



European Master in Renewable Energy – Students Project Guidelines –

Updated: 14 February 2019

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Project Regulations – taken from the general programme regulations:

www.master.eurec.be/en/About-the-Master/Regulations/

Arranging the project

11. The student is encouraged to arrange his/her own Project. The Project should complement the knowledge that the Student has gained during his/her Specialisation, so, if necessary, the relevant Specialisation Provider should offer assistance to the Student in finding a Project. If despite the best efforts of the Student and Specialisation Provider, a suitable Project is not found, the Core Provider shall propose a Project to the Student. However, the main responsibility for finding a project falls on the student.

12. Each year, the Coordinator shall contact previous Project Hosts to see if they would host one or more Students in the current Academic Year.

Approval

13. Students must fill in a standard form ('Project Proposal Form ') circulated by the Coordinator.

14. Each Student must obtain his/her Core Provider's approval for the Project work (s)he wishes to undertake. The Core Provider assesses Projects on the basis of the information contained in the forms described in 13. Therefore, each Student must make sure his/her Core Provider receives the Project Proposal Form.

15. Once approved by the Core Provider, each Student shall send his Project Proposal Form to his Specialisation Provider, as well as to the Coordinator (EUREC).

Supervision

16. One month after beginning work on his/her Project, each Student should send a 1-2 pages document to his/her Core and Specialisation Providers describing his/her Project in detail, the role (s)he fulfils at the Project Host and setting out a timetable by when (s)he expects to complete different stages of his/her Project work.

17. The regularity of progress reports to be sent by the Student during his/her project will be determined by the Core Provider.

18. Core and Specialisation Providers will provide their Students with prompt feedback on the messages the Students send them.

19. Core and Specialisation Providers reserve the right to impose further measures to ensure adequate supervision of their Students.

20. The company or research centre at which the Students work during their Project is required to fill an evaluation template and send it to the Student's Core Provider and to the coordinator at least one month before the Project Presentations.

Assessment

21. Project assessment will be in two parts: the Master Thesis and the Project Presentation. The relative weighting between the Master Thesis and Project Presentation is 80% and 20% respectively.

22. The Steering Committee will ensure that all Students are marked according to a common scheme.

23. If a Student fails the project, (s)he may redo this course section in the following Academic Year, under approval and particular conditions of their Core provider University.

Handing in the Master thesis

24. Projects are assessed on the basis of six months of work.

25. Each Student is to send his/her Master Thesis by e-mail to his/her Core and Specialisation Providers, and to the Coordinator no later than two weeks before the first day of the Project Presentations. The files e-mailed should be in 'doc' or 'pdf' format.

26. If the Master Thesis is not handed in on time, the student will fail the Project unless he/she has prior written permission (including by e-mail) from the designated supervisor at their Core provider. The Coordinator will confirm receipt of each Master Thesis and their accompanying summaries by e-mail.

27. If the project hosts wishes it, Students can request their thesis content to be treated confidentially by indicating this on the cover of the thesis. In this case, the Coordinator undertakes not to allow access to the Coordinator's copy of the Student's Master Thesis to anyone outside the Steering Committee, aside from the Coordinator itself.

Presentations

28. The Steering Committee will decide well in advance the exact dates and venue for the Project Presentations and the Coordinator will communicate this to the Students.

29. Each Student's Project Presentation will be heard by a jury composed of a representative of that Student's Core and Specialisation Providers and the representative of another EUREC Master Partner. The Steering Committee and Coordinator will select this jury. The marks awarded by this jury will inform the mark that the Core Provider awards for the Project.

30. Each Student's Project Presentation should last 15 minutes followed by 10 minutes of questioning on his/her Project by the jury.

31. All Master students are requested to be physically present at the Master Presentation days in Brussels. However, under exceptional circumstances and previous approval of the student's core university, students can have the possibility to present their Thesis in a conference call mode. In this case, the Core provider should, at the latest two weeks before the Presentation Days, send an email to EUREC approving the student's request.



Information for Project Host Companies or Research Centres

For the 17th year, the network of EUREC members involved in teaching the European Master in Renewable Energy is educating young motivated engineers for their professional career in the RE sector.

66 students from 31 different countries are following the courses at Loughborough University (UK), Mines-ParisTech (FR), Oldenburg University (DE), Hanze UAS (NL) and Zaragoza University (ES).

