EUROPEAN MASTER IN INFORMATICS

University of Trento (Italy)

RWTH Aachen University (Germany)

University of Edinburgh (Scotland, UK)

Call for European Student Applications

EuMI 2007-2008

Deadline May 30th, 2007

Online Application at:

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

Sponsored by the European Commission Programme

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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 to understand advanced techniques, tools, and methodologies in the field of Computer Science, and teach them how to put this knowledge into practice in the key application domains of **Net-Centric and Media**, **Life Science**, and **Embedded Systems Informatics.**

2. MASTER'S PROGRAMME

Description of the Programme
The goal of the program is to generate experts in three specialization areas that are emergent, rapidly evolving, have a growing impact on society, and require specialized competencies not covered by more traditional degree programmes. These specialization areas are:
- *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 follow basic courses on the fundamentals of biology and cognitive sciences and advanced courses on the applications of computer science principles 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 practical design and implementation of embedded systems, and allows students to put these principles into practice in applications areas such as control systems (e.g., controllers for automotive systems or industrial plants) or ambient intelligence applications (e.g., domotics or sensors networks).

Structure of the Programme
For each area of specialization, there is a joint curriculum which involves two universities of the consortium. This means that students admitted to a selected curriculum will study in two universities, by taking advanced theoretical and practical Computer Science courses, but with focus on their selected area of specialization. During the initial part of their study period, students will attend one of the two universities (a.k.a. "main university"), during the middle part the second university (a.k.a. "partner university"), and will return to the main university for their thesis preparation.

Duration of Studies
The duration of the EuMI MSc is in average two academic years, with roughly equal amounts of time spent in each of the two universities. The program starts in in September 2007.

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 multidisciplinary domains and provides the foundations and the training required for those who wish to continue their studies for a PhD degree.

After completing the EuMI programme students will possess the competencies necessary for the design and implementation of complex software systems, including their embedding in technical and socio-technical systems. They will achieve the necessary theoretical and applied Computer Science knowledge that will allow them to adapt quickly to the changes in this constantly evolving field. They will also receive specific competencies necessary to operate in their chosen area of specialization. Student will also attain expertise in putting their knowledge into practice by participating in laboratory projects and/or industrial student placement schemes. Moreover, the student will attain practical project management skills necessary for a successful carrier in the field.

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 European dimension of the programme guarantees that students familiarise themselves with different educational methods and a multicultural education through their immersion in two different European universities.

Language
All courses are taught in English.

Graduation thesis
The thesis will be done at the main university, but students will be jointly supervised by instructors from both universities.

3. MASTER'S DEGREE

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

This Call is intended to applicants who are residents of countries **within** 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).
Please note, that a Call dedicated to Third-Country (non-EU) Students for EuMI 2007-2008 has already been carried out and has been closed in January 2007.

Applications for students' positions are accepted from candidates, regardless of sex, age, and European nationality, who comply with the following requirements:

–   A first level (at least three years) degree in Computer Science or closely related disciplines, awarded by an internationally recognised university-level institution.
    Students who have not yet completed their first degree, but who expect to graduate before August 31st, can apply to EuMI. If selected, their admission will be conditional on the receipt of the degree certificate by EuMI before August 31st.

–   Fluent written and spoken English, 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; students with higher English scores (IELTS 6.5; TOEFL 580 / 237 / 88; CAE B or A) will be preferred.

    Students who have not yet a certificate, but who expect to have it before August 31st, can apply to EuMI. If selected, their admission will be conditional on the receipt of the English certificate by EuMI before August 31st.

    English speaking country nationals do not have to submit language certificates.

Students will be selected according to the following criteria:
–   Profile: academic records, work experience, other qualifications
–   English knowledge level
–   Programming skills
–   Motivation
–   Reference letters

5. TUITION FEES

The tuition fees for the Master's Programme are **€ 4.000** for academic year 2007-2008. Students will be provided with the facilities of the participating universities (library, computers, laboratories, Internet).

6. SCHOLARSHIPS

For the academic year 2007/08, **3 tuition weaver** are offered for students who are residents of countries within 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).

These scholarships are funded by the EuMI School.

Further scholarships and tuition waiver may be made available depending on the financial sources available at the time of students' selection.

7. HOW TO APPLY

The application requires two steps: An **on-line application** and the **hard-copy submission** of documents

Applicants will be **notified about admission** and whether they will be offered a scholarship (tuition weaver) by **June 30th, 2007.**
The on-line applications should be made at the website
http://www.eumi-school.org/eumi/application
Applicants are required to fill out the on-line form and to provide the following documents electronically:

– Photocopy of the applicant's identity card or passport (indicated as "Attachment 1")

– A copy of the English language certification: IELTS-certificate (with a minimum score of 6.0) or the TOEFL certificate, (with a minimum score of 550 (paper-based) or 217 (computer-based) or 81 (internet-based) - the certificate must be not older than January 2005 - or the CAE certificate (with a minimum score of C) (indicated as "Attachment 2").
  English speaking country nationals do not have to submit language certificates.

– A copy of all academic degree certificates, i.e. bachelor or equivalent, master or equivalent, other graduate degrees (indicated as "Attachment 3").

– 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 (indicated as "Attachment 4").

– 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 (indicated as "Attachment 5").

– 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 (indicated as "Attachment 6").

The attachments need to be submitted electronically, following the instructions provided at the website **http://www.eumi-school.org/eumi/application**. If you encounter any problems with the submission procedure, please contact directly the EuMI School
ADDITIONALLY, copies of the following documents must be sent by normal mail to the address:

> **EuMi School Secretariat**
> **Att: Luca Valenzin**
> c/o DIT – Department of Informatics and Telecommunications
> Università degli Studi di Trento,
> Via Sommarie, 14
> 38100 Povo diTrento - Italy

- A signed copy of the application form previously made on-line (print the application form and sign it)
- A photocopy of the applicant's identity card or passport (indicated as "Attachment 1")
- A copy of IELTS, TOEFL (not be older than January 2005) or CAE certificate (indicated as "Attachment 2"). This document is not required for students who are not required to submit its electronic version.
- A copy of all academic degree certificates, i.e. bachelor or equivalent, master or equivalent, other graduate degrees (indicated as "Attachment 3").
- A translation of the degree certificates, made by an officially recognised translator in English, in case the original documents are not written in English, German, or Italian (indicated as "Attachment 4").
- Two letters of recommendation from academic referees (indicated as "Attachment 7" and "Attachment 8"). Each recommendation letter must be sent in an envelope sealed and signed by the referee. It should be written preferably on the headed paper of the referees' institution, or with the official stamp of the referees' institution.

Again, all submitted documents should contain a clear indication of the student's application ID provided during the electronic submission of the application form and of the attachment number.

Unreadable documents and attachments that do not contain the application ID number will not be considered. On-line applications which have not been completed by the Call deadline (see below) will not be considered. Applications for which paper copies of the documents are not received by the deadline (see below) will not be considered, even if sent on time. The "European Master in Informatics" does not accept responsibility for loss of applications through errors in the address as well as possible postal problems.

8. IMPORTANT DATES

- **May 30th, 2007**   Deadline for on-line application
- **June 10th, 2007**   Deadline for surface mail application
- **June 30th, 2007**   Notification of admission and of scholarship

9. CONTACTS

EuMi School Secretariat
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