

Is the EUR-ACE Accreditation Worth Implementing?

A student view

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Conference Key Areas: Please select three Conference Key Areas

Keywords: Students, accreditation, attractiveness, quality

INTRODUCTION

As students, we are highly interested in the quality of education universities can offer: How the education can give us the best possible assets for employment and continuous development in the most effective and pleasant way. In this study we concentrate on the value and impact of accreditation to the quality and attractiveness of engineering education programmes. The value includes at least the quality of the teaching, facilities, reputation and employability.

EUR-ACE stands for European Accreditation of Engineer Programmes and is a quality label for engineering degrees [1]. The label is valid six years from the accreditation. In

more detail, we studied the EUR-ACE accreditation: what is the effort needed to earn it and what kind of improvement it might require.

1 THE PURPOSE OF THE STUDY

The purpose of the study was to find out what are the added value and benefits that the EUR-ACE label could offer and which resources are needed to reach the label. Does the label lead to development of the quality or just give an external certificate to the program? We have learned a great deal about quality control and the EUR-ACE label has become very familiar to us through our study. So, in the future, if we decide to study further on the university level, a study program with a quality label will stand out.

1.1 How the study was implemented

In addition to the document based survey, we interviewed the main stakeholders at the engineering education, i.e.:

- potential students
- students
- university staff
- employers
- other authorities

First of all many of the stakeholders did not know much about accreditation, and thus basic knowledge about the system was necessary in the beginning of the interviews. Until now the reputation of universities has been known by employers and students and the internal quality control has been based on the requirements of the national evaluation board who authorizes the universities to give the degrees.

Now, as the competition on resources and students gets tougher, evidence of accreditation profitability could be increasingly appreciated by the stakeholders.

1.2 Background of the quality work

The quality must be evaluated and tracked in Finnish universities basically because it is required in order to be an eligible degree granting organization. Additionally, the financing of the Universities depends on agreements made with the Ministry of Education and the agreements are based on many indicators from quality work. Before implementing total quality management systems or other systematic ways of improving quality originally created in industry, universities took care of quality with their autonomic peer reviewing within the scientific society.

The Helsinki Metropolia University of Applied Sciences quality work is visible for students in various ways. For example, students are asked to give feedback on courses and programmes. Students should also get feedback from their evaluations and the necessary actions should be taken accordingly.

The intranet (Tuubi) plays a role as a quality handbook. All information regarding study plans, course descriptions, schedules, students' support etc. should be available there. As students we think that the intranet works fine. The course information can be easily found in the created workspaces and there is general information about studying, different events and so on. In addition, Tuubi is a very useful tool as it provides students with job offers and information about employers, targeted directly to engineering students.

What is EUR-ACE for?

ENAAE (European Network for Engineering Accreditation) authorises accreditation and quality assurance agencies to award the EUR-ACE label to their accredited

engineering degree programmes. To be authorised, an agency must satisfy the standards published by ENAEE. In Finland, FINEEC awards study programmes with a label if they state that it can be given. So, ENAEE does not accredit engineering degree programmes, it gives the guidelines and framework standards for the accreditation and the required standards of the programs. Agencies can apply these guidelines to suit their own national educational systems and for example emphasize some part over the other. Of course, the modifications have to be approved by ENAEE. [2] [3]

ENAEE was founded February 8, 2006, after the successful conclusion of the EUR-ACE Project which was supported by the EU Socrates and Tempus Programmes and by 14 European associations concerned with engineering education. ENAEE is rooted in the so-called Bologna process which aims at building a European Higher Education Area by strengthening the competitiveness and attractiveness of European higher education and fostering student mobility and employability. [3]

ENAEE specifically addresses the education of engineers, whose importance is increasing in the global economy. ENAEE aims to enhance and promote the quality of the education of engineering graduates in order to facilitate their professional mobility and to enhance their individual and collective ability to fulfil the needs of economies and society. [3]

Since 2006, the EUR-ACE label has been awarded to more than 1800 engineering programmes, delivered in more than 300 universities in 28 countries in Europe and worldwide. [3]

2 THE FRAMEWORK

2.1 Benefits for different stakeholders

For students, the employment possibilities are better when graduated from an accredited programme. In some countries the labels are highly appreciated or even obligatory. When hiring a newly graduated engineer, the employer can be certain that the employee's knowledge and abilities are at a standard level. The same applies to potential students. They know what the learning outcomes of the programme are and that the education applies to the needs of the working life. [2]

For the university, the label provides outside credibility and affects which education programme the potential students choose. When the education becomes chargeable, the competition of paying international students will become more relevant and the international co-operation with other programmes will be easier. In addition, the label generates more collaboration between the university and industrial companies. [2]

However, a big benefit of the accreditation is that the university recognizes the improvement areas and, thus, can take action for continuous improvement.

2.2 Resources needed

In Finland the Finnish Education Evaluation Centre (FINEEC) has the licence to give the EUR-ACE accreditation. FINEEC charges 13000€ for the accreditation plus the travelling expenses of the assessment visit. Preparation for the accreditation induces expenses for the universities, depending on the workload that has to be done for the self-evaluation and development activities to meet the EUR-ACE criteria. Usually the

time range for the self-evaluation is about a year. At the universities the largest expense is not the fee, though. The devotion and the contribution of the staff is the most important. [2]

2.3 Enablers

The management of the university has to support the project both financially and timewise. The staff of the university has to be motivated. [2]

3 THE SURVEY

In our study the most important method was interviewing different stakeholders and experts related to this subject. The interviews had a great impact on our opinions and understanding of the EUR-ACE label. The most valuable information we got from the people who have worked around this matter and had a close look on how the accreditation process works. The key persons were the evaluation expert from FINEEC, Touko Apajalahti, and Kevin McIntire, a senior lecturer at Metropolia University of Applied Sciences. Kevin McIntire was the project manager in the EPAS-accreditation of Metropolia's business degree programme which is quite similar with the EUR-ACE accreditation. We also interviewed our fellow students.

