

1. BASIC INFORMATION

Course	Organization of production
Degree program	Bachelor's Degree in Industrial Systems Engineering
School	School of Architecture, Engineering, Science and Computing
Year	3º
ECTS	6
Credit type	Elective
Language(s)	Spanish / English
Delivery mode	Face to face
Semester	S2
Academic year	25-26
Coordinating professor	Beatriz Peña

2. PRESENTATION

This course aims to introduce future engineers to the knowledge of business organizations in their various sections, with special emphasis on the production area.

They will also be given the necessary tools to solve problems that may arise in their professional future when designing or redesigning production systems.

The organization of production is approached from an engineering perspective, which will serve both for the students' basic training and to introduce them to the business environment, as a comprehensive view of the company is provided.

3. LEARNING OUTCOMES

Knowledge

KNO11: Basic knowledge of production and manufacturing systems

- Identify the processes involved in production management

Skills

SK21: Ability to apply basic knowledge of production and manufacturing systems

- Analyze the decision-making strategy in an organization
- Develop a plan for the design, implementation and continuous improvement of a production system
- Designing a sustainable production system

Competences

CP5: Organizational and planning capacity in the field of business, and other institutions and organizations

CP13: Cooperate with others in the achievement of a shared academic or professional goal, participating actively, empathetically and exercising active listening and respect for all members.

4. CONTENT

- Models of production systems. Production and operations management.
- Production strategy and product strategy.

- Design of the production process. Capacity planning
- Material flow planning
- Facility design.
- Industrial logistics

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies used are indicated below:

- Master class
- Problems-based learning

6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one:

Campus-based mode:

Learning activity	Number of hours
Master class	10
Seminars	20
Problem solving	50
Self-study	60
Debates	5
Evaluation tests	5
TOTAL	150

7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

Campus-based mode:

Assessment	Min. %	Max. %
Assessment tests	50	60
Reports	10	20
Case study or problem solving	20	30
Performance evaluation	5	5

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

Campus-based mode:

Assessable activities	Deadline
Engineering project	Weeks 2-14
Complementary activities	Weeks 1-10
Final exams and presentations	Weeks 14-16

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any change as and when appropriate.

9. BIBLIOGRAPHY

The main reference work for this subject is:

- Heizer, J y Render, B. "Dirección de la producción: Decisiones estratégicas". Prentice Hall
- Heizer, J y Render, B. "Dirección de la producción: Decisiones tácticas". Prentice Hall

The recommended Bibliography is:

- Chase, R., Aquilano, N. y Jacobs, R. "Administración de producción y operaciones: Producción y cadena de suministro". McGraw-Hill
- Domínguez Machuca, J.A. "Dirección de Operaciones: Aspectos estratégicos en la producción y los servicios". McGraw-Hill
- Domínguez Machuca, J.A. "Dirección de Operaciones: Aspectos tácticos y operativos en la producción y los servicios". McGraw-Hill

10. EDUCATIONAL GUIDANCE, DIVERSITY AND INCLUSION UNIT

From the Educational Guidance, Diversity and Inclusion Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by mean of counselling and personalized plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing equal opportunities for all students.
3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at:

orientacioneducativa@universidadeuropea.es

11. ONLINE SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify the strengths and areas we need to improve regarding professors, degree programs and the teaching-learning process.

The surveys will be made available in the “surveys” section in virtual campus or via e-mail.

Your assessment is necessary for us to improve.

Thank you very much for your participation.