STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

KAUNO KOLEGIJOS (aukštosios mokyklos pavadinimas)
STUDIJŲ PROGRAMOS "*AGROVERSLŲ TECHNOLOGIJOS*"
(valstybinis kodas – 6531IX008, 653D77002)
VERTINIMO IŠVADOS

EVALUATION REPORT
OF "*AGRIBUSINESS TECHNOLOGIES*"
(*state code – 6531IX008, 653D77002*)
STUDY PROGRAMME
at KAUNAS COLLEGE (higher education institution)

Review' team:

1. **Mr. Michael Pearson (team leader)** *academic,*
2. **Prof. dr. Dietrich Darr,** *academic,*
3. **Prof. dr. Endla Reintam,** *academic,*
4. **Mr. Povilas Drulis,** *representative of social partners'*
5. **Mr. Gabrielius Jakutis,** *students' representative.*

Evaluation coordinator -

Ms. Natalja Bogdanova

Išvados parengtos anglų kalba
Report language – English

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	*Agroverslų technologijos*
Valstybinis kodas	6531IX008, 653D77002
Studijų sritis	Biomedicinos mokslai
Studijų kryptis	Žemės ūkio mokslai
Studijų programos rūšis	Koleginės
Studijų pakopa	Pirmoji (profesinio bakalauro)
Studijų forma (trukmė metais)	Nuolatinė – 3 metai, ištęstinė – 4,5 metai
Studijų programos apimtis kreditais	180 ECTS
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Žemės ūkio mokslų profesinis bakalauras
Studijų programos įregistravimo data	2003.05.29

INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	*Agribusiness Technologies*
State code	6531IX008, 653D77002
Study area	Biomedical Sciences
Study field	Agricultural Sciences
Type of the study programme	College studies
Study cycle	First (professional Bachelor)
Study mode (length in years)	Full-time – 3 years, part-time – 4.5 years
Volume of the study programme in credits	180 ECTS
Degree and (or) professional qualifications awarded	Professional Bachelor of Agricultural Sciences
Date of registration of the study programme	29.05.2003

CONTENTS

I. INTRODUCTION

1.1. Background of the evaluation process

The evaluation of on-going study programmes is based on the **Methodology for evaluation of Higher Education study programmes,** approved by Order No 1-01-162 of 20 December 2010 of the Director of the Centre for Quality Assessment in Higher Education (hereafter – SKVC).

The evaluation is intended to help higher education institutions to constantly improve their study programmes and to inform the public about the quality of studies.

The evaluation process consists of the main following stages: *1) self-evaluation and self-evaluation report prepared by Higher Education Institution (hereafter – HEI); 2) visit of the review team at the higher education institution; 3) production of the evaluation report by the review team and its publication; 4) follow-up activities.*

On the basis of external evaluation report of the study programme SKVC takes a decision to accredit study programme either for 6 years or for 3 years. If the programme evaluation is negative such a programme is not accredited.

The programme is **accredited for 6 years** if all evaluation areas are evaluated as "very good" (4 points) or "good" (3 points).

The programme is **accredited for 3 years** if none of the areas was evaluated as "unsatisfactory" (1 point) and at least one evaluation area was evaluated as "satisfactory" (2 points).

The programme **is not accredited** if at least one of evaluation areas was evaluated as "unsatisfactory" (1 point).

1.2. General

The Application documentation submitted by the HEI follows the outline recommended by the SKVC. Along with the self-evaluation report and annexes, the following additional documents have been provided by the HEI before, during and/or after the site-visit:

No.	Name of the document
1.	Updated course descriptions

1.3. Background of the HEI/Faculty/Study field/ Additional information

Kaunas college has been established in 2000. It currently offers more than 50 study programmes in the areas of Biomedicine, Humanities, Social Sciences, Technological Sciences and Arts; and more than 7000 students are enrolled in the college currently (paragraph 1 of the SER). The *Agribusiness Technologies* study programme at Kaunas college has been implemented since

2003. The programme moved from a different location to the main campus in Kaunas in 2013. The previous evaluation of the programme took place in 2014.

1.4. The Review Team

The review team was completed according *Description of experts' recruitment*, approved by order No. V-41 of Acting Director of the Centre for Quality Assessment in Higher Education. The Review Visit to HEI was conducted by the team on 12th April 2017.

