# EUROWEB PLUS Project
## Academic offer for 2014-2015

1.  Name of EU Partner: **University of L'Aquila, Italy (UDA)**

2.  Name & E-Mail of primary contact:
    Henry Muccini, Ph.D., Professor in Computer Science. henry.muccini@univaq.it

3.  Name & E-mail of additional contacts:
    Dr. Manola Equizi, manola.equizi@univaq.it

4.  Local EUROWEB web page( if any): http://informatica.di.univaq.it/go/euroweb

5.  Departmental web page: http://www.disim.univaq.it/

6.  University of L'Aquila web page: http://www.univaq.it/en/index.php?&lang_s=en

7.  Which system do you have? (Semester /Trimester etc) : Semester

8.  Provide details of each semester/trimester in following table

| Study Period/ Term | Start date | End date | Exam period |
|---|---|---|---|
| Semester I, a.y. 2014-2015 | **Late September** | **Mid January** | **January and February** (two sessions) |
| Semester II, a.y. 2014-2015 | **Beginning of March** | **Mid June** | **Mid June to end of July** (three sessions) <br><br> **September and October** (two sessions). |

9.  In the following table use one row per subject area and show at least the numbers & duration. Please provide as much detail as possible. Any constraints/ concerns also may be added, in remarks or as notes below the table. The rows are as per our application themes. You may add other subject areas or breakdown to more detailed themes as appropriate by adding more rows.

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## Mobility that can be supported in EUROWEB PLUS

# Opportunities for Ph.D students, Post Doc, and Staff
## University of L'Aquila
## a.y. 2014-2015

FOR PH.D STUDENTS, POST DOCS, AND STAFF INTERESTED TO SPEND PART OF THEIR PROGRAM IN L'AQUILA

**In order to apply for a Ph.D., a PostDoc, or a Staff mobility under the EUROWEB PLUS programme, please send an email with a detailed CV to the primary contact above, Prof. Henry Muccini.**

We have in L'Aquila strong research groups in Computer Science:

➔ **Software Engineering** group (chair: Pr. Paola Inverardi), known to be one of the best Computer Scientist in the world.
The topics covered by the group and the researchers working on them are:
- Advanced Software Engineering: Paola Inverardi
- Software Architecture: Henry Muccini, Patrizio Pelliccione, Ivano Malavolta

- Software Testing: Henry Muccini
- Formal Verification: Patrizio Pelliccione, Giuseppe della Penna
- Self*: Antinisca di Marco, Patrizio Pelliccione
- Software Performance Analysis: Vittorio Cortellessa, Paola Inverardi, Antinisca Di Marco
- Software Synthesis: Massimo Tivoli, Marco Autili
- Bio Informatics: Antinisca Di Marco
- SE for Wireless Sensor Networks: Henry Muccini, Vittorio Cortellessa
- Model Driven Engineering: Alfonso Pierantonio, Davide Di Ruscio, Romina Eramo, Vittorio Cortellessa
- Engineeering Mobile-enabled systems: Henry Muccini, Ivano Malavolta

➔ **Algorithms** group (chairs: Pr. Michele Flammini and Pr. Guido Proietti)
You may want to check the web sites of the following professors for more information on their research topics: Michele Flammini, Guido Proietti.

➔ **Operational Research** group (chair: Pr. Claudio Arbib)
You may want to check the web sites of the following professors for more information on their research topics: Claudio Arbib, Stefano Smriglio, Fabrizio Rossi.

➔ **Formal Verification** group (chairs: Pr. Monica Nesi and Dr. Giuseppe Della Penna)
You may want to check the web sites of the following professors for more information on their research topics: Monica Nesi, and Giuseppe Della Penna

➔ **Intelligent Agents** (chair: Pr. Stefania Costantini)
You may want to check the web sites of the following professors for more information on their research topics: Stefania Costantini

We also have research groups in **Mathematics** and **Telecommunication and Information Engineering**. Please enquire the University of L'Aquila EUROWEB PLUS primary contact (prof. Henry Muccini) for more information.

