

Call for positions 2012 – 2nd edition

DEADLINE: ~~January 9th, 2012~~ — **EXTENDED UNTIL January 16th, 2012**

POSITIONS & FELLOWSHIPS: The number of positions will depend on the number of EACEA and other fellowships. This will be published on the website as soon as available, presumably by the end of October 2011.

OFFICIAL LANGUAGE: English

IMPORTANT NOTICES:

1) without exception, all communication from the SMART Consortium to applicants will be managed via e-mail. Candidates are advised to check their mail box/es regularly.

2) read also the "Instructions for completing the application", available in a separate file.

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1- Introduction

The SMART Erasmus Mundus Joint Doctoral Programme (EMJD) is open to all interested doctoral candidates from Europe and beyond, regardless of citizenship, sex, religion and political opinion. Admission to the programme is subject to a competitive application process, a comparative review and a final validation by EACEA¹. To apply, candidates must complete the application form (read carefully the present call and complete the Annexes as specified below) and forward all required documents for receipt by the deadline date of January 16, 2012.

It is the candidate's responsibility to hand in a complete and timely application dossier.

2- The SMART programme

The SMART EMJD is a fully integrated, international interdisciplinary doctoral training and research programme focusing on the sustainable management of river systems from their headwaters to estuaries. Over a 3-year period, doctoral candidates will receive training towards accomplishing an original doctoral thesis and international publications on the

¹ EACEA is the Education, Audiovisual and Culture Executive Agency, responsible for the management of parts of the EU's programmes in the fields of education, culture and audiovisual, including the Erasmus Mundus programmes.

after the final examination and successful defence of their thesis, they will be awarded a Joint or Double Doctoral degree from the two partner universities where their studies and training were completed.

The partner universities will provide enabling and complementary research environments, mobility schemes and support structures and assistance, all aimed at developing the doctoral candidates' skill set.

3- Fellowships

a) Erasmus Mundus fellowships:

Two different types of Erasmus Mundus fellowships can be awarded to doctoral candidates:

Category A fellowships: can be awarded to third-country doctoral candidates who come from a country other than a European country² and who are not residents nor have carried out their main activity (studies, work, etc.) for more than a total of 12 months over the last five years in one of these countries³. The only exception to this rule applies to doctoral candidates who have previously received an Erasmus Mundus masters scholarship in order to follow an Erasmus Mundus Masters Course.

Category B fellowships: can be awarded to any doctoral candidate who do not fulfil the Category A criteria as defined above.

The Erasmus Mundus Doctoral Fellowship covers the candidates' tuition fees, travel and participation costs and monthly salary.

b) University of Trento fellowship

This fellowship is governed by the Italian D.M. 224 (April 30, 1999) and the Regulations of the University of Trento⁴.

c) Freie Universität Berlin fellowship

This fellowship will be governed by the Regulations of the Freie Universität Berlin.

Further additional non-EM fellowships that may become available after the selection procedure is completed and before the start of the programme will be assigned to those candidates who are in the reserve list (following the ranking) and that in the application form have specified that they want to be taken into consideration. The total number of non-EM fellowships cannot in any case exceed twice the number of EM fellowships.

Other details regarding the possibility of tuition fee waiver and the eligibility criteria for an EM fellowship are reported on the SMART EMJD website: <http://www.riverscience.eu>

² For the definition of "European country" see p. 13 in the Erasmus Mundus Programme Guide

³ The 5-year reference period is calculated backwards as from the submission deadline by the EM consortium to the Agency.

⁴ Other information and the quoted documents may be found at: <http://www.unitn.it/en/ateneo/2738/research-doctorate>

4 – Admission requirements

All candidates must possess a Master's degree or equivalent at the moment of the deadline for application, having completed their first and second cycle of higher education in a relevant field within the scientific disciplines of the SMART programme (Civil / Environmental Engineering or Natural / Earth / Environmental Sciences, or Ecology, Biology, Geography, Physics or Applied Mathematics). Equivalent degrees that guarantee access to own country doctoral programmes with a non-Bologna higher education system will also be admitted to the selection process⁵.

A minimum requirement of 240 ECTS combining the B.Sc. and M.Sc. (or equivalent to 4 years of full-time graduate studies with thesis, even on a single-cycle track) is eligible for participation in the selection.

A thorough proficiency in English is also necessary: this will be confirmed by the candidates on the application form. If available, a statement of formal qualifications may be included although this is not compulsory. English proficiency will also be checked by the Selection committee during the interview. Doctoral candidates whose English is later found to be insufficient to progress successfully through the programme within the 3-year limit may have their fellowship re-assigned to another applicant or be otherwise terminated from the programme.

