COMPUTER MODELING AND SIMULATION

Duration: 20 hours

Number of students: 10

Language of instruction: English

Professors: Ph.D. Carlos Rioja Del Río, Ph.D. Guadalupe Ortiz Bellot

Program:

1. **Parallel Programming**
   a. Introduction to parallel programming
   b. Parallel programming models
   c. Analysis and design of parallel programming
   d. Real world case studies

2. **Computer Simulation**
   a. Simulation programming with OpenMP
   b. Simulation programming with OpenMPI
   c. Comparing the model and the simulation results

3. **Programming simulations in Java**
   a. Java simulation tools
   b. Java simulation implementation