

## Erasmus Mundus Master in Membrane Engineering EM<sup>3</sup>E

### Call for Applications

#### Master edition 2012 - 2014

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 were selected in July 2010 by the European Commission. Both are open to non-European and European students. The first edition has started from September 2011.

### 1. Master description

The Erasmus Mundus Master in Membrane Engineering EM<sup>3</sup>E offers 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 six High Education Institutions of five European countries: University of Twente (The Netherlands), Universidade Nova de Lisboa (Portugal), Universidad de Zaragoza (Spain), Institute of Chemical Technology Prague (Czech Republic), Université Paul Sabatier (Toulouse, France) and Université Montpellier 2 (France, coordinating organisation). Associated partners are: Università della Calabria (Italy), Katholieke Universiteit Leuven (Belgium) and Université Hassan II de Mohammedia (Morocco). The pedagogical project of EM<sup>3</sup>E comes from the closely collaboration between partners through the European Research Network of Excellence NanoMemPro.

The Master course has 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 fundamentals are provided. After an integration week, students enter the Master at Université Montpellier 2 or at Université Paul Sabatier. In each of two universities, there are 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 is adapted to students by taking into account the background and their learning objectives. During the second semester, students 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* (Universidad de Zaragoza), *Energy and Environment* (University of Twente), and *Biotechnologies, Food and Health* (Universidade Nova de Lisboa). The last semester is devoted to a 6 months master thesis in a university, a research center or an industrial company.

The number of enrolled students is maximum 30. Erasmus Mundus scholarships are available. The language of instruction is English. During the study period, the courses and activities country languages and culture are 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 or Norway and not residents nor have carried out their main activity (studies, training or work) for more than a total of twelve 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 fee includes 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 fee does not include living expenses and transportation costs.

## 3. Erasmus Mundus Scholarships

EM<sup>3</sup>E Master through the European Commission offers a limited number of Erasmus Mundus scholarships to non-European and European students to follow the EM<sup>3</sup>E 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 EM<sup>3</sup>E 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](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 EM<sup>3</sup>E 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 and Eligibility 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 1<sup>st</sup> cycle degree or a bachelor degree in Chemistry, Physics, Materials Engineering, Chemical Engineering, Bio-chemical Engineering, or equivalent degrees in one of the previous domains, 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 their Bachelor degree, may apply for admission to EM<sup>3</sup>E. Applicant should include a letter from his/her 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/her former studies.
- Official proof of good English competencies (all courses are conducted in English).

#### 5. Application Procedure

The application form is available on the EM<sup>3</sup>E website

The application submission is done via e-mail (to send to the EM<sup>3</sup>E Management Office: [master-em3e@univ-montp2.fr](mailto:master-em3e@univ-montp2.fr)).

Students that wish to apply for an Erasmus Mundus scholarship can do so at application time to the EM<sup>3</sup>E Master through the same 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 EM<sup>3</sup>E Master course, which skills and abilities make you a good candidate for EM<sup>3</sup>E, 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 two copies: one handwritten, one typed.
- **Certified copy of academic degree(s)** in original language and translated into English, stating the final classification obtained.

Please note that if you are in the process of obtaining your Bachelor degree, you may also apply for admission to the EM<sup>3</sup>E Master. Applicant should include a letter from his/her university stating the anticipated date of completion of the degree. The EM<sup>3</sup>E Consortium may conditionally admit you, based on requested documents in the application form and the expected date of graduation. After graduation, you have to submit the degree and official transcripts before the start of the EM<sup>3</sup>E Master (September 1<sup>st</sup> 2012).

- **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.
- **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 1<sup>st</sup> cycle class or of your bachelor's course.
- **Official proof of English language proficiency.** English language tests accepted are: TOEFL-iBT (required overall of at least 90); IELTS (required overall score of at least 6,5); University of Cambridge ("Certificate of Proficiency in English" or "Certificate in Advanced English"). Other official proof could be admitted under validation of the EM3E consortium.

Exception: Candidate from English speaking countries or candidate who completed his/her bachelor degree in English as medium of instruction must provide an official letter from his/her university from which he/she graduated attesting that English is the media of instruction.

- **Official proof 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. The letters have to be on letterhead of the referee's organisation.
- **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.

## 6. Evaluation and selection

Applications for admission to EM<sup>3</sup>E Master and for an Erasmus Mundus scholarship will be examined and evaluated by the EM3E consortium.

If the examination of the application reveals that the application does not meet the eligibility criteria stated in paragraph 4, the application will be rejected on this sole basis.

The evaluation and examination of applications is done in two steps based on:

- first step: academic excellence (one of the most important selection criteria), curriculum vitae, professional experience, motivation and recommendation letters.
- second step (only for preselected students): interview by phone or video-conference to guarantee the selection of high-quality students.

Successful candidates 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 and interview will be thoroughly examined for that purpose.

Country of origin, gender and age are additional criteria that could be used to orient the final recruitment towards diversity in geographical cover and balance in gender representation.

## 7. Indicative time-table of the evaluation procedure

| For admission with an Erasmus Mundus scholarship             |                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Deadline for submission of applications                      | December 15 <sup>th</sup> 2011                                                                                                                                                                                                                                                                                                                                                              |
| Evaluation and selection period                              | <p>January - February 2012</p> <p>The EM<sup>3</sup>E consortium will submit to the European Commission the main-list and reserve list of pre-selected students on February 28<sup>th</sup> 2012.</p> <p>During this period, applicants could be contacted by e-mail for submitting additional documents or for scheduling an appointment for an interview (phone or video-conference).</p> |
| First notification to non-selected and pre-selected students | First week of March 2012 by e-mail                                                                                                                                                                                                                                                                                                                                                          |
| Final notification to students on the main and reserve lists | <p>May - June 2012 by e-mail</p> <p>Students will be informed about the final decision only after receipt of the European Commission notification.</p>                                                                                                                                                                                                                                      |

| For admission without an Erasmus Mundus scholarship          |                                                                                                                                                                                                        |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Deadline for submission of applications                      | February 29 <sup>th</sup> 2012                                                                                                                                                                         |
| Evaluation and selection period                              | <p>March 2012</p> <p>During this period, applicants could be contacted by e-mail for submitting additional documents or for scheduling an appointment for an interview (phone or video-conference)</p> |
| Final notification to students on the main and reserve lists | May - June 2012 by e-mail                                                                                                                                                                              |

## 8. Contact

For any question about EM<sup>3</sup>E, please visit our website or contact us at [master-em3e@univ-montp2.fr](mailto:master-em3e@univ-montp2.fr)