5- Application

The application must be written in English and include the following elements:

1. The completed Application Form (Annex 1, duly dated and signed).
2. Proof of nationality (scan National Identity Document or passport).
3. A detailed Curriculum Vitae (candidates must clearly specify their previous scholar career and include a list of publications and/or research outputs; 5 pages maximum).
4. A certified copy of the **original highest degree/diploma obtained**, with a list of courses, credits, grades and workload, with an English language translation. **This must be sufficient to allow enrolment on a doctoral programme in the country of issue.** Attach the Diploma Supplement if available. If certified copies cannot be provided before the application deadline, non certified translated copies are to be provided; and upon selection, a candidate will pledge to provide certified copies as soon as possible.
5. A copy of all other previous academic degrees, included Bachelor's and equivalent, together with a list of courses, credits, grades and workload, with an English language translation.
6. Copies of all relevant academic transcripts and academic records for all relevant courses taken after the highest degree/diploma award, if any, with an English language translation.

⁵ Candidates who will only obtain their postgraduate higher education degree at the end of the academic year preceding the one concerned by the fellowship application can nevertheless apply for a doctoral fellowship and be selected by the consortium under the condition that they acquire the required degree by July the 23rd, 2012.

7. For non-native speakers, if any English qualification has been obtained (e.g. IELTS, TOEFL) a certified copy stating the level achieved. If certified copies cannot be provided before the application deadline, non certified copies are to be provided; and upon selection, a candidate will pledge to provide certified copies as soon as possible. If formal English qualification have not been obtained, no document has to be provided and English proficiency will be assessed by the Selection Committee.
8. Personal statement: to be written using the form in Annex 2, part A. The file must be in doc, docx or rtf so to allow the secretariat to check the number of characters used.
9. Research project proposal: to be written using the form in Annex 2, part B. The subject of the research proposal should refer to one of the research themes listed in Annex 3 of this call. Individually chosen research themes are eligible provided that they are consistent with the research areas of interest of the programme. The file must be in doc, docx or rtf so to allow the secretariat to check the number of characters used.

Please note that the research proposal will be considered solely for evaluation purposes (to assess the candidate's capacities, skills etc.) and that should the candidate be admitted to the Programme the SMART Supervisory Board reserves the right to assign different research track.

10. List of preferred research topics (Annex 3). The list is now definitive.
11. Two letters of recommendation from Academics. These can be submitted as letters in sealed envelopes or electronic scanned documents via e-mail (dicaphd@ing.unitn.it). The name of the candidate must be specified on the envelope or in the e-mail subject. For those applying online, the procedure will run automatically after the registration of the Academics' data in the "Referees" section.

N.B. Doctoral candidates can apply to maximum of three different Erasmus Mundus joint programmes.

The application must arrive at the SMART secretariat **on or before the 16th of January 2012**, sent either:

- 1) Online at the following website: <http://www4.unitn.it/Apply/en/Home/Index>
Note that the online application must be definitely and positively closed by 4:00 PM Italian time (GMT+1) of the deadline above indicated.

or

- 2) Via registered post or courier (all documents must be submitted in the same envelope) to the following address:
Dott.sa Laura Martuscelli – Dott.ssa Marina Rogato
SMART secretariat
Faculty of Engineering, University of Trento
Via Mesiano 77
I-38123 Trento (ITALY)

All candidates will receive an acknowledgment of receipt via e-mail.

Applications received after 16th January 2012 will be disregarded.

6 - Selection

The SMART Selection Committee will review all eligible applications and select those applicants who will be accepted into the programme and to whom fellowships will be offered.

The selection process will consist of two steps; the Selection Committee will assign a maximum score of 50 points for each step.

Step 1: assessment of qualifications, academic merit, personal statement, research project proposal, references obtained. A common template will be used for comparing candidates to inform selection for step 2, and also for compiling feedback to unsuccessful candidates. Candidates achieving a minimum score of 30 in step 1 will be admitted to step 2 (the interview).

Step 2: interview. This step is aimed at assessing the excellence of the candidates and the suitability of their scientific and educational backgrounds for undertaking research training in their area of interest and their academic potential. Where candidates cannot attend in person, the interview will be undertaken through a remote medium (teleconference, videoconference, skype). Candidates achieving a minimum score of 30 in step 2 will be shortlisted.

