



## Renewable Energies study programme Module experimental review

### Introduction

The purpose of this form is to provide an assessment of a particular module within **the RE** study programme. The study programme consists of an aggregate of modules (the curriculum) which have been developed within the SALEIE programme. In order to further improve the quality of a particular module, in terms of content (including reference to the identified key global challenges) and pedagogical aspects (including the current and emerging delivery and assessment methods), a module would be reviewed (referred to here as an **experimental review**) and the review would be captured in this form.

### Definitions used

Within the SALEIE project, the following definitions are used:

|                   |  |
|-------------------|--|
| <b>Curriculum</b> | The aggregate of modules of study given in a learning environment. The modules are arranged in a sequence. |
| <b>Syllabus</b>   | Is an outline and summary of topics to be covered in an education or training programme.                   |
| <b>Programme</b>  | A plan of modules to be covered to achieve a specific degree and/or qualification.                         |
| <b>Module</b>     | Lectures, labs and other activities related to one topic.  |

### Module details

|             |                          |
|-------------|--------------------------|
| Module name | <u>Fuel Cells Energy</u> |
| Module code | <u>RE20M3</u>            |

### Reviewer details

**Note:** The reviewer **personal information** will be for **internal use only** within the SALEIE project and will not be published.



**Project funded by the EU Lifelong Learning Programme  
Project Reference No. 527877-LLP-1-2012-1-UK-ERASMUS-ENW**

## Experimental review

The module is to be reviewed according to the following criteria:

### Pedagogical approach

| Aspect  | Reviewer comments   |
|---|---|
| <b>Content delivery approaches</b><br>Is there a broad range of content delivery methods (including at-presence teaching and learning, e-learning, lectures, tutorials, laboratories).  | Yes, Lectures, class discussions, homework.   |
| <b>Assessment methods</b><br>Are there a broad range of assessment methods adopted? Does the assessment rely on a single final exam or does it include continuous assessment? If there is group work assessment, is this suitably structured? | Assessment methods include: evaluation of exercises and reports.  |
| <b>Inclusion of team and individual project work</b><br>What project work is undertaken by the students?  | The students work in teams and are individually responsible for the different parts of the project and laboratory exercises.              |
| <b>New pedagogical approaches</b><br>Does the module consider and include contemporary and emerging pedagogical approaches which are suitable for the module?   | Yes, team work, projects and individual work, are suitable and relevant for engineers in the industry.                                    |
| <b>Student feedback</b><br>Is there any student feedback on the module available?   | Yes. After module is finished the survey can be conducted. Students have to fill a questionnaire relative mainly to pedagogical approach. |
| <b>Staff feedback</b><br>Is there any staff feedback on the module available?   | No.   |

### Content

|  |   |
|--|---|
| <b>Relevance to global technical challenges</b><br>Refer to the identified challenges within the SALEIE project. Reference should be made to work package 3, deliverables D3.2 & D3.3, "REPORT ON EXISTING PROGRAMMES ORIENTATED TO KEY CHALLENGE AREAS" | Page 64 of the named report and following challenges: <ul style="list-style-type: none"> <li>Sustainable development and climate change.</li> <li>Energy</li> </ul> |
| <b>Technical aspects</b><br>Are the technical aspects suitably addressed and at the right academic level? Is there any industry input and support for projects and internships within the  | The different technical aspects are suitably addressed and at the right academic level. The industry can support for projects and internships within the module.    |



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|  |   |
|--|---|
| module?  |   |
| <b>Non-technical aspects</b><br>Are there any generic and transferable competences appropriate to the industry sector?   | Yes, team work (laboratory exercise) and project work. Also independent work at home, each student must prepare a portion of the project alone (as a homework). |
| <b>Relevance and “up-to-date” of content</b><br>Is the content (including module title) attractive to industry and complements European Union (EU) economic development and employability of the graduates? Is there a good balance between the breadth and depth of content covered | The module is relevant and “attractive” for industry and for students. Fuel Cells can be used for example as a new energy source for cars.                      |
| <b>Student feedback</b><br>Is there any student feedback on the module available?  | Yes. After module is finished the survey can be conducted. Students have to fill a questionnaire about the content of the module.                               |
| <b>Staff feedback</b><br>Is there any staff feedback on the module available?  | The short feedback form can be prepared by staff for the course director.   |

Document version

Date: 3<sup>rd</sup> July 2015