1. **Mr. Michael Pearson (team leader)** *principal of Gurteen College, Ireland.*
2. **Prof. dr. Dietrich Darr,** *professor of Agribusiness at the Faculty of Life Sciences, Hochschule Rhein-Waal, Germany***.**
3. **Assoc. Prof. dr. Endla Reintam,** *professor at Institute of Agricultural and Environmental sciences, Estonian University of Life Sciences, Estonia.*
4. **Mr. Povilas Drulis,** *Managing director at JSC Agrotikslas, Lithuania.*
5. **Mr. Gabrielius Jakutis,** *student of Vilnius University Faculty of Medicine, Lithuania*.

II. PROGRAMME ANALYSIS

2.1. Programme aims and learning outcomes

Overall, the programme is conceptualized and organized in a systematic manner, and programme aims and outcomes are clearly defined and consistent. However, the college should aim to make the programme more attractive to students from urban areas with no agricultural background and to international exchange students in order to increase student enrolment in the future.

The programme objectives are defined as "to prepare professional Bachelors of Agricultural Sciences who are able to plan, organise and manage the activity of specialised farm, to select and implement crop production and animal husbandry technologies, to organise realisation of agricultural production, to assure the quality of agricultural products, to establish an enterprise and to adapt creatively to the changes of the labour market" (paragraph 25 of the SER). Graduates of the programme are expected to have acquired "professional competences enabling them to perform independently and responsibly work in the following areas: organisation of technological process in an agricultural enterprise, designing the process and realisation of agricultural products, organisation of activities in an agricultural enterprise (unit)" (paragraph 14), and "to analyse technological documentation, to evaluate agricultural production technologies, to plan, organise and manage agricultural production, storage and sales work; to organise enterprise's (units) activities, to

prepare plans for business and management or may join producers' groups; to work according to their specialty on farms; to carry out the agrarian sector crop insurance and risk assessment" (paragraph 20). These objectives are broken down into three concreate aims of the programme, which are:

- To organise and manage technological process of agricultural production;
- To establish an agricultural enterprise and to manage it;
- To communicate and cooperate in making rational professional decisions.

These aims are described in more detail (paragraphs 27-29) and complemented with a number of intended learning outcomes (LOs) of the programme; and each LO is supported by a list of study subjects (Table 4 of the SER).

Objectives, aims and intended LOs are well defined, clear and consistent. They are published through a variety of channels including websites, school visits and Days of Open Doors, career events and further occasions (paragraph 34 of the SER).

The Lithuanian rural development policy defines the formation of competitive farms capable of producing high-quality healthy and safe production, the support of non-traditional agriculture and alternative businesses start-ups, and the support of cooperative structures in the agricultural sector, among other points, as major policy objectives (paragraph 16 of the SER). The promotion of food chain organisation and risk management in agriculture has also been formulated as a policy priority (paragraph 17). The demand for specialists in the rapidly advancing agricultural sector of Lithuania is increasing; the agricultural specialist demand analysis conducted by the Lithuanian Institute of Regional Research has forecasted a demand increase for qualified professionals in the area of agricultural production by 31% and in the area of agricultural technologies by up to 43% until 2016 (paragraph 121). By aiming to achieve the above mentioned objectives, the programme aims to contribute to meeting these policy priorities. Curriculum structure and content of the study subjects are annually being evaluated and adjusted to changing market demands and students' interests. The Evaluation Team (ET) could convince itself during the discussions with students, teachers and management that the aims and LOs are regularly being revised and updated to respond to feedback obtained from students and social partners as well as to industry and labour market trends. For example, and as also stated in the SER (paragraph 35), a new teaching subject "Open Source GIS" and the specialization on "Insurance in the Agrarian Sector" have been introduced recently, and one semester has been added to the curriculum of the part-time study programme. The specialization corresponds well to recent developments and demands in the agribusiness industry and the LOs defined for the programme. Simultaneously, the specialization differentiates this programme course from similar elsewhere in Lithuania thereby contributing to building a distinctive profile at Kaunas

college. During the meetings is has been confirmed that the programme committee ensures that subjects and LOs are consistent and with no overlaps; and teachers cooperate with each other to ensure this outcome. Civil society and industry stakeholders actively participate in providing education and in regularly reviewing and updating the programme to reflect changing labour market needs as stated in the SER (paragraph 21) and confirmed during the meeting with social partners.

