

**Course Programme**

<b>Name of the course</b>	Introduction to business economics and administration		
<b>Subject / branch of study</b>	Business		
<b>Module</b>	Instrumental course		
<b>Degree</b>	Engineering on Telecommunication Technologies Engineering on Telecommunication Specific Technologies		
<b>Study Plan</b>	907	<b>Code</b>	45010
<b>Teaching Period</b>	1 semester	<b>Category</b>	Basic formation
<b>Level</b>	Bachelor Degree	<b>Course Year</b>	1
<b>ECTS Credits</b>	6 ECTS		
<b>Language of instruction</b>	English		
<b>Responsible teacher/s</b>	Guillermo Aleixandre Mendizábal Juan José Juste Carrión		
<b>Contact details (E-mail, telephone...)</b>	Guillermo Aleixandre Mendizábal Email: <a href="mailto:galeixandre@uva.es">galeixandre@uva.es</a> Office: 2L014 (Escuela Superior de Ingenieros de Telecomunicaciones)  Juan José Juste Carrión Email: <a href="mailto:juan.juste@uva.es">juan.juste@uva.es</a> Office: 333 (Facultad de Ciencias Económicas y Empresariales)		
<b>Department</b>	Applied Economics		



## 1. Presentation

### 1.1 Contextualization

For their professional practice, among the competences of telecommunication engineers must be an adequate knowledge of the main principles that govern economy and functioning of enterprises. These competences may not be so useful at the beginning of their professional career, unless they decide to create a technological start-up. However, they will eventually use these competences, when they start participating in the economic decision-making of the organizations they work.

This course allows students to understand engineering as an economic activity carried out, mostly, in the private sector. In any case, these activities are also performed by public administration (regulatory bodies of the sector or the university), and by private non-profit institutions (foundations, technology centres, professional associations, sector organizations ...).

In all the previous cases, work carried out by telecommunication engineers should not be only confined to technical aspects and, on many occasions, decision-making will have to take into account economic and financial aspects.

### 1.2 Relationship with other courses within the subject and/or module

This course is the English version of the course: Introducción a la Economía y la Empresa (in Spanish).

This course is related to an optional course of the degree: Creación de empresas (in Spanish).

### 1.3 Prerequisites

There are no academic preconditions to take this course.

Online teaching tools may be used in this course either in teaching activities or in evaluation activities. Students must have access to a computer with internet connexion to interact with the UVa Campus Virtual and to use videoconference systems.

For the evaluation purposes of this course, student must accept to use the technical mechanisms that appear in this programme and those that the University of Valladolid determines and/or provides.

## 2. Competencies

### 2.1 General Competencies

- GB1. Reasoning, analysis and synthesis capacity.
- GB7. Knowledge of the economic-financial aspects and of the basic elements of human resources management, organization and project planning.
- GE6. Capacity, and ethical commitment in the development of engineering solutions and in the various situations of human resource management and economic management, as well as the ability to understand the impact of engineering solutions in a global social context.
- GC1. Capacity for organization, planning and time management.
- GC2. Ability to communicate, both in writing and orally, knowledge, procedures, results and ideas related to telecommunications and electronics.
- GC3. Ability to work in any context, individual or group, learning or professional, local or international, respecting fundamental rights, equality of sex, race or religion and the principles of universal accessibility, as well as the culture of peace .

### 2.2 Specific Competencies

- B5. Adequate knowledge of the concept of company, institutional and legal framework of the company. Organization and management of companies. Marketing.
- T16. Knowledge of the regulation and regulation of telecommunications at national, European and international levels.

## 3. Objectives

The student must be able to:

- Apply the basic principles of the economy and the company to the telecommunications sector.
- Identify the different types of companies, market structures, being able to calculate prices and quantities of equilibrium in each one of them.
- Distinguish the types of costs of the companies and their sources of financing.
- Interpret the economic, legal and institutional framework of the company.

#### 4. Contents and/or thematic modules

##### Thematic module 1: Economy and business: main principles

Workload in ECTS credits: 

###### a. Contextualization and justification

The main conceptual and methodological aspects that framework the economic and business activities are introduced in this section. In this sense, this module consists of two units that focus: on the description of the stakeholders, institutions and basic principles of the organisation and operation of the economy; and on the definition of enterprise, its classes, elements and functions.

