COURSE: Introduction to the Energy Efficiency in Buildings

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Main topics:
- Analysis of thermal losses and heat gains in buildings,
- Analysis of the main energy consumers and energy systems in building facilities,
- Primary fuels used in buildings and their environmental aspect,
- Introduction to the modern energy concepts and in general methods to increase energy efficiency in building facilities,
- Energy efficiency measures in buildings, i.e. their technical and economic aspect (case study)
- Introduction to the sustainable energy management in buildings,
- Introduction to the energy audit and building energy certification

Programme structure:
- 5-day course
- Sample data will be provided for practice and for final presentation
- Lecture notes will be available either on-line or in printed form

Important dates:
Course dates: 02/09/2019 – 06/09/2019
Deadline for application: 01/08/2019
Confirmation of the course: 15/08/2019
Payment due by: 24/08/2019

Price of the course: 300 € (tax included)

Programme plan:
Day 1
- Introduction to the energy efficiency in buildings, surroundings and challenges.
- Introduction to the methods for calculation of heat losses and gains in buildings.

Day 2
- Introduction to the energy efficiency measures in buildings: Part I - (Building thermal envelope /heating and cooling systems, integration of renewables in buildings).

Day 3
- Introduction to the energy efficiency measures in buildings: Part II - (lighting systems, water consumption systems).

Day 4
- Realisation of the project task.

Day 5
- Presentation of final projects and discussion with scholars.
  Final exams and grading of final projects.

Programme lecturers:
Sandro Nižetić PhD,
Associate Professor at the University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Split, Croatia, LTEF-Laboratory for Thermodynamics and Energy Efficiency

Vladan Prodanović PhD,
University of British Columbia, Canada