Graduates of the programme address a labour market need, as between 51 and 71% of graduates 2013-2016 were employed (Table 3 of the SER), typically more than 60% of which according to their specialization (Table 32). During the meetings college staff expressed that the number of drop-outs is not very high; and the graduation percentage of students in the programme is generally good. However, the SER also states that, the number of new enrolments has been declining from 37 in 2013 to 12 in 2016 (Tables 22 and 28), partially due to an overall decrease in number of school graduates, an increasing number of youth choosing to study in European higher education institutions (paragraphs 93 and 96), and a perceived overall low popularity of agricultural studies among the best graduates of secondary schools (paragraph 121). It was further explained to the ET that the recent decision of the Lithuanian government to make maturity exams in mathematics a precondition to obtain governmental scholarships for students of agriculture has negatively affected enrolment numbers during the last year. In response to this change, the staff now proactively informs grade 10 students in secondary schools around the college to advise them on their choice of specialization. The ET is convinced that this is likely to increase student enrolment in the programme during the next years again. The ET could further confirm that students are attracted to the programme from various regions of Lithuania, and students expressed that it was worth coming to study at KC. Nevertheless, given the fact that most current students have a family farming background the ET sees the need, and potential, to increase the attractiveness of the programme for prospective students from urban areas with no agricultural background. Likewise, the KC should continue its efforts to attract international exchange students for this programme.

Overall, the LOs defined for the programme reflect appropriately the needs of the contemporary labour market. Through regular involvement of social partners it is ensured that the programme contents and LOs respond to changing demands and professional developments in the sector. Nevertheless, the percentage of graduates working according to their specialization is relatively low given the high demand for professionals in the agribusiness sector repeatedly expressed during the ET visit. However, factors beyond the control of the KC contribute to this result, such as wage levels in the sector relative to other industries or migration of graduates abroad.

Departmental policy of the Environmental Engineering Department is “to ensure quality of implemented study programs, to carry out applied research, to ensure a sufficient quality of studies

and educational background as well as the quality and competitiveness of graduates in the labour market" (paragraph 10 of the SER). The objectives and intended LOs of the programme under evaluation contribute to this policy.

During the staff meetings the ET could convince itself that the objectives, aims and LOs of the programme have been defined in accordance with the national standard for preparing specialists for the agriculture sector. Based on the evaluation of materials and information presented ET comes to the conclusion that that these appropriately reflect and correspond to criteria defined for second cycle programmes. For example, LOs such as "…analyse possibilities of technology selection" or "…plan and organise continuous work process in a specialised enterprise" appropriately address the applied character of and professional qualifications to be obtained from first cycle study programmes.

Programme title, intended LOs, programme content and qualifications to be obtained are well aligned. The ET concludes that the title *Agribusiness technology* is appropriate and sufficiently discriminates the programme at KC from similar programmes offered elsewhere in Lithuania given its strong focus on business and technology aspects in the agribusiness sector.

2.2. Curriculum design

The programme is structured as a 6 semester programme with a total of 180 credit points. The ET concludes that the curriculum fully complies with the legal requirements.

Teaching subjects are arranged in a consistent manner, with general college study subjects (15 credits) taught during the first and second semester, study field subjects (135 credits) primarily taught during the third and fourth semesters, and optional (specialization) subjects taught during the fifth and sixth semesters. The subjects are arranged in a local sequence and build on each other; for example, "Basis of Economics" (2nd semester) is followed by "Agribusiness economics" (3rd semester), "Agricultural marketing" (4th semester) and "Agricultural accounting and finance" (5th semester). However, the ET would like draw attention to the facts that, (a) the number of credit points in individual modules does not fully meet legal requirements (a minimum of 10 credit points is required per module according to the "General requirements for the first degree study programmes"); and (b) thereby the terms "subject", "course", and "module" appear to be used interchangeably in the SER although denoting distinct concepts.