###### b. Learning objectives

At the end of this thematic module, students must be able to:

- Define the concepts of economy and business.
- Describe the participants and institutions of the market economy and the functioning of that economy through the circular flow of income.
- Characterise the figure of the entrepreneur and his role in the company.
- Classify companies by different criteria.

###### c. Contents

Unit 1: Preliminary concepts in economy.

Unit 2: The enterprise and the entrepreneur.

###### d. Teaching method

Participatory master class either face-to-face or online (Blackboard Collaborate).

Problem resolution.

Collaborative learning.

###### e. Working plan

This work plan is an indicative plan. It can be slightly modified depending on the circumstances.

Week	Contents	Student activities
1	Unit 1	Delivery of unit 1 activities.
2*	Unit 2	Delivery of unit 2 activities. Socratic activity on unit 1 and unit 2.

(\*) This week has two extra hours of class to effectively fulfil the 60 hours of class of the course.

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**f. Assessment**

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The evaluation of the acquisition of competences will be based on:

- Assessment of the attitude and participation of the student in the learning activities.
- Resolution of in and out of class activities.
- Final exam at the end of the semester.

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**g. Educational material**

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**g.1 Basic bibliography**

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Mankiw, N.G. (2004): Principles of Microeconomics (6th Edición). South-Western CENGAGE Learning.  
Atrill & McLaney (2005): Financial accounting for decision makers. Pearson Education Limited. Essex.

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**g.2 Complementary bibliography**

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Madura (2001): Introduction to business 2nd edition. South-western Thomson Learning. Cincinnati.

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**g.3 Other online resources (knowledge pills, blogs, videos, electronic journals/books, MOOC, ...)**

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Online materials generated for the course available in the course website (UVa Virtual Campus).

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**i. Resources**

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In the new normality scenario, classrooms of the centre are used. They are equipped with a digital blackboard, projection cannon, computer with internet connection, presentation software, audiovisual projection resources. Besides, students must have computer and internet connexion to interact with the UVa Campus Virtual and videoconference systems.

In the case of special health measures, the student must have sufficient computer and telematic resources to interact with the UVa Campus Virtual and to use videoconference systems.

All the necessary materials are available through one of the following channels:

- On the Moodle platform at the UVa Virtual Campus.
- In the Miguel Delibes Campus library in electronic version.
- On the Internet with free access.

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**j. Timing**

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ECTS load	Expected period for implementation
0.8 ECTS	Weeks 1 and 2



## Thematic module 2: The firm in different types of markets

Workload in ECTS credits: 3.2

### a. Contextualization and justification

Based on the principles in the previous module, the four units of this module analyse the elements that condition the way in which companies make their offer of goods and services. The focus is on business behaviour in either competitive or non-competitive markets.

### b. Learning objectives

At the end of this thematic module, student must be able to:

- Analyse the behaviour of companies in a perfectly competitive market.
- Explain graphically and analytically the behaviour of a company's costs, distinguishing between the short term and the long term.
- Explain the movements of perfectly competitive product markets and the process that leads to their equilibrium.
- Analyse the behaviour of companies in situations of imperfect competition and the functioning of these markets as a whole.

### c. Contents

Unit 3: Competitive markets in the short term: demand and supply.

Unit 4: Production, costs, revenues and business benefits.

Unit 5: Firms in the perfect competition market.

Unit 6: Firms in non-competitive markets.

### d. Teaching method

Participatory master class either face-to-face or online (Blackboard Collaborate).

Problem resolution.

Collaborative learning.

### e. Working plan

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This work plan is an indicative plan. It can be slightly modified depending on the circumstances.

Week	Contents	Student activities
3*	Unit 3	
4	Unit 3	Delivery of unit 3 activities.
5	Unit 4	
6	Unit 4	Delivery of unit 4 activities. Socratic activity on unit 3 and unit 4.
7	Unit 5	
8	Unit 5	Delivery of unit 5 activities.
9	Unit 6	Delivery of unit 6 activities. Socratic activity on unit 5 and unit 6.