From June to December, students are required to work on a **practical project on the premises of a company or a research centre**. If you are **interested in having a qualified trainee with you over 6 months**, you can contact the programme coordinator to obtain a detailed list of students, or to publish an internship offer on our website (secured area, only for EUREC students). The ad should describe **the technical aspects of the project** and please indicate linguistic and educational preferences for your trainee. Contact: Nathalie Richet, richet@eurec.be

The academic directors of the participating universities will make sure the technical level of the project is high enough to be a challenge to our students.

The students are specialising in the following areas:

- 3 students in Solar Thermal
- 12 students in PV
- 17 students in Wind energy
- 16 students in Grid Integration
- 10 students in Ocean energy
- 8 students in Sustainable Fuel Systems for mobility

The project host company or institute is expected to support the student in form of an **allowance**. This allowance is meant to cover at least the cost for accommodation of the student. This can be done by offering housing as an in-kind contribution to the student or in form of a small remuneration. Basically, 750 EUR should be an indicative minimum for this. If this is a problem, a company can still offer a project and wait and see if a student is accepting to work for free on the project.

The project host must **supervise** the student. Students are required to work on a comprehensive project; they are writing their project thesis based on their practical experience. The company does not have to read or evaluate the thesis, though.

The students have a supervisor at their core university, as this institution is ultimately responsible for issuing the diploma and thus has to evaluate the students' project work.

The host company has to make sure the student is covered by **insurance** while working on the company's premises. The host company will usually draw up a traineeship agreement with the student and the University at which the student is registered.

The company or research centre at which the Students work during their Project is required to fill an evaluation template and send it to the Student's Core Provider and to the coordinator (EUREC) before the Project Presentations. EUREC will send the evaluation template to students in October.



Project proposal form

STUDENTS HAVE TO FILL IN THE FORM, SEND IT FOR APPROVAL TO THEIR CORE PROVIDER UNIVERSITY AND, ONCE APPROVED, SEND IT BACK TO EUREC.
EUREC MUST RECEIVE ALL PROPOSAL FORMS AT THE LATEST BY THE END OF JUNE

The Project Proposal

Project Title

Objective and methodology

- Introduction to set the context and reason for the development of the project (max. 150 words)
- Objectives - 4-6 measurable activities to meet the aims (max. 150 words)
- Proposed scientific methodology – How you are going to solve the problem and meet the objectives (max. 150 words)
- Main expected outcomes of the project (max. 150 words)
- References – 2 or 3 peer review journal articles related to the topic under investigation (when applicable)

Contact person: _____

Address: _____

Country: _____

Tel: _____

E-mail: _____

The Student

Full name

Core and Specialisation
Universities

Name and contact details of the Supervisor in the Core University

Other relevant information: (dates/pay...)

Please return this form to richet@eurec.be by the end of June.

**EUREC EEIG,
Place du Champ de Mars, 2
1050 Brussels
Belgium**





Academic year 2018-2019

Title: (Template thesis cover)

This thesis has to remain confidential upon specific request of the host organisation

(Tick if appropriate - Delete if not confidential)

Full Name of Student: *Name of student*

Core Provider: *Name of core University*

Specialisation: *Name of specialisation University*

Host Organization: *Name and address (+country) of company or research centre*

Academic Supervisor:

Submission Date:

Cover: see the uniform cover template with EUREC Master logo (previous page)

Format: A4 portrait

Margins (left, right, top, bottom): 2,0 cm

Fonts: Arial

Title: Centered; Arial 16 Pt Bold

Headings: Arial 14 pt bold

Subheadings: Arial 12 pt bold

Text: Arial 12 pt normal

Caption: Arial 12 pt italic

Spacing: Line spacing: Single-spaced; Word spacing: Single-spaced

Reference: all at the end (use endnote with numbers). Times New Roman 12

Annexes: all at the end

Annex numbering: Annex 1: This annex is....

Figure / table numbering: Table 1, Table 2, Figure 1, Figure 2, etc.

Page numbers: bottom right 8

Title Arial 16 pt bold

Name of student, name and address of the core University

1. Headings Arial 14 pt bold

1.1. Subheading Arial 12 pt bold

Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal

1.2. Subheading Arial 12 pt bold

Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal

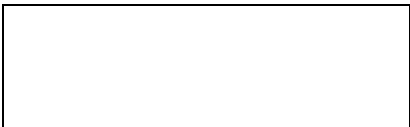
2. Headings Arial 14 pt bold

2.1. Subheading Arial 12 pt bold

Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal Text Arial 12 pt normal

Table 1. Font Sizes

Size	Usage
8 points	Footnotes
12 points	Normal text
12 points bold	Subheadings
14 points bold	Headings
16 points bold	Title



Picture1. Empty figure

References

[1] C. V. Nayar and J. H. Bundell, "Output Power Controller for a Wind Driven Induction Generator", *IEEE Trans. on Aerospace and Electronic Systems*, Vol. AES-23, No. 3, May 1987, pp. 388-401.

