degree:** Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 2    **Semester:** 1

**Type:** Core

**ECTS Credits:** 6

**Structure:** lectures (28h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (21h), Group tutorials (2h).

**Requirements:** No pre-requisites are needed. However it is advisable to have a basic knowledge on topographic maps and principles of geology from high school

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19739>

## **Thermal Engineering (2GCIVMIN-2-012)**

**Degree:** Bachelor's Degree in Civil Engineering / Bachelor's Degree in Mining & Energy Resources Engineering

**Year:** 2    **Semester:** 2

**Type:** Compulsory

**ECTS Credits:** 6

**Structure:** lectures (35h), Practical session in classes/seminars/workshops (7h), Laboratory and field work (14h), Group tutorials (2h).

**Requirements:** In order to enroll of the subject it is strongly advisable that students have previously passed the subject "Mechanics and Thermodynamics" that belongs to the first year of the degree. It is also essential that they have acquired basic knowledge in "Calculus", "Linear Algebra" and "Mathematical Methods", subjects taught also in the first year of the degree. Specifically, they will have to master basic mass and heat balances, as well as the application of the First and Second Laws of Thermodynamics to closed systems and simple thermodynamics cycles.

**Course description and schedule:**

<http://sies.uniovi.es/ofe-pod-jsf/ofertaFormativaServlet?&asignatura=19750>

# Annex

## Campus in Asturias



## Campus in Oviedo



## **Faculty of Biology**

<http://biologia.uniovi.es/>

[decanato.f.biologia@uniovi.es](mailto:decanato.f.biologia@uniovi.es)

C/ Catedrático Valentín Andrés Álvarez s/n. 33006 – Oviedo

<https://goo.gl/maps/ef9tabKR7MF2>

## **Faculty of Sciences**

<http://ciencias.uniovi.es/>

[decanato.ciencias@uniovi.es](mailto:decanato.ciencias@uniovi.es)

C/ Calvo Sotelo s/n. 33007 – Oviedo

<https://goo.gl/maps/89B1hDQDWSA2>

## **Faculty of Commerce, Tourism and Social Sciences**

<http://jovellanos.uniovi.es/>

[fac.jovellanos@uniovi.es](mailto:fac.jovellanos@uniovi.es)

C/ Luis Moya Blanco 261. 33203 – Gijón

<https://goo.gl/maps/k2XwwXJk6zN2>

## **Faculty of Law**

<http://derecho.uniovi.es/>

[fac.derecho@uniovi.es](mailto:fac.derecho@uniovi.es)

C/ Valentín Andrés Álvarez s/n. 33006 – Oviedo

<https://goo.gl/maps/XTQcnBMT8JG2>

## **Faculty of Economics and Business**

<http://econo.uniovi.es/>

[fac.econo@uniovi.es](mailto:fac.econo@uniovi.es)

Avda. del Cristo s/n. 33006 – Oviedo

<https://goo.gl/maps/jJuWqPUddfS2>



## **Faculty of Philosophy and Letters**

<http://fyl.uniovi.es/>  
[facultadfyl@uniovi.es](mailto:facultadfyl@uniovi.es)

C/ Teniente Alfonso Martínez s/n. 33011 – Oviedo  
<https://goo.gl/maps/1Cjqff28Trx>

## **Faculty of Teaching Training and Education**

<http://www.uniovi.es/centros/facultades/fyl;????>

C/. Aniceto Sela, s/n. 33005 – Oviedo  
<https://goo.gl/maps/JyFh2zSqgbz>

## **Faculty of Geology**

<http://geologia.uniovi.es/>  
[geofac@uniovi.es](mailto:geofac@uniovi.es)

C/ Aniceto Sala s/n. 33005 – Oviedo  
<https://goo.gl/maps/o6RtymHbaVR2>

## **Faculty of Medicine and Health Sciences**

<http://medicinaysalud.uniovi.es/>  
[fac.medicina@uniovi.es](mailto:fac.medicina@uniovi.es) / [euenferfisio@uniovi.es](mailto:euenferfisio@uniovi.es) (nurse and physiotherapy)

Campus El Cristo s/n. 33006 – Oviedo  
<https://goo.gl/maps/kikjYSpbB342>

## **Faculty of Psychology**

<http://psicologia.uniovi.es/>  
[admppsico@correo.uniovi.es](mailto:admppsico@correo.uniovi.es)

Plaza Feijóo s/n. 33003 – Oviedo  
<https://goo.gl/maps/kYZDNWJjGcD2>

## **Faculty of Chemistry**

<http://quimica.uniovi.es/>

[facquimica@correo.uniovi.es](mailto:facquimica@correo.uniovi.es)

Avda. Julián Clavería 8 33006 – Oviedo

<https://goo.gl/maps/T4sepTVB3f52>

## **School of Computer Science Engineering**

<http://ingenieriainformatica.uniovi.es/>

[eii@correo.uniovi.es](mailto:eii@correo.uniovi.es)

Valdés Salas s/n 33007 – Oviedo

<https://goo.gl/maps/GLxz6RHiPcx>

## **Polytechnic School of Engineering of Gijón**

<http://epigijon.uniovi.es/>

[epi@correo.uniovi.es](mailto:epi@correo.uniovi.es)

Edificio Polivalente, Módulo 1 - Planta Baja s/n 33203- Gijón

<https://goo.gl/maps/VNWyaA5yaRG2>

## **Polytechnic School of Mieres**

<http://epm.uniovi.es/>

[direpm@correo.uniovi.es](mailto:direpm@correo.uniovi.es)

C/ Gonzalo Gutiérrez Quirós s/n. 33600 – Mieres

<https://goo.gl/maps/VggamaUyvKq>

## **Professional School of Physical Education and Sports Medicine**

<http://medepor.uniovi.es/>

[epmedicinadeldeport@correo.uniovi.es](mailto:epmedicinadeldeport@correo.uniovi.es)

C/ Catedrático Gimeno, 7 33007- Oviedo

<https://goo.gl/maps/NbGnaJjwvkJ2>

## **Higher School of Civil Navy**

<http://marina.uniovi.es/>

[mjose@correo.uniovi.es](mailto:mjose@correo.uniovi.es)

Campus de Gijón 33203- Gijón

<https://goo.gl/maps/EZMBA7X4WQm>

## **School of Mining, Energy and Materials Engineering of Oviedo**

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C/ Independencia nº 13. 33004 – Oviedo

<https://goo.gl/maps/6LQEj2qVgGm>

## **School of Mining, Energy and Materials Engineering of Oviedo**

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C/ Independencia nº 13. 33004 – Oviedo

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