3.1 Is the EUR-ACE accreditation worth implementing?

In Finland the first EUR-ACE accreditations were made in 2014 so there is not yet much evidence whether the label has been worth implementing. When negotiating with international partners the label has been a great benefit. Creating partnerships and the partnership itself becomes easier when the quality standards are the same. [2] We think that international relations are important for universities and students. In Europe the EUR-ACE label is both recognized and appreciated. When graduated from an accredited education programme the employment possibilities are better and the label guarantees a certain level of know-how.

The students that we interviewed had different opinions about the subject - in favour and against. The chargeable studies for foreign students could also benefit domestic students in the form of offered courses and devices in laboratories etc. On the other hand, the appreciation towards the label in Finland is not as high as in other European countries because it is not yet familiar. Some of the interviewed students doubted the label's worthiness for the electrical engineering programme at Metropolia because the current situation in certain matters might not meet the EUR-ACE standards. [2]

3.2 Students' role in improvement

The EUR-ACE criteria requires that one member of the evaluation group has to be a student in the concerned line of business. The student feedback should be observed and documented in the self-evaluation. [2] However, we think that the feedback from students should play a bigger part.

In the electrical engineering degree of Metropolia, giving feedback of the study module is voluntary. We have seen that students do not give feedback very eagerly. In our case that is maybe because the teachers do not mention it or because of the students' lack of knowing how to give feedback. At Metropolia, there is in our opinion a proper feedback form but it could more visible. The form is shown in Figure 1. We think that students should be, maybe not forced, but more strongly encouraged to give feedback. Effective motivators could be for example extra points in exams or a raising impact on the grade. We think that through student feedback teachers can improve their teaching. This would contribute to better teaching and the superiority of students' know-how.

	I fully agree	I agree partly	I don't agree nor disagree	I disagree partly	I fully disagree	Why?
The study module created a learning advancing wholeness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
The implementing method of the study module inspired to study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
The implementing method of the study module enabled co-operative working	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
I understood the significance of the study module according to working life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
The workload of the study module suited the learning outcomes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
I got learning supporting feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Open feedback						

Fig. 1. The feedback form of Metropolia

3.3 Which university to choose? – Impact of the label

The stakeholders that we interviewed claim that the EUR-ACE label increases the attractiveness of the study programme. [2] We think that the domestic students at least in Finland, do not choose their line of study or study program based on the existence of the label. In Europe the case can be very different though because the EUR-ACE concept is better known. When considering different study options, the label could make an education with the label stand out because it guarantees a specific standard.

Another core problem is that the attractiveness of Finland in the eyes of prospective students coming from outside EU is currently considered to be based on high quality education that is free of charge to all students. The survey with the first year international students of electronics in Metropolia indicated that only a few among such students were actually aware of the high quality of the education in advance and the decision to come to study in Finland was mainly based on low costs. The prospective change in the pricing of the education raises concerns about how to attract students outside EU in the future, as studying will no longer be free of charge. In order to appeal to these students abroad, we need to focus on the brand image based on evidence of the Finnish education. An internationally recognized label would be an effective way of increasing students' awareness of the high quality education Finland offers and making it more reliable in the eyes of a students who want value for the money invested. The label would be a part of the plan to bring universities towards more commercial and also competent players in the international contest of the best talents.

4 OUTCOMES

4.1 Suggestions based on the study

The universities' programme leaders should first take a look at the EUR-ACE standards and criteria and maybe do a rehearsal self-assessment. This gives perspective on how much resources the project needs and what the areas needing the most attention are. The next step would be the implementation of the self-assessment

and after that inviting an external audition to evaluate the programme. The biggest workload is the self-assessment and as a part of it a curriculum analysis and gathering documentation of everything [2].

4.2 Focus areas before accreditation

- Changes to the curriculum: how the programme outcomes correspond to the EUR-ACE criteria and on which courses the knowledge is gained [2]
- Show proof of the employment of postgraduates; do they get a job in their own line of business; working life know-how [2]
- Research, publications [2]
- Documentation and procedures: meetings, student feedback, industrial collaboration [2]
- Management of documentation

5 CONCLUSIONS

Based on how much the programme needs to be improved, the university decides whether to apply for the label or not. As a conclusion figure 2 illustrates the investments and benefits of the EUR-ACE label.



Fig. 2. The investments and benefits of the EUR-ACE label

In our opinion, the benefits of the accreditation claim that the label is worth the effort are correct. However, we think that applying for the label just to get a label is not the correct attitude. The improvement process of the programme and organisation needs to be continuous and the people behind it need to be both dedicated and interested. At Metropolia interest in continuous improvement and staff involvement can be recognised from the participation in international projects, such as the European QAEMP project (Quality Assurance and Enhancement Market-Place for HEIs), which proposed a continuous enhancement model and processes for educational programmes in engineering [4].

This means that the benefits of the label for students are undeniable - the question is, are such benefits worth of the effort of the school.

As far as attracting students who would pay a tuition fee, one can speculate how many additional students might be needed to cover the costs of the label.

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