EUROPEAN MASTER IN INFORMATICS

University of Trento (Italy)

RWTH Aachen University (Germany)

University of Edinburgh (Scotland, UK)

Call for Student Applications
EuMI 2009-2010
Deadline January 18th, 2009

Online Application at:

http://www.eumi-school.org/eumi/application

Sponsored by the European Commission Programme

ERASMUS MUNDUS

1. EUROPEAN MASTER IN INFORMATICS

The University of Trento (Italy), the RWTH Aachen University (Germany), and the University of Edinburgh (Scotland) offer a **two year (120 ECTS credits)** Joint Master's Programme, named **European Master in Informatics (EuMI)**. The objective of the Master's Programme is to educate professionals who will understand advanced techniques, tools, and methodologies in the field of Computer Science, and who will be able to put this knowledge to practice in the key application domains of **Net-Centric/Media Informatics**, **Life Science Informatics**, and **Embedded Systems Informatics.**
The Programme will admit a maximum number of **50 students** for the academic year 2009/2010.

2. MASTER'S PROGRAMME

Description of the Programme
The objective is to educate professionals who will understand advanced techniques, tools, and methodologies in the field of Computer Science, and who will be able to put this knowledge to practice in key application domains. In particular, EuMI offers three areas of specialization in
- *Net-Centric / Media Informatics*: This specialization covers all those aspects of informatics related to the design, implementation and analysis of distributed, ubiquitous information and computing systems. This area covers a wide range of topics, ranging from network architectures and communication infrastructures to techniques for the design and analysis of distributed knowledge, media applications, intelligent human computer interfaces and distributed web-service applications.
- *Life-Science Informatics*: This area of specialization will prepare professionals for research or employment at the intersection of the study of Life Science (biology, neuroscience, cognitive science) and the study of computation and engineering. Students will take basic courses on the fundamentals of biology and/or cognitive science and advanced courses studying the application of computer science techniques to the analysis of structural and behavioural aspects of biological and cognitive systems.
- *Embedded Systems Informatics*: This specialization introduces the fundamental principles underlying the theory and the practical design and implementation of embedded systems. Moreover, it allows students to put these principles into practice in applications in the area of control systems (e.g., controllers for automotive systems or industrial plants) and to ambient intelligence applications (e.g., domotics or sensors networks).

These are application domains that, being emergent, rapidly evolving, and of growing impact on society, require specialized competencies not covered by more traditional degree programmes.

Structure of the Programme
For each area of specialization, a joint curriculum is defined which involves two universities of the Consortium. The student admitted to a selected curriculum will study in two universities, taking courses on advanced topics in theoretical and practical Computer Science, and with a focus on the selected area of specialization. The student will spend half of his/her Master's course in one university (the "first university"), and the other half in the other university (the "second university"). Work towards the thesis will be jointly supervised and evaluated by two professors, one from each university.

Duration of Studies
The EuMI Course has an average duration of two academic years starting in September 2009.

Learning outcomes
EuMI aims to train students in emerging research domains with a high potential impact to shape the future of applied computer science disciplines. It prepares students for employment in such multidisciplinary domains and/or for continuing their studies within PhD programmes.
After completing the EuMI programme the student will possess the competencies necessary for the design and implementation of complex software systems, including their embedding in technical and socio-technical systems. The student will achieve knowledge in both theoretical and applied Computer Science, which will allow him/her to adapt quickly to the changes in this constantly evolving field, and specific competencies necessary to operate in the chosen area of specialization. The student will also attain expertise in putting his/her knowledge into practice by participating in laboratory projects and/or in industrial student placement schemes. Moreover, the student will attain practical project management skills which are necessary for an effective application of the knowledge acquired.

During his/her studies, the student will work within research groups of three leading European universities, and will interact with professors, researchers and scholars working in advanced research in computer science and associated enabling technologies.

The international dimension of the Master's Course guarantees that students familiarise themselves with different educational methods and a multicultural education through the immersion in two different European universities.

Language

All courses are taught in English. Students will also undertake courses on the culture and language of the European countries of the main and partner universities, whenever English is not the officially spoken language.

Graduation thesis

Work towards the thesis will be jointly supervised and evaluated by two professors, one from each visited university

3. MASTER'S DEGREE

Upon the successful completion of the curriculum and fulfilment of the Master's course requirements, students will be awarded a qualification equivalent to Master's degrees in the two visited universities. The awarded degree corresponds to:

- a Master of Science in Computer Science or Media Informatics from the RWTH Aachen University
- a Master of Science in Informatics from the University of Edinburgh
- a Master of Science (Laurea Specialistica) in Informatics from the University of Trento

4. ADMISSION REQUIREMENTS AND SELECTION CRITERIA

Students are accepted in the program regardless of sex, age, or nationality. A student to be accepted must fulfil the following requirements:

– A first level (at least three years) degree in Computer Science or closely-related discipline, awarded by an internationally recognised university-level institution.
  Students who have not yet completed their first degree, but expect to graduate before July 31st,2009 can apply provided that they will obtain the degree and supply the EuMI secretariat with a degree certificate by July 31st 2009.