\* This week has two extra hours of class to effectively fulfil the 60 hours of class of the course.

### f. Assessment

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The evaluation of the acquisition of competences will be based on:

- Assessment of the attitude and participation of the student in the learning activities.
- Resolution of in and out of class activities.
- Final exam at the end of the semester.

### g. Educational material

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#### g.1 Basic bibliography

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Tucker, I.B. (2010): Microeconomics for today. 7th edition. South western. Cengage Learning.

#### g.2 Complementary bibliography

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Mankiw, N.G. (2004): Principles of Microeconomics (6th Edición). South-Western CENGAGE Learning.

#### g.3 Other online resources (knowledge pills, blogs, videos, electronic journals/books, MOOC, ...)

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Online materials generated for the course available in the course website (UVa Virtual Campus).

### i. Resources

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In the new normality scenario, classrooms of the centre are used. They are equipped with a digital blackboard, projection cannon, computer with internet connection, presentation software, audiovisual projection resources.

Besides, students must have computer and internet connexion to interact with the UVa Campus Virtual and videoconference systems.

In the case of special health measures, the student must have sufficient computer and telematic resources to interact with the UVa Campus Virtual and to use videoconference systems.

All the necessary materials are available through one of the following channels:

- On the Moodle platform at the UVa Virtual Campus.
- In the Miguel Delibes Campus library in electronic version.
- On the Internet with free access.

#### j. Timing

ECTS load	Expected period for implementation
3.2 ECTS	Weeks 3 to 9

### Thematic module 3: Investment and finance decisions

Workload in ECTS credits:

#### a. Contextualization and justification

Raise of financial resources and their correct application to company assets are two essential aspects for the achievement of business objectives. It is essential to that future engineers understand the economic and financial reality associated with the productive activities of the company. This analysis can be approximated at the project level, with the appraisal and ranking of projects, or for the company as a whole, with an analysis of the financial statements of the company.

#### b. Learning objectives

At the end of this thematic module, student must be able to:

- Assess and rank business projects from a financial perspective and describe financing alternatives available for those projects.
- Describe the information contained in the balance sheet and in the profit and loss account of the company, with special focus on the sources of financing of the company.
- Analyse the situation of the company from the available accounting information and use the basic ratios of the financial-accounting analysis.



### c. Contents

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Unit 7: Project appraisal decisions in the company.

Unit 8: Financial statement analysis of the company and business financing.

### d. Teaching method

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Participatory master class either face-to-face or online (Blackboard Collaborate).

Problem resolution.

Collaborative learning.

### e. Work plan

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This work plan is an indicative plan. It can be slightly modified depending on the circumstances.

Week	Contents	Student activities
10	Unit 7	
11	Unit 7	Delivery of unit 7 activities.
12	Unit 8	
13	Unit 8	Delivery of unit 8 activities. Socratic activity on unit 7 and unit 8.
14	Unit 8	Delivery of unit 8 activities. Socratic activity on unit 7 and unit 8.

### f. Assessment

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The evaluation of the acquisition of competences will be based on:

- Assessment of the attitude and participation of the student in the learning activities.
- Resolution of in and out of class activities.
- Final exam at the end of the semester.

### g. Educational material

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#### g.1 Basic bibliography

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Amat, O. (2010): Análisis de balances. Claves para elaborar un análisis de las cuentas anuales Profit. Barcelona

Atrill, P. & McLaney, E. (2002): Financial Accounting for decision Makers (4th edition). Prentice Hall & Financial Times. Essex.

McLaney (2006): Business Finance. Theory and practice. 7th edition. FT Prentice Hall. Harlow.

#### g.2 Complementary bibliography

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### g.3 Other online resources (knowledge pills, blogs, videos, electronic journals/books, MOOC, ...)

Online materials generated for the course available in the course website (UVa Virtual Campus).

#### i. Resources

In the new normality scenario, classrooms of the centre are used. They are equipped with a digital blackboard, projection cannon, computer with internet connection, presentation software, audiovisual projection resources. Besides, students must have computer and internet connexion to interact with the UVa Campus Virtual and videoconference systems.

