

28960 - Building installations

Información del Plan Docente

Academic Year	2016/17
Academic center	201 - Escuela Politécnica Superior
Degree	437 - Degree in Rural and Agri-Food Engineering
ECTS	5.0
Course	4
Period	Second semester
Subject Type	Optional
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

The learning process designed for this course is based on the following methodologies: Theoretical sessions, Problem-based learning, Project based learning and Computer lab sessions.

5.2.Learning activities

The program that the student is offered to achieve the expected results includes the following activities:

- Theoretical sessions (2,5 ECTS):

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- o The teacher explains the theoretical content of each session. One of the objectives of this activity will be the promoting of the participation of the students and the cooperative learning.
- o Problem-solving sessions. The teacher will resolve specific problems.
- Practical sessions (2,5 ECTS):
 - o Problem-based learning. Students, working individually or in groups, gain knowledge and skills by working to respond problems and questions.
 - o Computer lab sessions. Students use technical software.
 - o Project-based learning. Students gain knowledge and skills by working with examples of real projects.

5.3.Program

Theory Program

MODULE 1. Cold water supply and distribution

1. Basic regulation.
2. Components of the installation.
3. Calculating the installation.

MODULE 2. Domestic hot water production and distribution

1. Basic regulation.
2. Components of the installation.
3. Calculating the installation.

MODULE 3. Water evacuation

1. Basic regulation.
2. Components of the installation.
3. Calculating the installation.

MODULE 4. Fire protection installation

1. Basic regulation.
2. Components of the installation.

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3. Calculating the installation.

MODULE 5. Emergency electrical installations

1. Basic regulation.

2. Components of the installation.

3. Calculating the installation.

Practical program

1. Calculating a water supply installation for a building in the agricultural and/or food processing domain.

2. Calculating a water evacuation installation for a building in the agricultural and/or food processing domain.

3. Calculating the fire protection installations for a building in the agricultural and/or food processing domain.

4. Calculating the emergency lighting installation for a building in the agricultural and/or food processing domain.

5.4.Planning and scheduling

Week	Theoretical sessions (h)	Practical sessions (h)	Individual work (h)	Total (h)
1	1	0	1,5	2,5
2	2	2	6	10
3	2	2	6	10
4	2	2	6	10
5	2	2	6	10
6	2	2	6	10
7	2	2	6	10

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8	2	2	6	10
9	2	2	6	10
10	2	2	6	10
11				
12	2	2	6	10
13	2	2	6	10
14	2	2	6	10
15	0	1	1,5	2,5
Total hours	25	25	75	125

5.5. Bibliography and recommended resources

- BB** España. Ministerio de Industria, Comercio y Turismo. Reglamento de Seguridad Contra Incendios en los Establecimientos Industriales RSCIEI (Real Decreto 2267/2004, de 3 de diciembre) y Guía Técnica de Aplicación (octubre 2007) / [Ministerio de Industria, Comercio y Turismo]. Madrid : Paraninfo, D.L. 2008
- BB** España. Ministerio de la Vivienda. Código técnico de la edificación. Edición septiembre 2009 Madrid : La Ley, 2009
- BC** Arizmendi Barnes, Luis Jesús. Cálculo y normativa básica de las instalaciones en los edificios. Tomo 1, Instalaciones hidráulicas, gases combustibles y de ventilación / Luis Jesús Arizmendi. 7ª ed. renovada Pamplona : EUNSA, 2005
- BC** Arizmendi Barnes, Luis Jesús. Cálculo y normativa básica de las instalaciones en los edificios. Tomo 2, Instalaciones energéticas / Luis Jesús Arizmendi . 6ª.

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ed. renovada Pamplona : EUNSA, 2003

España. Dirección General de la Vivienda,
la Arquitectura y el Urbanismo. Normas
tecnológicas de la edificación NTE.

BC

Instalaciones : diseño, cálculo,
construcción, control, valoración,
mantenimiento / Dirección General de la
Vivienda, la Arquitectura y el Urbanismo .
[14ª reimpr.] Madrid : Ministerio de
Fomento, Centro de Publicaciones, 2000

BC

Martín Sánchez, F. 2008. Nuevo manual
de instalaciones de fontanería y
saneamiento. A. MADRID VICENTE
Ediciones. Madrid.