FOR STAFF INTERESTED TO SPEND SOME MONTHS IN L'AQUILA
We do have strong research groups in many research areas related to Computer Science, Engineering, and Mathematics. For more information, please contact the University of L'Aquila EUROWEB PLUS primary contact.

# Courses to be offered by the University of L'Aquila to ==BACHELOR and MASTER STUDENTS== within EUROWEB PLUS a.y. 2014-2015

Dear bachelor student,
the University of L'Aquila welcomes you to attend Master level courses (in English).
You are entitled to attend those courses only if you are very advanced in your bachelor studies (e.g., third year) and if your background provides you all the necessary background to attend those courses. Please submit the data requested by the EUROWEB submission system (cv, transcript of record, etc.). We will carefully analyze it and let you know your potential to attend such courses.

We do provide courses in English at the following schools:
- Computer Science
- Mathematical Modelling in Engineering
- Telecommunication Engineering
- Computer and Control Engineering

If you speak Italian, you can instead attend our bachelor courses that are provided in Italian.

**The courses offered at the Master level in English are summarized below.**

# Course in "Computer Science"

| | Course name | Lecturer | Settore S.D. | ECTS | Notes |
|---|---|---|---|---|---|
| | | | | | |
| Check the following link for the most up to date information: http://www.disim.univaq.it/didattica/content.php?lid=en&pid=49&did=0 | | | | | |
| **Semester I** | **a.y. 2013-2014** | | | | |
| | **Algorithms for distributed systems** | | INF/01 | 6 | |
| | **Advanced Software Engineering** | Proietti | INF/01 | 12 | |
| | **Formal Methods** | Nesi | INF/01 | 6 | |
| | **Foundations of Computer Science II** | Orefice | INF/01 | 6 | |
| | **Production Scheduling** | Smriglio | INF/01 | 6 | |
| | **Neural Networks** | Caianiello | INF/01 | 6 | |
| | | | **TOT** | **42** | |
| | **Advanced English for Computer Scientists** | TBA | | 3 | When available |
| | **Master Thesis** | | | 20 | |
| **Semester II** | **a.y. 2013-2014** | | | | |
| | **Advanced Software Engineering project** | Muccini & Cortellessa | INF/01 | 6 | |
| | **Model Driven Engineering** | Pierantonio | INF/01 | 6 | |
| | **Network Design** | Rossi | MAT/09 | 12 | |
| | **Information Systems and Network Security** | Monaco | INF/01 | 6 | |
| | **Systems and Applications on Networks** | Cassioli | INF/01 | 6 | |
| | | | **TOT** | **30** | |
| | **Italian** | Crediti F | Crediti F | | When available |
| | **Master Thesis** | | | 18 | |

➔ **Other course potentially offered in English:** Operational Research (6 ECTS), Logistics and Integrated Production Management (6 ECTS)

# Courses in "Mathematical Modelling in Engineering"

| | Course name | Lecturer | ECTS | Notes |
|---|---|---|---|---|
| Check the following link for the most up to date information: http://www.mathmods.eu/about/partners/l-aquila | | | | |
| **Semester I** | **a.y. 2013-2014** | | | |
| | **Applied partial differential equations** | Lattanzio & Plaza | 6 | |
| | **Control systems** | D'Innocenzo & Pola | 6 | |
| | **Dynamical systems and bifurcation theory** | Rubino & Luongo | 6 | |
| | **Functional analysis in applied mathematics and engineering** | Engel | 6 | |
| | **Fluid dynamics** | Gallifuoco | 6 | |
| | **Computer modelling and simulations of biomolecules** | Guidoni | 6 | |
| | **Principles of structural and cell biochemistry** | Guidoni | 6 | |
| | **Introduction to biomathematics** | Simeoni & Twarogowska | 6 | |
| | **Systems biology** | Palumbo | 6 | |
| | **Mathematical modelling and simulation** | Marcati & Maurizi | 9 | |
| | **Electronic devices** | Carelli | 9 | |
| | **Nanophotonics** | Palange | 9 | |
| **Semester II** | **a.y. 2013-2014** | | | |
| | **Concrete algebra** | Gavioli | 6 | |
| | **Network design** | Rossi | 6 | |
| | **Mechanics of solids and materials** | Tatone | 9 | |
| | **Stochastic mechanics** | Cancrini | 6 | |
| | **Intensive programmes [http://www.mathmods.it/ip]** | | 3 | |

