EUROPEAN MASTER IN INFORMATICS

University of Trento (Italy)

RWTH Aachen University (Germany)

University of Edinburgh (Scotland, UK)

Call for Student Applications

EuMI 2011-2013

Deadline May 22, 2011

Online Application at:

For EU students: http://applications.disi.unitn.it

For non-EU students: http://applications.disi.unitn.it

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
Education and Culture DG ERASMUS MUNDUS	EAC EA Education, Audiovisual & Culture Executive Agency

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 **40 students** for the academic year 2011/2012.

For the academic year 2011/2012 only the mobility between the University of Trento (Italy) and the RWTH Aachen University (Germany) will be active.

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 application domains are emergent, rapidly evolving, and of growing impact on society. Therefore they 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. Students admitted to a selected curriculum will study in two universities, taking courses on advanced topics in theoretical and practical Computer Science with a focus on the chosen area of specialization. The student will spend half of his/her Master 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 2011.

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 have all necessary competencies 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 taking part 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. In order to be accepted all students 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 August 31,2011 can apply provided that they will obtain the degree and supply the EuMI secretariat with a degree certificate by August 31, 2011.

– Fluent written and spoken English knowledge, **certified** (certificate not older than 2008) either by an IELTS score of at least 6.0, a TOEFL score of at least 550 (paper-based) / 217 (computer-based) / 81 (internet-based) or a CAE score of at least C. 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 academic year 2011-2012 are **€ 6.500**. 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 years 2011/12 **up to 4 scholarships** will be offered to **EU students** (applicants who are residents of countries within the European Union, the European Economic Area / European Free Trade Association (Iceland, Liechtenstein, Norway) which will cover:
- tuition waiver and
- a financial contribution to the student's costs of € 3.500 per each year of the EuMI programme.

Moreover up to **8 tuition waivers** will be offered both to **EU** and **NON EU** (applicants who are citizens of countries outside the European Union and are not resident in the EU) students.

These scholarships and tuition waivers are funded directly by the EuMI School consortium. Additional scholarships and tuition waivers may become available depending on institutional funding available at the time of selection.

Please note that for the academic year 2011/2012 only motilities between the University of Trento (Italy) and the RWTH Aachen University (Germany) will be active.

7. HOW TO APPLY

The application requires two steps: (1) **on-line application** (due by **May 22, 2011**) and (2) **short-form hard-copy submission** by fax or postal service (due by **May 31, 2011**).

Applicants will be **notified about the admission** decision and whether they will be offered a scholarship or a tuition waiver by **June 15, 2011.** Registration procedures as well as visa procedure will also start after acceptance and registration deposit payment. Additional documents may be required.

The on-line application should be submitted to the central EuMI website.

Applications for both EU and NON EU students are available on the following website:
http://www.eumi-school.org/eumi/application
Please select the application correspondent to your residence country.

Applicants will be required to fill out the on-line forms and to provide the following documents in electronic form.

Needed documents

- A copy/photocopy of the applicant's **passport** (identity card if you have no passport). **Only** pages with a photo and personal data.
- A copy/photocopy of the **IELTS**, **TOEFL**, or **CAE** certificate (not older than 2008). In case, the institutional code 2348 01-University of Trento.
- A copy/photocopy of all academic **degree certificates** (i.e. Bachelor or equivalent, Master or equivalent) or other **postgraduate degrees**/academic qualifications. Note: if the degree is not in English, German, or Italian, an English translation is needed, made by an officially recognised translator or your University. If the degree will be obtained within August 31, 2011 please indicate it in a letter.

- Copies/photocopies of all **transcripts** or other **academic records** that give proof of the higher education studies (i.e. Bachelors, Masters etc.) including **credits** and **grades** achieved in each single subject.
- **Reference letters** (minimum 2) should be requested via S.A.R.A. application procedure. In case your reference letters are in sealed envelopes, please notify the EuMI Secretariat via email (info@eumi-school.org) and send them together with your finalized online application short-form document.
- **Print-out of your finalized online application short-form**, signed in original.

Postal address
You can send the application with any carrier you think it is appropriate - UPS, DHL, TNT, Postal service, etc.

EuMI School – attention Ms. Elena Bortolotti
University of Trento - Faculty of Science - DISI
Via Sommarive, 14
38123 Trento (TN) - Italy

Unreadable documents or documents without an application ID number will not be considered. On-line applications not submitted by May 22, 2011 or applications whose signed **finalized online application short-form** have not been received by May 31, 2011 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

- **May 22, 2011**   Deadline for on-line application
- **May 31, 2011**   Deadline for surface mail **application short-form**
- **June 15, 2011**   Notification of admission and of scholarship
- **September 2011**   Start of Master courses

Selected students will be registered in the Programme only after paying a 100,00€ registration deposit, which will be refund after student's arrival.

Scholarship rates may be taxed depending on each University regulation.

9. CONTACTS

EuMI School
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