

EUROPEAN MASTER IN INFORMATICS

University of Trento (Italy)
RWTH Aachen University (Germany)
University of Edinburgh (Scotland, UK)

Call for non-EU Student Applications

EuMI 2010-2011

Deadline February 28, 2010

Online Application at:

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

**EuMI has been awarded by the European Commission/EACEA
the Erasmus Mundus Brand Name (EMBN)**

European Commission,
Directorate-General for Education and Culture, EAC



Executive Agency for Education,
Culture and Audiovisual, EACEA



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 2010/2011.

2. MASTER'S PROGRAMME

Description of the Programme

The objective of the 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 key application domains. In particular, EuMI offers three areas of specialisation in

- *Net-Centric / Media Informatics*: This specialization covers all 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 specialisation will prepare professionals for research or employment at the intersection of the study of life science (biology, neuroscience, cognitive science) and computing. Students will take basic courses on the fundamentals of biology and/or cognitive science, advanced courses studying the application of computer science and courses on techniques for 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. 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 specialisation, a joint curriculum is specified 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 chosen 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 carried out at the second university and will be jointly supervised and evaluated by two professors, one from each university.

Duration of Studies

The EuMI Course has a duration of two academic years full-time, starting in September 2010.

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 areas 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 computational systems, including their embedding in a socio-technical context. The student will acquire knowledge in both theoretical and applied Computer Science, which will allow him/her to adapt quickly to changes in this constantly evolving field, and specific competencies necessary to operate in the chosen area of specialisation. 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 computer science research in 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 and two different countries.

Language

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

Graduation thesis

Work towards the thesis will be carried out at the second university 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 Magistrale) 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 31, 2010 can apply provided that they will obtain the degree and supply the EuMI secretariat with a degree certificate by July 31, 2010.
- 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 2008); students with higher English scores (IELTS 6.5; TOEFL 580 / 237 / 92; CAE grade 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 both academic year 2010-2011 and 2011-2012 are **€ 6.500** per each year. The tuition fee may be waived in part or in total depending on institutional funding 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 2010/11, **up to 6 full-scholarships** will be offered to students **who are citizens of countries outside the European Union**, the European Economic Area / European Free Trade Association (Iceland, Liechtenstein, Norway). **The amount of each scholarship will be up to € 15.000 per year.** The exact number of scholarships and scholarship amount will be communicated at the completion of the selection procedure (end of March). EuMI will also offer **3 additional scholarships** only tuition-waiver.

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

7. HOW TO APPLY

The application requires two steps: (1) **on-line application** (due by **February 28, 2010**) and (2) **short-form hard-copy submission** by fax or postal service (due by **March 15, 2010**).

Applicants will be **notified about the admission** decision and whether they will be offered a scholarship or a tuition waiver by **March 31, 2010**. Registration procedures as well as visa procedure will also start after March 31st, 2010. Additional documents may be requested/required.

The on-line application should be submitted to the central EuMI 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 2008).
- A copy of all academic degree certificates, i.e. Bachelor or equivalent, Master or equivalent, or other postgraduate degrees/academic qualifications .
- 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 send the **signed hard-copy** of the **submission short-form** by March 15, 2010 via FAX or SURFACE MAIL (any carrier/post courier) to:

EuMI School – Elena Bortolotti
c/o Dipartimento di Ingegneria e Scienza dell'Informazione
University of Trento

Via Sommarive, 14
I-38100 Povo – Trento – Italy
FAX: +39 0461 28 3166

Unreadable documents or documents without an application ID number will be rejected.
On-line applications not submitted by **February 28, 2010** or applications for which no hard copies have been received by **March 15, 2010** will not be considered either. The “European Master in Informatics” does not accept responsibility for loss of applications due to address errors or other postal matters.

8. IMPORTANT DATES

- **February 28, 2010** Deadline for on-line application
- **March 15, 2010** Deadline for surface mail application
- **March 31, 2010** Notification of admission and of scholarship and starting of the registration procedure
- **September 2010** Start of Master courses

9. CONTACTS

EuMi School

c/o DISI – Dipartimento di Ingegneria e Scienza dell'Informazione

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