# Courses in "Telecommunication Engineering"

| | Course name | Settore S.D. | ECTS |
|---|---|---|---|
| | Check the following link for the most up to date information: http://www.disim.univaq.it/didattica/content.php?lid=en&pid=49&did=0 | | |
| **Semester I** | **a.y. 2013-2014** | | |
| | **Automatic control (*)** | ING-INF/04 | 9 |
| | **Wireless Communications (*)** | ING-INF/03 | 9 |
| | **Radiopropagation and remote sensing (*)** | ING-INF/02 | 9 |
| | **Embedded systems (*)** | ING-INF/04-05 | 9 |
| | **Master Thesis** | | 20 |
| | | | |
| **Semester II** | **a.y. 2013-2014** | | |
| | **Electromagnetic Design (*)** | ING-INF/02 | 9 |
| | **Digital communications (*)** | ING-INF/03 | 9 |
| | **Digital electronics I (*)** | ING-INF/01 | 9 |
| | **Telecommunication networks II (*)** | ING-INF/03 | 9 |
| | **Algorithms and platforms for multimedia (*)** | ING-INF/03 | 6 |
| | **Master Thesis** | | 20 |

(*) To be provided in English only if English-speaking students are attending

# Courses in "Computer and Control Engineering"

| | Course name | Lecturer | Settore S.D. | ECTS |
|---|---|---|---|---|
| Check the following link for the most up to date information: http://www.disim.univaq.it/didattica/content.php?lid=en&pid=49&did=0 | | | | |
| **Semester I** | **a.y. 2013-2014** | | | |
| | **Advanced Control Systems** | A. Germani | Ing-Inf/04 | 6 |
| | **Automatic Control** | M.D. Di Benedetto | Ing-Inf/04 | 9 |
| | **Computer networks** | G. Di Stefano | Ing-Inf/04 | 6 |
| | **Economics** | M. Gastaldi | Ing-Inf/04 | 6 |
| | **Industrial Robotics** | C. Manes | Ing-Inf/04 | 9 |
| | **Information Systems** | E. Clementini | Ing-Inf/04 | 6 |
| | **Systems identification and data analysis** | A. Germani | Ing-Inf/04 | 9 |
| **Semester II** | **a.y. 2012-2014** | | | |
| | **Analysis and Control of Hybrid Systems** | M.D. Di Benedetto | Ing-Inf/04 | 6 |
| | **Control Systems Technology** | S. Di Gennaro | Ing-Inf/04 | 9 |
| | **Error correcting codes** | S. Innamorati | Ing-Inf/04 | 6 |
| | **Nonlinear systems** | S. Di Gennaro | Ing-Inf/04 | 6 |
| | **Optimal Control** | E. De Santis | Ing-Inf/04 | 9 |
| | **Web programming** | S. Cicerone | Ing-Inf/04 | 6 |
| | **Modeling and Simulation (mathematical methods for decision analysis)** | P. Caravani | Ing-Inf/04 | 9 |
| | | | | |

(*) To be provided in English only if English-speaking students are attending

10. State any special eligibility requirements you have such as TOEFL etc: NONE. Still, we do required students and staff to be able to speak English fluently.

11. Can you have fee-waiver for less than 10 month mobility? YES

12. If not, up to what duration can you support without fees? -

13.  If no fee-waiver possible, state details of your tuition fees? -

14. Can UG/Master's thesis works be done without fees? YES

15. Can your University pay scholarships? YES

16. Are scholarships taxable in your country? NO

17. Participation costs for international students staying one academic year: 3000 euros

18. Does your university follow ECTS grading system? YES

19. Any other information you would like to add