ESTONIAN QUALITY AGENCY FOR HIGHER AND VOCATIONAL EDUCATION

Assessment Report on Meeting the Requirements of the Secondary Condition

Study programme groups of Transport Services; Engineering Manufacturing and Technology

Estonian Aviation Academy

2018

Contents

INTF	ODUCT	ION	.3
1.	GENER	AL PROGRESS REPORT SINCE LAST ASSESSMENT OF STUDY PROGRAMME GROUPS	.5
2.	REPOR	T ON MEETING THE REQUIREMENTS OF THE SECONDARY CONDITION	.7
	2.1	GENERAL BACKGROUND	.7
	2.2	MEETING THE REQUIREMENTS OF SECONDARY CONDITION	.7

Introduction

Background and aim of the assessment

Quality assessment of a study programme group involves the assessment of the conformity of study programmes and the studies and development activities that take place on their basis to legislation, national and international standards and developmental directions with the purpose of providing recommendations to improve the quality of studies.

The goal of quality assessment of a study programme group is supporting the internal evaluation and self-development of the institution of higher education. Quality assessment of study programme groups is not followed by sanctions: expert assessments should be considered recommendations.

Quality assessment of a study programme group takes place at least once every 7 years based on the regulation approved by EKKA Quality Assessment Council for Higher Education <u>Quality Assessment of Study Programme Groups in the First</u> <u>and Second Cycles of Higher Education</u> (see the regulation in English <u>here</u>).

In 2016, an international expert panel assessed the quality of the study programme group of Transport Services and the study programme group of Engineering, Manufacturing and Technology at the Estonian Aviation Academy (EAVA).

Professional higher education programmes assessed in the **study programme** group of Transport Services:

- Air Traffic Services
- Aircraft Piloting
- Aviation Management
- Management of Aviation Communication and Navigation Systems

Professional higher education programme assessed in the study programme group of Engineering, Manufacturing and Technology:

• Aircraft Engineering and Maintenance

As a result, EKKA Quality Assessment Council for Higher Education decided at its meeting on January 6, 2017, that **the next assessment is to take place in seven years if the Academy meets certain requirements set by the Council.**

The aim of the current assessment committee was to assess whether the requirements (secondary condition) set by the Quality Assessment Council for Higher Education have been met by the Aviation Academy.

Assessment committee

The following members formed the assessment committee:

Pascal BauerProf. Emeritus, ENSMA-University of Poitiers – FranceKristo VallimäeProject Manager, Estonian Air Navigation Services (EANS) –
Estonia

The assessment was coordinated by Tiia Bach (EKKA).

Assessment process

The committee members visited the Estonian Aviation Academy on the 19th of March 2018 and had discussions with the Academy management and with the heads of departments and other key lecturers.

In the following sections, the assessment committee summarizes their findings regarding the fulfillment of the secondary condition, and also provides feedback on the progress the Academy has made in connection with experts' recommendations made in their report in 2016.

The current report is a public document and made available on <u>EKKA website</u> after EKKA Quality Assessment Council for Higher Education has made the assessment decision.

1. General progress report since last assessment of study programme groups

General assessment of the actions taken by the Estonian Aviation Academy with regard to improvement areas presented in the <u>assessment</u> <u>panel's report regarding quality assessment of study programme group of</u> <u>Transport Services and the study programme group of Engineering</u>, <u>Manufacturing and Technology in 2016</u>.

<u>Comments</u>

EKKA Quality Assessment Council for Higher Education has decided at its meeting on January 6, 2017 to set secondary condition that EAVA has to fulfil in order to continue assuring the quality of studies.

When meeting with the management and other staff, the Committee was very pleased to see that the Estonian Aviation Academy has changed its mindset, compared to what was experienced and felt in 2016, and is now aiming more towards improvement activities and implementation of action plans. The Academy has shown positivity in all the aspects stated in the assessment committee's 2016 report and highlighted by the Quality Assessment Council.

During the visit it was identified that both the management and heads of departments are cooperating closely towards solving the issues raised during the quality assessment.

Recommendations provided by the assessment committee in 2016 have been taken very seriously into account – in depth and with much care.

Development of the curricula has been prioritized, and together with the industry every curriculum has been modified. Updated curricula are fitting more with the needs of the industry. For example, the Academy has merged two study programmes which were assessed in 2016: Management of Aviation Communication and Navigation Systems with Aircraft Engineering and Maintenance. The new programme is titled Aeronautical Engineering.

By the end of 2018 the vision for curricula development will be fully finalized.

Commendations

- The Academy's aspiration and readiness to change is the key that enables changes to take place.
- The workload of teaching staff is under surveillance (e.g., specific forms have been developed to monitor the workload), and plan has been made to finalize lecture schedule for the next academic year already in May-June.
- More efforts have been made to advertise the Aviation Academy curricula in secondary schools and involve EAVA teaching staff in teaching activities at secondary schools. Additionally, several workshops are being held there.
- An increase in elective courses will provide more flexibility for EAVA and ERASMUS students. The raise in elective courses have been as follows: ATS: 8 ECTS to 19, CNS: 3 ECTS to 10, AM: 10 ECTS to 11, TECH: 6 ECTS to 10, PIL: 3 ECTS to 10.
- Internationalization is an ongoing process:
 - More subjects are taught in English (e.g., in the Aviation Management programme, the whole semester is provided in English);
 - Mobility of teaching staff and students are in rising trend and the academy has set some relevant goals in its Development Plan (e.g., 80% of staff must have been abroad by 2022).