– Fluent written and spoken English knowledge, **certified** by either an IELTS score of at least 6.0, a TOEFL score of at least 550 (paper-based) / 217 (computer-based) / 81 (internet-based) or CAE score of at least C (not older than 2007); students with higher English scores (IELTS 6.5; TOEFL 580 / 237 / 88; CAE B or A) will be preferred.

  Only applicants who are Nationals and/or first-degree-holders of Antigua&Barbuda, Australia, The Bahamas, Barbados, Belize, English-speaking Canada, The Gambia, Ghana, Grenada, Guyana, Republic of Ireland, Jamaica, Kiribati, Liberia, Mauritius, Micronesia, New Zealand, Nigeria, Papua New Guinea, St. Kitts-Nevis, St. Lucia, St. Vincent, Sierra Leone, Solomon Islands, Trinidad&Tobago, United Kingdom, United States of America, Zambia or Zimbabwe **do not have to submit language certificates**.

Students will be selected according to the following criteria:
– Profile: academic records, work experience, other related qualifications
– Level of English knowledge
– Research & Development experience
– Motivation
– Reference letters

5. TUITION FEES

The tuition fees for academic year 2009-2010 are **€ 6.500**. The tuition fee may be waived in part or in total depending on the financial sources available at the moment of the selection. Students will be provided access to the facilities of the participating universities (library, computers, laboratories, Internet).

6. SCHOLARSHIPS

For the academic year 2009/10, **a number of scholarships** will be offered to students who are residents of countries outside the European Union, the European Economic Area / European Free Trade Association (Iceland, Liechtenstein, Norway) and the candidate countries for accession to the European Union (Bulgaria, Croatia, Romania, and Turkey). The amount of each scholarship can be up to **€ 21.000 per year**. The exact number of scholarships and amount will be communicated at the completion of the selection procedure (end of February).

These scholarships are funded by the European Commission within the Erasmus Mundus programme and will be assigned according to the requirements and constraints of this programme, as defined in the Erasmus Mundus programme (http://europa.eu.int/comm/education/programmes/mundus/index_en.html).
These constrains include but are not limited to: reserved positions for specific countries, no residence in EU, limitation in previous stays in EU, no previous enrolment in other European Master. More information about the Erasmus Mundus programme can be found at
http://ec.europa.eu/education/programmes/mundus/faq/index_en.html

Additional scholarships and tuition waivers may become available depending on the financial sources available at the time of the selection.

7. HOW TO APPLY

The application requires two steps: (1) an **on-line application** (due by **January 18th, 2009**) and (2) the **hard-copy submission** of documents (due by **January 31th, 2009**).

Applicants will be **notified about the admission** decision and whether they will be offered a scholarship by **March 10th, 2009. The formal confirmation** of the scholarship will be given by **May 31st, 2008** after the approval of the Erasmus Mundus scholarships by the European Commission.

The on-line application should be made on the website
http://www.eumi-school.org/eumi/application
Applicants will be required to fill out the on-line forms and to provide the following documents in electronic form

– A copy of the applicant's identity card or passport

– A copy of the IELTS, TOEFL, or CAE certificate (not older than 2007).

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– A copy of all academic degree certificates, i.e. bachelor or equivalent, master or equivalent, or other graduate degrees .

– A translation of the degree certificates, made by an officially recognised translator in English, ONLY in case the original documents are not written in English, German, or Italian.

– Copies of all transcripts or other academic records that give proof of the higher education studies presented in Attachment 3 (i.e. bachelors, masters etc.) including credits and grades achieved in each single subject.

– A translation of the transcripts and records made by an officially recognized translator in English, ONLY in case the original documents in Attachment 5 are not written in English, German, or Italian.

Applicants should also send a hard copy of the following documents by January 31th, 2009 by regular mail to:

> EuMI School – Luca Valenzin
> c/o Dipartimento di Ingegneria e Scienza dell'Informazione
> University of Trento
> Via Sommarive, 14
> I-38100 Povo - Trento
> Italy

‒ A signed copy of the online application form
‒ A photocopy of the applicant's identity card or passport
‒ A copy of IELTS, TOEFL or CAE certificate, not older than 2007. Not required for applicants that do not need provide English certification (see list of countries in the admission requirements).
‒ A copy of all academic degree certificates, i.e. bachelor or equivalent, master or equivalent, other graduate degrees accompanied by a certified translation if not in English, German or Italian.

All submitted documents should contain a clear indication of the application ID provided during the electronic application submission.

Unreadable documents or documents without an application ID number will not be considered. On-line applications not submitted by January 18th, 2009 or applications whose paper copies of have not been received by January 31th, 2009 will neither be considered. The "European Master in Informatics" does not accept responsibility for loss of applications due to address errors or other postal-related problems.

8. IMPORTANT DATES

- **January 18th, 2009**   Deadline for on-line application
- **January 31th, 2009**   Deadline for surface mail application
- **March 10th, 2009**   Notification of admission and of scholarship
- **May 31st, 2009**   Formal confirmation of scholarship
- **September 2009**   Start of Master courses

9. CONTACTS

EuMi School
c/o DISI – Dipartimento di Ingegneria e Scienza dell'Informazione
Università degli Studi di Trento, 38100 Trento
E-mail: info@eumi-school.org
Web-Site: http://www.eumi-school.org/
Fax: +39 0461 88 2061