In the case of special health measures, the student must have sufficient computer and telematic resources to interact with the UVa Campus Virtual and to use videoconference systems.

All the necessary materials are available through one of the following channels:

- On the Moodle platform at the UVa Virtual Campus.
- In the Miguel Delibes Campus library in electronic version.
- On the Internet with free access.

#### j. Timing

ECTS load	Expected period for implementation
2.0 ECTS	Weeks 10 to 13

### 5. Teaching method and methodological principles

Participatory master class either face-to-face or online (Blackboard Collaborate).

Problem resolution.

Collaborative learning.

### 6. Table of estimated dedication time of the student to the course

Class activities	Number of hours	Out of class activities	Number of hours
Theory-practice lessons	26	Individual study and autonomous work	44
Small group applied lessons	24	Group study and autonomous work	9
Assessment activities	2	Solving of online activities	9
		Performing of individual deliveries.	18
		Performing of group deliveries.	9
		Watching of multimedia contents	9
<b>Total of class activities</b>	<b>52</b>	<b>Total of out of class activities</b>	<b>98</b>
		<b>Total</b>	<b>150</b>

### 7. Assessment



Assessment instruments	Final grade percentage	Observations
Assessment of attitude and participation of student in the classroom activities	5%	
Resolution and delivery of class activities and out of the class throughout the course.	45%	Each unit has out of the class activities. All the activities done either in class or out of class are used in the assessment.
Final exam (Questionnaire)	25%	
Final exam (Problems)	25%	

Assessment Criteria
<ul style="list-style-type: none"><li>• <b>Ordinary call:</b> It is necessary to pass the final exam (to have a score equal to or higher than 50% in the final exam) The final assessment of the course is the weighted sum of the different assessment instruments.</li><li>• <b>Extraordinary call:</b> Student has to choose between two options:<ul style="list-style-type: none"><li>○ Option 1: considering the continuous assessment. The score obtained in the continuous evaluation of the ordinary call is kept (5%+45%) and an extraordinary final exam is carried out (Questionnaire 25% + Problems 25%). The final assessment of the course is the weighted sum of the different assessment instruments.</li><li>○ Option 2: Without considering the continuous evaluation. An extraordinary final exam is carried out (Questionnaire 50% + Problems 50%). The final assessment of the course is the score of the extraordinary final exam.</li></ul></li></ul> <p>By default, all students are subject to option 1. To choose option 2, the student must explicitly express his desire to take option 2 before the date of the extraordinary final exam with an email to the teacher..</p>

## 8. Final considerations

There are no final considerations.



**Supplement to Course Programme 2020-2021 adapted to the new normality**

**S4. Contents and/or thematic modules**

**Thematic module 1: Economy and business: main principles**

Workload in ECTS credits:

**c. Contents adapted to online education**

No changes.

**d. Teaching method adapted to online education**

Online theory classes in the course timetable using the Cisco Webex o Blackboard Collaborate.

Online practical classes in the course timetable using Cisco Webex o Blackboard Collaborate where students are guided in the resolution of tasks (put into practice previous knowledge), which will end individually or collaboratively after the online activity.

Tutorials aimed at providing personalised attention to students, using: course forum on the UVa Virtual Campus platform, email and video calls. Teacher will be available for real time chats and video calls during the established tutorial schedule.

**e. Working plan adapted to online education**

No changes.

**f. Assessment adapted to online education**

The evaluation of the acquisition of competences will be based on:

- Assessment of the attitude and participation of the student in the online learning activities.
- Resolution of online class activities and out of class activities.
- Final exam at the end of the semester.

**j. Timing**

No changes.

**Thematic module 2: The firm in different types of markets**

Workload in ECTS credits:

**c. Contents adapted to online education**

No changes.

**d. Teaching method adapted to online education**

Online theory classes in the course timetable using the Cisco Webex o Blackboard Collaborate.

Online practical classes in the course timetable using Cisco Webex o Blackboard Collaborate where students are guided in the resolution of tasks (put into practice previous knowledge), which will end individually or collaboratively after the online activity.