The final ranking of candidates will be based on the overall score achieved during steps 1 and 2. Only candidates who have obtained a minimum overall score of 60 will be shortlisted. This will produce a list of selected candidates and a list of reserve candidates. Please note that no more than two doctoral candidates with the same nationality can be awarded an EMJD fellowship in the same Doctoral cohort, and that selections must conform to the required mix of Category A and Category B candidates. Where a selected doctoral candidate is unable to commence the programme by the start date, their fellowship may be reassigned to a candidate from the same category on the SMART Selection Committee's reserve list.

Successful and reserve list candidates will be informed of their selection by the end of April 2012. Other candidates who are not successful nor on the reserve list will be informed by e-mail of the SMART Selection Committee's decision as soon as possible, and no later than the end of February 2012.

7 - Admission and enrolment

Admission can be completed only when candidates have obtained and delivered to the Consortium all necessary documents, visas, permits and insurance policies for the enrolment (the SMART consortium will offer help with these procedures, but final responsibility to obtain the required documentation rests with the candidate).

The programme will start during September 2012; late starts cannot be permitted. Candidates who are unable to obtain and deliver all necessary documents, visas and permits by commencement in September 2012 will be excluded from the programme, and their fellowships reassigned to another candidate on the reserve list.

8 - Doctoral candidate's rights and duties

Doctoral candidates must commit to attend the doctoral programme and to carry out research and studies on a full time basis. If a negative evaluation is given by the SMART Academic

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Board regarding a candidate's participation in the programme activities and studies, the candidate can be excluded from the programme.

9 – Personal data

The SMART Consortium will use applicants' personal data only for the purpose of selection and for institutional reasons such as programme management and reporting. The application, inclusive of attachments, will not be passed to third parties except for those other bodies involved in the management and procedures related to the implementation of the programme (SMART partners and associates, EACEA, Erasmus Mundus National Structures, EU delegations and the Erasmus Mundus candidate and Alumni Association). Candidates are informed that the list of selected candidates will be published on the Consortium website. Submitted material will not be returned.

Annex 1 : Application form

TO THE SMART SECRETARIAT
c/o UNIVERSITY OF TRENTO
FACULTY OF ENGINEERING
VIA MESIANO 77
38123 TRENTO – ITALY

I, the undersigned, apply to be included in the competitive selection for the SMART Erasmus Mundus Joint Doctorate Programme, 2nd cohort (call 2012) for

EM fellowship A

EM fellowship B

For this purpose I declare

SURNAME

FIRST NAME/S

SEX

Male

Female

DATE OF BIRTH (dd/mm/yy)

PLACE OF BIRTH Town/City

Country

PLACE OF PERMANENT RESIDENCE

Address		
Zip Code		Country
Tel.		Fax
E-mail:		
Alternative e-mail:		
Skype:		

• That I have _____ citizenship⁶

• That the following is will be (tick where appropriate)
my highest degree qualification

⁶ Candidates with multiple nationalities MUST decide at application stage under which ONE nationality they apply. It will determine the type of EACEA fellowship they can access to.

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(tick the awarded/to be awarded title)

in (subject/field)

duration

credits

awarded on/to be awarded on

with mark

at the University of⁷

City & Country

MA/MSc	BA/BSc	Other
Other (specify)		
Out Of (maximum possible score)		

Other academic qualifications (e.g. BSc, BA): _____

- That my knowledge of English is (please, point out the level of knowledge):

Written _____ Spoken _____

I have the following English qualification(s) (optional):

Qualification _____ Level achieved _____

- That I undertake to inform the SMART secretariat of any changes of my address of permanent residence and e-mail/s;
- That I have not previously received any Erasmus Mundus Fellowship for doctoral education, and have not applied for more than three Erasmus Mundus joint programmes;

⁷ Doctoral candidates with a joint, multiple, double degree can select the award country of their choice

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- (only for EMJD Category A fellowship) That I am not resident nor have carried out my main activity (studies, work, etc.) for more than a total of 12 months over the last five years in one of the European countries⁸ YES NO
- That I want / don't want to be considered also for the non-EM fellowships;
- That I want / don't want to be considered also for self-paying positions;
- That, in case of admission to step 2 of the selection, I come in person I prefer to hold the interview via a remote medium;
- That I am aware and accept the provisions set by the ERASMUS MUNDUS Programme guide⁹
- That all the information given above is correct and complete and that incorrect information may result in my exclusion from admission to the programme.

Date _____

Signature _____

⁸ For the definition of "European countries" see p. 13 in the Erasmus Mundus Programme Guide; the only exception to this rule applies to doctoral candidates who have previously received an Erasmus Mundus masters scholarship in order to follow an Erasmus Mundus Masters Course.

