



Master on Numerical Methods in Engineering

ACCEPTANCE OF INTERNSHIP WORK PLAN

Name of the student	Samuel Parada Bustelo
Company/Institution/ Department	CIMNE / Structural Mechanics Group
Name of the external supervisor	Joan Baiges Aznar
Start and end dates	From 01/07/2017 to 15/12/2017
Total number of hours	450

Topic: Help to develop FEMUSS, an in-house FEM code
<p>Main tasks:</p> <ul style="list-style-type: none"> - Learn the basics of Object Oriented Programming using Fortran 2003 applied to FEM. - Get used to FEMUSS and its environment. - Investigate different file output formats for the management of extremely large and complex data collections used in large scale supercomputing. Program an HDF5 file output format for FEMUSS. - Learn how to link and compile external libraries. Couple with Femuss an external library, written in C++, by developing an interface for language interoperability. - Adapt GiD Problem Type to all changes described above. - Master's thesis tasks.

<p>Additional remarks:</p> <p>The first 100 hours were done during Summer. 300 hours of the industrial training have been already completed. The remaining 150 hours are to be done during the rest of the semester.</p>

Any change in the information contained in the internship agreement must be authorized by the local master coordinator.

Date:

Student's signature

External
supervisor's signature

Joan
Baiges

Internal advisor
Riccardo Rossi