Tutorials aimed at providing personalised attention to students, using: course forum on the UVa Virtual Campus platform, email and video calls. Teacher will be available for real time chats and video calls during the established tutorial schedule.

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**e. Working plan adapted to online education**

No changes.

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**f. Assessment adapted to online education**

The evaluation of the acquisition of competences will be based on:

- Assessment of the attitude and participation of the student in the online learning activities.
- Resolution of online class activities and out of class activities.
- Final exam at the end of the semester.

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**j. Timing**

No changes.

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**Thematic module 3: Investment and finance decisions**

Workload in ECTS credits:

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**c. Contents adapted to online education**

No changes.

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**d. Teaching method adapted to online education**

Online theory classes in the course timetable using the Cisco Webex o Blackboard Collaborate.

Online practical classes in the course timetable using Cisco Webex o Blackboard Collaborate where students are guided in the resolution of tasks (put into practice previous knowledge), which will end individually or collaboratively after the online activity.

Tutorials aimed at providing personalised attention to students, using: course forum on the UVa Virtual Campus platform, email and video calls. Teacher will be available for real time chats and video calls during the established tutorial schedule.

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**e. Working plan adapted to online education**

No changes.

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**f. Assessment adapted to online education**

The evaluation of the acquisition of competences will be based on:

- Assessment of the attitude and participation of the student in the online learning activities.
- Resolution of online class activities and out of class activities.
- Final exam at the end of the semester.

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**j. Timing**

No changes.

### S5. Teaching method and methodological principles adapted to online education

Online theory classes in the course timetable using the Cisco Webex o Blackboard Collaborate.

Online practical classes in the course timetable using Cisco Webex o Blackboard Collaborate where students are guided in the resolution of tasks (put into practice previous knowledge), which will end individually or collaboratively after the online activity.

Tutorials aimed at providing personalised attention to students, using: course forum on the UVa Virtual Campus platform, email and video calls. Teacher will be available for real time chats and video calls during the established tutorial schedule.

### S6. Table of estimated dedication time of the student to the course

Class activities	Number of hours	Out of class activities	Number of hours
Theory-practice lessons	26	Individual study and autonomous work	44
Small group applied lessons	24	Group study and autonomous work	9
Assessment activities	2	Solving of online activities	9
		Performing of individual deliveries.	18
		Performing of group deliveries.	9
		Watching of multimedia contents	9
<b>Total of class activities</b>	<b>52</b>	<b>Total of out of class activities</b>	<b>98</b>
		<b>Total</b>	<b>150</b>

### S7. Assessment

Criteria: when more than 50% of the school days of the semester are spent in a contingency situation, the evaluation criteria will be those indicated in the supplement.

Assessment instruments	Final grade percentage	Observations
Assessment of attitude and participation of student in the classroom activities	5%	
Resolution and delivery of class activities and out of the class throughout the course.	45%	Each unit has out of the class activities. All the activities done either in class or out of class are used in the assesment.
Final exam (Questionnaire)	25%	
Final exam (Problems)	25%	

Assessment Criteria
<ul style="list-style-type: none"> <li> <b>Ordinary call:</b>            It is necessary to pass the final exam (to have a score equal to or higher than 50% in the final exam)            The final assessment of the course is the weighted sum of the different assessment instruments.         </li> <li> <b>Extraordinary call:</b>            Student has to choose between two options:           <ul style="list-style-type: none"> <li>Option 1: considering the continuous assessment. The score obtained in the continuous evaluation of the ordinary call is kept (5%+45%) and an extraordinary final exam is carried out</li> </ul> </li> </ul>



(Questionnaire 25% + Problems 25%). The final assessment of the course is the weighted sum of the different assessment instruments.

- Option 2: Without considering the continuous evaluation. An extraordinary final exam is carried out (Questionnaire 50% + Problems 50%). The final assessment of the course is the score of the extraordinary final exam.

By default, all students are subject to option 1. To choose option 2, the student must explicitly express his desire to take option 2 before the date of the extraordinary final exam with an email to the teacher..

