

Assessment panel report – summarized assessor statement

1. Background

1.1 Evaluated education

The Master Programme in Energy Technology (Entech), Faculty of Science and Technology, Uppsala University. The programme is part of the KIC InnoEnergy Master School. Responsible for the educational unit: Albert Mihranyan, Professor in Nanotechnology and Functional Materials, Department of Materials Science and Engineering, Uppsala University.

1.2 The evaluation panel's composition

Eric Bylander, Professor of Procedural Law, Faculty of Law, Uppsala University, Convenor

David Pallarès, Vice-Head of Department for PhD studies, Professor of Energy Conversion, Department of Space, Earth and Environment, Energy Technology, Chalmers

Oscar Stenström, Master Student, KTH Royal Institute of Technology

Xingxing Zhang, Associate Professor of Energy Technology, Department of Energy and Construction Technology, Dalarna University

1.3 Implementation

The method for the evaluation was an assessment panel. The written background material is specified in the detailed statement. The principal operations of the panel were taking place 4 February – 27 April, 2021. They included contacts within the panel, and communication with the programme coordinators. The pandemic meant that no site visit could be carried out and that the panel members had to rely exclusively on contact via email and digital meetings. A digital meeting replacing a site visit was held on 23 April, 2021. It was followed up by the Panel through the drafting of a joint paper, completed as of 27 April 2021, as a basis for the preparation of the report.

2. Evaluation

2.1 The strengths of the evaluated education

2.1.1 Coordinators

Both past and new programme coordinators have qualified experience and skills to run the programme in a sustainable way.

2.1.2 Teachers

Teachers are fully qualified and experienced.

2.1.3 Teaching content

A comprehensive and up-to-date teaching content is developed in this programme, covering a very wide range of energy technology.

2.1.4 Connection with industries

The programme has very strong connections with industries.

2.1.5 European cooperation context

The programme has unique connections with universities across the European Union (EU), which brings different strengths and characteristics of each university together. The EU connection is valuable also as regards culture, communication, social exchange etc. Cf. 2.2.1 below.

2.1.6 Intensity

The students enjoy having some high-intensity courses, rather than several low-intensity ones during the same time period. This is seen as a strength of the programme. Cf. 2.2.2 below.

2.2 Weaknesses/areas of improvement

2.2.1 European cooperation context

The programme has a more complicated control structure than conventional master programmes at Uppsala University, since it is not entirely administrated and operated at Uppsala University. This poses challenges in terms of programme administration, etc. Cf. 2.1.5 above.

2.2.2 Intensity

Six out of seven students state that they spend less than 31h/week on their studies. Cf. 2.1.6 above.

2.2.3 Gender balance

The vast majority of the students being male, there is a significant gender unbalance.

3. Recommendations

The assessment panel mainly makes the following recommendations for further improvement.

3.1 Learning goals

The planning of goal achievement and the follow-up of the learning goals should be made from a programme perspective, and their level of achievement should be included in student surveys.

3.2 Coordinators

The programme coordinators allocate more of their time than what is meant to be, due to the complexities of managing a partnership programme. Considerations should be made for this.

3.3 Intensity

The study load should be monitored at course level and addressed at a programme level.

3.3 Group work

Marking group work should be improved, to ascertain the performance of each individual.

3.4 Communication with industry

Communication with industry for project or thesis could be improved by more involvement of teachers.

3.5 Gender balance

The programme would probably benefit from a programme-specific integrated gender perspective. Inspiration could be taken from other similar programmes making the same journey.

3.6 Ethics

There should be an action plan on how to work with ethics at the different courses in the programme.

3.7 Teacher awareness of the specifics of the programme

The teachers could be more aware of the specifics of the programme, to make it easier for them to tailor the specific course for each Entech student.

Final version, submitted 23 June, 2022

