



## IDENTIFYING DATA

### Industrial organisation and processes in the wood industry

Subject	Industrial organisation and processes in the wood industry			
Code	P03G370V01707			
Study programme	(*)Grao en Enxeñaría Forestal			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	4th	1st
Teaching language	Spanish Galician			
Department				
Coordinator	García-Pintos Escuder, Adela			
Lecturers	García-Pintos Escuder, Adela González Prieto, Óscar			
E-mail	adelagpe@uvigo.es			
Web	<a href="http://www.forestales.uvigo.es">http://www.forestales.uvigo.es</a>			
General description	(*)Materia que trata sobre os procesos industriais de transformación da madeira, especialmente os que se levan a cabo na fabricación dos produtos finais, así como as técnicas de xestión e mellora continua da produción.			

## Competencies

Code	
B12	Capacity for organization and planning of companies and other institutions, with knowledge of the legislative provisions that affect them and the fundamentals of marketing and marketing of forest products.
C30	Ability to know, understand and use the principles of: knowledge of the basic principles of the second transformation processes of wood.
C31	Knowledge for the calculation and design of carpentry facilities. Drying, debarking and crushing of wood.
D5	Capacity for information management, analysis and synthesis
D8	Ability to solve problems, critical reasoning and decision making

## Learning outcomes

Expected results from this subject	Training and Learning Results
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2R. 2018 Knowledge and understanding of the disciplines of engineering of the his speciality, to the necessary level to purchase the rest of the competitions of the qualifications, including notions of the last advances.	B12	C30	D5
3R. 2018 Be conscious of the multidisciplinary context of the engineering.		C31	D8
4R. 2018 Capacity to #analyze products, processes and complex systems in the his field of study; choose and apply analytical methods, of calculation and experimental *relevantes of form *relevante and interpret correctly the results of these analyses.			
5R. 2018 Capacity to identify, formulate and resolve problems of engineering in the his speciality; choose and apply analytical methods, of calculation and experiments properly established; Recognize the importance of the social restrictions, of health and security, environmental, economic and industrial.			
6R. 2018 Capacity to project, design and develop complex products (pieces, component, products finished, etc.), processes and systems of the his speciality, that fulfil the requirements established, including the knowledge of the social aspects, of health and environmental security, economic and industrial; as well as select and apply methods of appropriate project.			
7R. 2018 Capacity of the project using any knowledges advanced of the his speciality in engineering.			
8R. 2018 Capacity to realize bibliographic researches, consult and use databases and other sources of information with discretion, to realize @simulación and analysis with the objective to realize investigations on technical subjects of the his speciality.			
9R. 2018 Capacity to consult and apply codes of good practices and security of the his speciality.			
11R. 2018 Understanding of the techniques and methods of analysis, project and applicable investigation and his limitations within the scope of the his speciality.			
12R. 2018 practical Competition to resolve complex problems, realize complex projects of engineering and realize specific investigations stop his speciality.			
13R. 2018 Knowledge of the application of materials, teams and tools, technological processes and of engineering and his limitations within the scope of the his speciality.			
15R. 2018 Knowledge of the social implications, of health and security, environmental, economic and @industrial of the practice in engineering.			
16R. 2018 general Ideas on economic questions, organisational and of management (how management of projects, management of risks and change) in the industrial and entrepreneurial context.			
18R. 2018 Capacity to manage activities or technical projects or complex professionals of the his speciality, assuming the responsibility of the takes of decisions.			

## Contents

### Topic

The sector of second transformation of the wood	The carpentry and furniture industry in: <ul style="list-style-type: none"> <li>· Galicia</li> <li>· Spain</li> <li>· Europe</li> </ul>
Industrial operations on wood and boards Mechanization of wood and boards	Industry 4.0 Adhesives and gluing techniques in the wood industry Application of edges on boards Application of decorative surfaces on boards Sanding practices in carpentry and furniture Finishing technology on wood and boards
Basic principles and production management tools	Basic concepts Tools for supply chain management, purchasing and inventory Mathematical tools and models for the optimization of production
Basic principles and tools for continuous improvement in the organization of industrial production	Lean management basics and production excellence Application of Lean management to the wood industry Other tools: JIT, six-sigma

## Planning

	Class hours	Hours outside the classroom	Total hours
Introductory activities	1	0	1
Lecturing	17	44	61
Problem solving	11	30	41
Mentored work	7	20	27
Studies excursion	8	10	18
Problem and/or exercise solving	2	0	2

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

## Methodologies

### Description

Introductory activities	Introduction to the objectives and development of the subject
Lecturing	Structured exposition of objectives, theoretical contents and exemplifications of the subjects and sub-themes that form the program of the subject
Problem solving	Active participation in the resolution of problems and / or exercises
Mentored work	Resolution of small practical exercises that accompany a theoretical explanation. Seminars of approach and resolution of type problems with oral presentation
Studies excursion	Explanation "in situ" of the organization and industrial processes in the carpentry and furniture industries

### Personalized assistance

Methodologies	Description
Mentored work	The tutoring hours will be indicated at the beginning of the course
Problem solving	The tutoring hours will be indicated at the beginning of the course

### Assessment

	Description	Qualification	Training and Learning Results
Lecturing	(*)Participación activa no debate que se expoña na aula sobre os conceptos teóricos	10	C30 C31
Mentored work	(*)Participación activa nos seminarios de resolución de exercicios e de casos/análises de situacións, con críticas construtivas ás resolucións doutros compañeiros e entrega en tempo e forma dos traballos encomendados	5	C30 C31
Studies excursion	(*)Presentación dunha memoria das visitas realizadas	5	C30 C31
Problem and/or exercise solving	(*)Proba escrita sobre os contidos teóricos e prácticos da materia	80	C30 C31

### Other comments on the Evaluation

### Sources of information

#### Basic Bibliography

Jay Heizer, Barry Render, **Dirección de la producción y de operaciones : decisiones tácticas**, 11, Pearson Educación, 2015

#### Complementary Bibliography

Carlos Rodrigo Illera, María Pilar Alberca Oliver, **Dirección de la producción**, Sanz y Torres, 2015

Lluís Cuatrecasas Arbós, **Organización de la producción y dirección de operaciones : sistemas actuales de gestión eficiente y competitiva**, Díaz de Santos, 2011

Tony Crespo Franco, Pilar Piñeiro García, **Producción : planificación, programación e control : ejercicios resoltos**, Universidade de Vigo, Servizo de Publicacións, 2005

Daniel Arias Aranda, Beatriz Mingueta Rata (directores), **Dirección de la producción y operaciones : decisiones operativas**, Pirámide, 2018

Javier Santos, Richard A. Wysk, José Manuel Torres, **Mejorando la producción con lean thinking**, 2, Pirámide, 2015

### Recommendations

#### Subjects that are recommended to be taken simultaneously

Primary wood processing industries/P03G370V01706

#### Subjects that it is recommended to have taken before

Wood technology/P03G370V01606