



CEEPUS-Network CIII-BG-1103-05-2021

**Flexible course“Modelling, Simulation and Computer-Aided Design  
in Engineering and Management”**

**University for Business and Technology (UBT), Priština, Kosovo.**

**12-16.07.2021**

Introduction to CEEPUS-Network CIII-BG-1103-05-2021 and Flexible CEEPUS  
courses. Distribution of topics to students for preparing presentations

Assoc. Prof. Dr. Galia Marinova

**Module 1. Emerging topics and security challenges**

Assoc. Prof. Dr. Galia Marinova

L1. Nanocommunications and security

L2. Autonomous vehicle, smart road infrastructure and security

L3. Cryptocurrencies and security

Students presentations and discussion on Advantages, Security threats and Possible solutions  
connected with:

P1. Nanocommunications

P2. Autonomous vehicle and smart road infrastructure

P3. Cryptocurrencies

**Module 2. Optimization and its implementation for energy flows in microgrids and  
portfilio optimization for business models**

Assoc. Prof. Dr. Vassil Guliashki

L1. Optimization methods - introduction

L2. Optimization of energy flows in microgrids

L3. Business models. Portfolio optimization

P1. Optimization methods in MATLAB

P2. Optimization of energy flows in microgrids in MATLAB

P3. Portfolio management and optimization (MATLAB, Firefly algorithm)

**Module 3. Presentation and testing of the Platform IMA-NET for e-management of  
academic networks**

**Lecturer Krisel Tola**

L1. E-learning and E-management principles and tools

L2. Structure and features of the Platform IMA-NET. Demonstration.

L3. Software realization of the platform IMA-NET

P1. Testing the registration system of IMA-NET platform

P2. Filling the Surveys in IMA-NET

P3. Filling the Feedback option of the platform IMA-NET

## Assessment and certificates