

Energy-aware application development for heterogenous computing

Objectives

With this course, we aim to present the TANGO toolbox which provides a set of tools to simplify and optimize the usage of distributed heterogeneous computing environments. We mainly target to attract students, HPC application developers and System administrators which can benefit from the tools we developed at the TANGO project. Students of this course will learn how to use the TANGO toolbox to easily develop parallel applications and efficiently execute them in heterogeneous distributed computing environments.

Requirements

Programming skills in C/C++

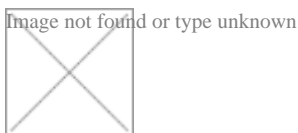
Learning Outcomes

In the first lesson the student will learn why heterogeneous computing is important nowadays. In the second lesson, students will get an overview of TANGO toolbox components and the provided functionality.

In the third lesson, the attendees will get a first lesson about the programming model and an overview of the runtime internals. The attendees will programming with COMPSs that will enable them to start programming with this framework.

A hands-on with simple introductory exercises will be also performed. The students who finish this course will be able to develop simple applications and to run them in a distributed heterogeneous platform.

Academic Staff



Convener: Jorge Ejarque, Workflows and Distributed computing group, Computer Sciences Dept. BSC.

Lecturers: Karim Djemame (University of Leeds), David Garcia, Atos Research and Innovation, and Jorge Ejarque (BSC)

[Further information](#)

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This course is free of charge.

Please bring your own laptop.

Recommended Accomodation

Please follow [the link](#) for map of some local hotels.

[CONTACT US](#) for further details about MSc, PhD, Post Doc studies, exchanges and collaboration in education and training with BSC.

For further details about Postgraduate Studies in UPC - Barcelona School of Informatics (FiB), visit the [website](#).

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