2. Report on meeting the requirements of the secondary condition

2.1 General background

At its meeting on January 6, 2017, EKKA Quality Assessment Council for Higher Education decided that the next assessment of the study programme group of Transport Services and the study programme group of Manufacturing, Engineering and Technology at the Estonian Aviation Academy will take place in 7 years (maximum term) but set a secondary condition that the Estonian Aviation Academy should meet by January 2018.

Based on the <u>Assessment Report</u> of the international panel and the <u>Decision of EKKA Quality Assessment Council for Higher Education</u>, the Estonian Aviation Academy submitted the following documents to EKKA in January 2018:

- 1) Report on actions taken on the improvement areas described in the Decision of EKKA Quality Assessment Council;
- 2) Comparative Analysis of EAVA Curricula with Similar European Higher Education Programmes;
- 3) Report on activities planned for improving issues pointed out in the Assessment Report.

2.2 Meeting the requirements of secondary condition

The following are the three requirements set by the Quality Assessment Council to be met by the Estonian Aviation Academy, and the committee's assessment on the developments the Academy has made concerning those requirements.

According to standard 5.1.1 of the regulation 'Quality Assessment of Study Programme Groups in the First and Second Cycles of Higher Education' adopted on the basis of subsection 4 of § 10 of the Universities Act and clause 3.7.1 of the Statutes of EKKA, the launch or development of the study programme must be based on the Standard of Higher Education and other legislation, development plans, analyses (including labour market and feasibility analyses), and professional standards; and the best quality has to be sought. In the Estonian Aviation Academy, there has been no benchmarking of the content and volume of the study

programmes with similar programmes in other European countries. There is also a lack of a clear vision regarding the development of the study programmes and the organisation of studies.

Assessment of the committee: the secondary condition is partly met.

<u>Comments</u>

A comparative analysis and research (as a graduation thesis) has been prepared by the Academy. The aim of the analysis was to compare EAVA curricula with similar programmes in other European universities and identify the amount of overlapping subjects between the curricula. For every curricula two similar programmes in other universities have been chosen for comparison.

The Academy considers the prepared analysis as initial work that serves as basis for further and more detailed work at departmental level. Every curriculum manager will conduct discussions with programme councils and stakeholders to make more specific plans for programme development (e.g, compare subjects in the curricula). Programme managers may also conduct their own analyses (i.e., choose other institutions), if they wish, meaning that they do not have to hold to those two institutions that were selected for initial comparison.

In its documents, EAVA has also outlined a vision for further development of all four programmes. The action plans include further consideration of, for example, teaching specialty modules in English, cooperation with visiting teaching staff, student and teacher mobility, also needs of the employers. As already stated above, the vision for curricula development (incl. duration of studies) will be elaborated by the end of 2018.

In the opinion of the Committee, the work that has been done so far has been beneficial for further and deeper analysis and action.

Commendations

• The prepared research will serve as a good basis for further deeper analysis of the curricula.

Further considerations

Additional comparison analysis needs to be prepared with exact and approved goals.

- The analysis should give EAVA the indication that in Europe the 3-year programmes ending with specific license are available and working.
- Based on that analysis, EAVA should identify and list reasons which limit their change from 4-year to shorter period of study and finally discuss that with appropriate stakeholders (e.g., ministries, industry, etc.). The comparison could also be based on the level of different courses that are taught in other institutions (i.e. number of ECTS).

According to standard 5.1.3 of the regulation 'Quality Assessment of Study Programme Groups in the First and Second Cycles of Higher Education', *different parts of the study programme have to form a coherent whole*. The interconnection of different courses taught at the partner universities with practical training conducted at the Academy and the study programme as a whole remains somewhat unclear.

Assessment of the committee: the secondary condition is fully met.

<u>Comments</u>

The Committee is pleased to see that specialty subjects that are taught in earlier years and subjects that were before provided by other universities are now taught more by EAVA staff. For example, "Physics" (which was taught at the Estonian University of Life Sciences) has been changed to "Physics for Aviation" and is now taught by two EAVA lecturers in the Academy. Such changes provide more "aviation fragrance" and less commuting for the students between different institutions and locations.

The Academy attempts to nullify commuting within a day so that the student could have all the lectures in one place – in EAVA or other universities. Even if the subject is taught in another institution, the lecturer comes to EAVA. Therefore, the Academy has much better overview of the content of studies (what the lecturer is teaching, what materials are being used, etc).

This is a growing trend and, in addition, will bring the academy community even closer.

Commendations

None

Further considerations

None

According to subsection 4 of § 6 of the 'Standard of Higher Education' (a regulation issued by the Government of the Republic), the *objectives and learning outcomes of a study programme have to be formulated in a way that they provide a basis for evaluation of the knowledge and skills of graduates of that study programme.* At the moment, the learning outcomes have been described in very generic terms and therefore, do not provide sufficient basis to fully evaluate the knowledge and skills of the graduates.

Assessment of the committee: the secondary condition is substantially met.

<u>Comments</u>

The Academy has conducted a thorough analysis of learning outcomes of the curricula and their structure together with an expert from a partner university. The analyses (starting from the subject level – i.e., bottom-up approach) has revealed that the necessary learning outcomes (basis for evaluation of the knowledge and skills of graduates) are in most cases present in specialty modules of the programmes, but often not reflected in the learning outcomes at the curriculum level. Currently, the work is in progress as to how to reflect the knowledge and skills at the curriculum level.

Learning outcomes are thoroughly investigated and will be expressed in a better and standardized way for 2018/19 academic year. New versions of the curricula with revised learning outcomes will be approved by the Academy Council by April 2018.

Commendations

None

Further considerations

• After refreshing the curriculum level learning outcome descriptions, make it as annual procedure to look through the learning outcomes periodically.