Department: 05 Building Services Engineering, Paper and Packaging Technology and Print and Media Technology

Course title: Abastecimiento Energético I ( = energy supply in field of building services engineering)

Hours per week (SWS): 2

Number of ECTS credits: 4 / 5 with additional presentation

Course objective: Knowledge of basic energy problems, applications and consequences

Prerequisites: Basic knowledge in Thermodynamics and Mechanical Engineering

Recommended reading: Materials given by the lecturer

Teaching methods: Presentation, blackboard: written explanations, comparisons in German and English

Assessment methods: Interactive

Language of instruction: Spanish (German and English correspondents)

Name of lecturer: Prof. Dr.-Ing. Hartmut Pietsch

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Course content: Energy Supply:
1) Basics
2) Energy application: resources - exploration - consequences
3) Energy transformation: burners - motors - turbines, thermodynamic cycles
4) Combustion - parameters of influence - calculation - control - emissions and pollution
5) Heaters: design - consumption - performance - condensing boilers
6) Students presentation on energetical subjects

Remarks: This class is suitable as an elective course for all students