

# SPLIT SUMMER SCHOOL STSS2019

## 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

