

Erasmus Mundus Master in Membrane Engineering EM³E
First Call for Applications
Academic Year 2011 - 2012

Erasmus Mundus is a cooperation and mobility programme in the field of higher education, promoted by the Executive Agency for Education, Audiovisual & Culture (EACEA - European Commission) that aims to enhance the quality of European higher education and to promote dialogue and understanding between people and cultures through cooperation with Third Countries.

In the framework of Action 1 ('implementing joint programmes at postgraduate level'), the Erasmus Mundus Master and Erasmus Mundus Doctorate in Membrane Engineering have been selected in July 2010 by the European Commission. Both will be open to non-European and European students. The first edition will start from September 2011.

1. Master description

The Erasmus Mundus Master in Membrane Engineering EM³E will offer an advanced education programme related to membrane science and engineering at the interface between material science and chemical engineering and focused on specific applicative fields.

It involves 6 High Education Institutions of 5 European countries: University of Twente (Netherlands), University of Lisboa (Portugal), University of Zaragoza (Spain), Institute of Chemical Technology Prague (Czech Republic), University Paul Sabatier (Toulouse, France) and University Montpellier 2 (France, coordinating organisation). Associated partners are the University of Calabria (Italy), the Catholic University of Leuven (Belgium) and the University Hassan II of Mohammedia (Morocco). The pedagogical project of Master comes from the closely collaboration between partners through the European Research Network of Excellence NanoMemPro.

The Master course will have a duration of two years: 4 semesters corresponding to 30 ECTS each and given at least in 3 countries. In the first year, theoretical and practical fundaments will be provided: After an integration week, students will enter the Master at University Montpellier 2 or at University Paul Sabatier. In each of these universities, there will be common mandatory and optional units, corresponding to teaching and research field of excellence of each partner (material science in Montpellier and physico-chemical processes in Toulouse). This first semester will be adapted to students by taking into account the background and their learning objectives. During the second semester, students will follow mandatory teaching units to acquire knowledge and skills on process modelling and simulation at the Institute of Chemical Technology of Prague. During the second year, students will choose to pursue their training in one of three university in order to acquire specific skills in an application field: *Nanosciences and Nanotechnology* (University of Zaragoza), *Energy and Environment* (University of Twente), and *Biotechnologies, Food and Health* (Universidade Nova de Lisboa). The last semester will be devoted to a 6 months master thesis in a university or an industrial company.

The number of enrolled students is expected to be 30. Erasmus Mundus scholarships will be available. The language of instruction will be English. During the study period, the courses and activities country languages and culture will be also provided. Students will be awarded with a multiple Master's degrees from the three hosting universities, together with a Diploma Supplement.

2. Participation costs

- Category A students: 8 000 €/year
- Category B students: 4 000 €/year

Category A: citizens of 'Third-countries' - those who are not nationals or residents of the 27 EU Member States, Iceland, Liechtenstein, Norway, Former Yugoslav Republic of Macedonia and Turkey AND not residents nor have carried out their main activity (studies, training or work) for more than a total of 12 months over the last five years in one of previous countries

Category B: European students and students not included in the previous category A.

The registration fees include registration in the three host universities and others participation costs (university tuition, insurance costs, attendance at the integration week, cultural lectures and visits, library access, fieldwork costs, and other costs related with the student support).

The registration fees do not include living expenses and transportation costs.

3. Erasmus Mundus Scholarships

EM³E Master through the European Commission offers a limited number of Erasmus Mundus scholarships to non-European and European students to follow the EM³E master courses. Two kinds of Erasmus Mundus scholarships will be awarded:

- Category A scholarships (awarded to category A students): this scholarship is considered as a 'full scholarship' covering all necessary costs of the student during his/her study period in Europe (24 000 €/year).
- Category B scholarships (awarded to category B students): this scholarship is considered as a 'financial contribution' covering only a reduced part of the student's costs while following the EM³E studies (10 000 €/year).

More details about the scholarships can be found on the Erasmus Mundus website: http://eacea.ec.europa.eu/erasmus_mundus/funding/scholarships_students_academics_en.php.

Who can apply to an Erasmus Mundus scholarship?

- Only candidates who have applied to and have been accepted by EM³E in accordance with EM³E admission criteria. The scholarships are offered to the best students, after the examination of the applications.
- Individuals who have already benefited from a scholarship from another Erasmus Mundus Master are not eligible for an EM³E Erasmus Mundus scholarship.
- Students can apply for an Erasmus Mundus scholarship to the Master course of their choice but the number of applications must be limited to maximum three courses (i.e. if you apply to more than three Erasmus Mundus Masters Courses, you will be automatically excluded from the selection process for an Erasmus Mundus Scholarship).