[2] P. S. Panickar, S. M. Islam, and C. V. Nayar, "A New Quasi-Optimal Control Algorithm for a Wind-Diesel Hybrid System", *Wind Engineering*, Vol. 22, No. 3, 1998, pp. 159-169.

Guidance marking scheme for EUREC Master Project thesis* (comprehensive report, summary paper and presentation in Brussels)

Name of Student:

1. Introduction: (max 10) <ul style="list-style-type: none"> • Background and context of the topic • Objectives of the project • Research question • Literature research 	/10	9-10	Outstanding
		7-8	Good
		5-6	Satisfactory
		3-4	Below average
		0-2	Unsatisfactory
2. Methodology: (max 10) <ul style="list-style-type: none"> • Clear description and justification of the method(s) applied • Soundness of methodology • Appropriateness of theoretical framework 	/10	9-10	Outstanding
		7-8	Good
		5-6	Satisfactory
		3-4	Below average
		0-2	Unsatisfactory
3. Data analysis, discussion, conclusions (max 30) <ul style="list-style-type: none"> • Interpretation of the results and critical comparison with theoretical models • Understanding of the results' practical implications • Correct and logical conclusions drawn from the analysis, consistent with the activity's objectives 	/30	25-30	Outstanding
		20-24	Good
		15-19	Satisfactory
		9-14	Below average
		0-9	Unsatisfactory
4. Report writing: (max 10) <ul style="list-style-type: none"> • Logical structure of report and literary accuracy • Use of paragraphs, headings, tables, figures, literature list, appendices • Proper length (40 pages max, including references) 	/10	9-10	Outstanding
		7-8	Good
		5-6	Satisfactory
		3-4	Below average
		0-2	Unsatisfactory
5. Project activity and student effort: (max 10) <ul style="list-style-type: none"> • Communication with project supervisor(s) • Project planning • Demonstration of initiative • Commitment and effort 	/10	9-10	Outstanding
		7-8	Good
		5-6	Satisfactory
		3-4	Below average
		0-2	Unsatisfactory
SUB TOTAL COMPREHENSIVE REPORT		/70	
6. 6-page summary: (max 10) <ul style="list-style-type: none"> • Completeness • Conciseness (6 pages max including references+ 20 max for appendices) • Structure and language 	/10	9-10	Outstanding
		7-8	Good
		5-6	Satisfactory
		3-4	Below average
		0-2	Unsatisfactory
SUB TOTAL SUMMARY PAPER		/10	
SUB TOTAL PRESENTATION (consolidated results from Steering Committee jury)		/20	
Total mark report + summary + presentation (max = 100)	/100	Date:	Assessed by:
Brief comments:			

1 The first 4 boxes guide the assessor in providing marks for the specified aspects of the project as manifest in the written report (including the Appendices where appropriate). The 5th box requires a mark for the organisation and effort put in by the student throughout the project that may or may not be reflected in the written report itself.

*Supervisors will be responsible to assess the comprehensive report in the respect of the core University regulations

Project - Oral Presentations

Date:

Time	Name	Project Title	A (100)	B (100)	C (100)	D (100)

Marker's Name

Marker's Signature

KEY: **A** – Structure/Logic/Communication; **B** – Use of resources/timekeeping;
C – Presentational style; **D** – Response to questioning

Notes:

A – Structure/Logic/Communication: A mark is awarded for how well a student structures their presentation including the use of introduction, methodology, results and conclusions. The mark also reflects the logic of the student's methodology and conclusions, i.e. is it well thought through. Finally, the mark reflects how well the student is able to communicate an overview of their project through the oral presentation.

B – Use of resources/timekeeping: The mark here reflects how well the student has used audio/visual resources, e.g. are PowerPoint slides well laid out and clear. This mark also reflects how well the student has kept to their allotted time – if they run overtime, they can expect to be penalised.

C – Presentational style: This mark reflects how well the student is able to present themselves. Do they speak clearly to their audience, do they interact well with their slides, are they easy to understand, e.g. if they just read verbatim from notes, they can expect to be penalised. Allowance should be made if English is not the student's native language.

D – Response to questioning: A final mark is given reflecting how well the student holds up under questioning. Are they able to think on their feet? Questioning also teases out how well the student has understood the aims, objectives and implications of their project, and whether it is largely their own work. N.B. It is important that the 'jury' ask sufficient questions to give a meaningful mark here.