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

### Course title
Abastecimiento Energetico I ( = energy supply in field of building services engineering)

### Hours per week (SWS)
2

### Number of ECTS credits
4

### 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