4. Admission Criteria

The minimum admission criteria are the same for all students irrespective of their country of origin or of the training track they candidate to.

- Hold a Bologna 1st cycle degree or a bachelor degree in Chemistry, Physics, Materials Engineering, Chemical Engineering, Bio Engineering, related Bioscience or equivalent degrees from a College, University or Technical School with a recognised standing or alternatively, a recognised professional experience in these areas. Students in the final year of a degree may be admitted as long as they present the certificate and official transcripts before they enrol. *Students in the process of obtaining his Bachelor degree, may apply for admission to EM³E. Applicant should include a letter from his university stating the anticipated date of completion of the degree.*
- Excellent academic background with marks identifying the candidate among the 20% best students of his former studies.
- Selection criteria include also professional experience, language skills, motivation and letters of recommendation.
- Proof of good English competencies (all courses are conducted in English).

5. Selection criteria

The selection for admission to EM³E Master and for an Erasmus Mundus scholarship is based on academic excellence (one of the most important selection criteria), curriculum vitae, professional experience, motivation, recommendations, language skills, and interview to guarantee the selection of high-quality students. Country of origin and gender are additional criteria that could be used to orient the recruitment towards diversity in geographical cover and balance in gender representation.

Successful candidates also have to have demonstrated a strong interest in membrane engineering sciences. Their letter of motivation, the letters of their referees and their extra-curriculum activities will be thoroughly examined for that purpose.

6. Application Procedure

The application form is available on the EM³E website (<http://www.em3e.eu/>).

For the first edition (academic year 2011-2012), the application submission will be done via e-mail (to send to the EM³E Management Office: master-em3e@univ-montp2.fr).

Students that wish to apply for an Erasmus Mundus scholarship can do so at application time to the EM³E Master through the provided application form. No separate application is required.

The application material corresponds to the application form (completed and signed) AND all requested documents (included in the sequence listed below) as a single PDF file. The file must be entitled: YOURLASTNAME_APPLIC2011.pdf.

Requested documents:

- **Application form** dully filled out and signed.
- **Detailed Curriculum Vitae** in English specifying scientific and professional experiences, academic degrees, conference presentations, publications and special skills. Maximum 3 pages.
- **Letter of motivation** in English covering the following aspects: what made you decide to apply to the EM³E Master course, which skills and abilities make you a good candidate for EM³E, your motivations to study abroad, your professional interests and your career goals and expectation. For non-European candidates, your goals and interests in coming to Europe for education

(statement of purpose) must be included in this letter. Maximum 1 page. The letter must be provided in 2 copies: one handwritten, one typed.

- **Certified copy of academic degree(s)** in original language and translated into English, stating the final classification obtained.

If you are currently in the final year of your Bachelor's programme, and therefore cannot send your Bachelor's degree, please send a statement of the expected date of graduation signed by your university.

- **An official document**, from the last institution visited, College, University or Technical School, stating your relative position in the corresponding graduation course, i.e., top 5%, top 10% or top 20% of your Bologna 1st cycle class or of your bachelor's course.
- **Certified copy of academic transcript(s)** in original language and translated into English, listing the grade/rank/mark of each course attended to obtain each degree. All courses taken must be included.
- **Official proofs of English language proficiency** (TOEFL/IELTS scores or equivalent) for participants from countries where English is not the medium of instruction in tertiary education.
- **Official proofs of other language proficiency** (where applicable).
- **Two reference letters**. The first letter from faculty from which you obtained your degree. The second letter, from faculty or from an employer or supervisor.
- **Copy of your international passport** (preferably) or identification card.

Pre-selected students will be requested to provide the originals or certified copies of all documents they have submitted in electronic form with their application and any additional document required.

7. Application period

The application period will be open from October 18th, 2010 to December 15th, 2010.

8. Publication of the results

The selection for admission and for scholarships will be concluded at the end of February 2011. On February 28th 2011, EM³E consortium will submit to the European Commission the main-list and reserve list of pre-selected students.

- Non-selected candidates will be informed on March 1st 2011 by e-mail about the decision.
- For the other candidates, the selection process will be pursued. They will be informed about the decision only after receipt of European Commission notification. No information will be given before that.

9. Contact

For any question about EM³E, please visit our website <http://www.em3e.eu/> OR contact us at: master-EM3E@univ-montp2.fr