⁹ http://eacea.ec.europa.eu/erasmus_mundus/programme/programme_guide_en.php

Annex 2: Personal Statement and Research proposal

Note for the filling: the number of characters includes the spaces

Part A : Personal Statement

Personal reasons for undertaking the doctoral programme

Max 1000 characters

Point out your strengths (background and skills) that could be of value for the doctoral career

Max 1000 characters

Describe your cultural and scientific interests

Max 1500 characters

Explain your reasons for choosing the SMART EMJD for your doctoral career

Max 1000 characters

Part B: Research proposal

Title

State of the art and short summary of relevant literature

Max 3000 characters

Rationale for the choice of research topic and any related, specific opportunities offered by the EMJD

Max 2000 characters

Research Aims

Max 3000 characters

Research Methodology and Timing (i.e. programme of research)

Max 4000 characters

Expected Research Outputs and Impact

Max 2000 characters

Annex 3: List of proposed research topics

N.B.: candidates should indicate their chosen research themes with numbers 1 for their first choice and subsequent numbers for their lower preferences. At least one theme for each primary university must be indicated. The following list is the definitive one and it is composed of two pages. For the details of the topics read the specific file available on the web.

Choice	Research topic	Prim. Univ.	Second.Univ.
UQ1	Nutrient dynamics and hydrological connectivity in agricultural floodplains	UniTN	QMUL
UQ2	Establishing the spatial and temporal structure of hydraulic conductivity in alluvial floodplains using physical-based meander modelling and luminescence dating	UniTN	QMUL
UQ3	Morphotexture of gravel-bed river bars	UniTN	QMUL
UQ4	Isotopic, chemical and physical characterization of the Presena glacier and of the Noce River basin	UniTN	QMUL
UQ5	Modelling the effects of aquatic vegetation and colmation on suspended sediment transport and hyporheic exchange of permeable gravel bed rivers	UniTN	QMUL
UQ6	Climate Sensitivity of the Presena glacier	UniTN	QMUL
UQ7	Environmental impacts of river impoundments - reservoirs and watershed sediment management - a study towards mitigation solutions	UniTN	QMUL
UQ8	Hydroecological processes and nutrients cycling in agricultural ditches	UniTN	QMUL
UQ9	Improve existing methods to survey and assess the hydromorphology of river ecosystems	UniTN	QMUL
UQ10	Interactions among vegetation, morphology and quality of water	UniTN	QMUL
UQ11	Morphodynamics of bars in channelized and restored urban streams	UniTN	QMUL
UF1	Thermal dynamics in braided river corridors	UniTN	FUB
UF2	Dynamics of hydropeaking in alpine river systems under scenarios of climate change	UniTN	FUB
UF3	Environmental impacts of small hydropower plants	UniTN	FUB
UF4	Grain dispersion in river bed	UniTN	FUB
QU1	Investigating and modelling vegetation – fluvial morphology interactions: bank erosion and accretion	QMUL/Uni TN	QMUL/ UniTN
QU2	Effects of in-stream vegetation on hyporheic biogeochemical processes	QMUL	UniTN
QU3	Modelling the response of braided rivers and deltas to unsteady sediment supply	QMUL	UniTN
QU4	Impact of invasive plant and invertebrate species on bank stability and sediment dynamics	QMUL	UniTN
QU5	Multi-scale 3-dimensional observations of the physical characteristics of flocculating, mixed sediments	QMUL	UniTN
QF1	The root-sediment system: riparian plant growth, mycorrhizal root symbionts and soil moisture regime	QMUL	FUB

QF2	To what extent can woody debris help reduce the nitrogen loads of lowland rivers?	QMUL	FUB
QF3	Microplastics in the river system	QMUL/FUB	QMUL/FUB
FU1	3D riverscapes: an airscape perspective of river landscapes	FUB	UniTN
FU2	Critical landscape elements along river corridors	FUB	UniTN
FU3	Carbon fluxes across aquatic-terrestrial boundaries: the pivotal role of emerging insects	FUB	UniTN
FU4	Food web modeling in aquatic systems	FUB	UniTN
FU5	Domesticated freshwaters: structure, function, and biodiversity	FUB	UniTN
FU6	Linkages among Global Inundated Areas, Biodiversity Patterns and Ecosystem Service Provision	FUB	UniTN
FQ1	Remobilization of contaminants out of estuarine sediments	FUB	QMUL
FQ2	Patterns in riparian assemblages of different organism groups (plants, soil microbes)	FUB	QMUL
FQ3	Hyporheic reactors: coupling hydrodynamic and biogeochemical processes in the bed of permeable lowland rivers	FUB	QMUL