



GENERAL INFORMATION

Data of the subject	
Subject name	Heating, Ventilation and Air Conditioning
Subject code	DIM-MII-631
Main program	Official Master's Degree in Industrial Engineering
Involved programs	Máster Universitario en Ingeniería Industrial [Second year]
Credits	3,0 ECTS
Type	Obligatoria
Department	Department of Mechanical Engineering
Coordinator	Luis Mochón Castro

Teacher Information	
Teacher	
Name	José Nieto Fuentes
Department	Department of Mechanical Engineering
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DESCRIPTION OF THE SUBJECT

Contextualization of the subject
Prerequisites
Basic knowledge of thermodynamics, fluid mechanics and heat transfer.

Course contents

Contents
<p>THEORY:</p> <ol style="list-style-type: none">1. Psychrometrics2. Air-conditioning processes3. Thermal comfort4. Load calculations5. Air-conditioning systems (all-air, all-water, others)6. Energy conservation measures7. Duct and pipe design8. Air diffusion9. Refrigerants and refrigeration cycles



LABORATORY:

1. Psychrometric processes
2. Cooling tower

EVALUATION AND CRITERIA

Evaluation activities	Evaluation criteria	Weight
Test on theory	60%	60
Problems, labs, individual and team works, class participation	40%	40

BIBLIOGRAPHY AND RESOURCES

Basic References

- ASHRAE HANDBOOK: FUNDAMENTALS
- FUNDAMENTOS DE CLIMATIZACIÓN (ATECYR, Asociación Técnica Española de Climatización y Refrigeración)

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