The catalogue of "free electives" contains two teaching subjects, which would actually fit better in one of the three specialization areas (i.e., teaching subject "Environment Protection Management" fits into "Ecological Production"; teaching subject "Decorative Horticulture and Floriculture" fits into "Horticulture and Olericulture commodity production"). To increase choice

and opportunities for students to specialize according to their interests, and to further differentiate the programme from similar study courses offered at other colleges, KC could consider expanding the catalogue of elective subjects.

It is not fully clear to the ET why teaching subjects differ in terms of the number of credit points (there are teaching subjects of 3, 4, 5 and 6 credit points). According to information provided during the staff meetings, the number of credit points reflects the importance of and workload assigned to the various subjects in order to reach the learning objectives. The ET was concerned that the programme logistics (e.g., preparation of time table and scheduling of lecture rooms) is becoming unnecessarily complex as a consequence, and that students might be confused about allocating their self-study time to the various teaching subjects responsibly. However, it was affirmed to the ET by the teaching staff that this was not the case.

Most of the study subjects are clearly delineated and do not overlap. However, the curriculum shows some overlap of the teaching subjects "Agribusiness" and "Agribusiness economics" (e.g., agribusiness classification/ organization; focus of economic analyses to be conducted), which was confirmed during the staff meeting. According to the information provided during the meeting, the programme committee had already agreed to remove the latter subject from the programme and to reallocate the respective credit point to other subjects.

The teaching subjects and contents covered in these subjects fully correspond to the requirements of a professional Bachelor programme in agricultural sciences. Teaching subject contents are described in detail and linked to study objectives and intended LOs. Methods of instruction and assessment are logically linked to and appropriately reflect the stated objectives and outcomes.

The programme allows students to fully achieve the defined LOs. Achievement of LOs related to factual knowledge and theory is ensured by appropriate theoretical lectures and classroom teaching. Achievement of practical LOs is ensured by an adequate amount of practical teaching units (seminars, laboratory classes, practical trainings). The large network of social partners from various areas of the agribusiness sector, as well as the stringent organization and evaluation of practical trainings (e.g., careful selection of practice partners, clear agreements with students and partners on training objectives before the internship; evaluation of student performance after the practical period) allow the students to obtain the required practical skills and competencies. Moreover, it has been confirmed during the staff meeting that students are encouraged to pursue their practical placements in areas which they do not feel familiar with so as to expose them to new learning opportunities.

While the curriculum is clearly stringent and well defined, the ET would like to encourage the college to keep continuously developing the curriculum in order to further strengthen the profile and distinctness of the programme. The ET would like to particularly propose the following areas, which the current curriculum does not yet explicitly address:

- Introduce a teaching subject "Entrepreneurship/ business planning" particularly addressing the needs of students with a non-farming background;
- Introduce a teaching subject "Human resources management";
- Strengthen teaching contents in the area of logistics and supply chain management;
- Strengthen teaching contents related to use of agricultural commodity futures and options as risk management instruments.

2.3. Teaching staff

24 teaching staff contribute to the programme, among them three doctoral degree holders and 21 Master degree holders. 1 staff member is an Associate Professor, 18 are lecturers and 5 assistant lecturers. Two thirds of the staff is employed on permanent contract, and nearly all have working experience of more than three years (paragraph 58 of the SER). The SER concludes that the available staff resources comply with the legal requirements (paragraph 65), and the ET confirms this claim. All academic/ teaching staff fulfils the legal requirements with regard to qualification (paragraph 69). It has been noted positively by the ET that a number of staff is currently pursuing their PhD degrees, which will positively contribute to the further development of the programme in the future.

Academic staff members contributing to the programme are adequately qualified and experts in their field as proven by the fact that many of them are engaged in a number of expert activities, such as membership in professional organizations, methodological publications, conducting applied research projects with various professional and private sector institutions, providing consultancy services, reviewing pertinent study programmes, etc. (paragraph 70 and Table 13 of SER).

7 staff members of the teaching programme are proficient in German language, 12 in Russian language; staff proficiency in English language has not been mentioned (paragraph 68 of the SER). The ET noted positively during the visit to Kaunas college and the meetings with various management and teaching staff that most of them can fluently communicate in English. Teaching staff of the programme conducted a number of applied research projects and published 24 publications during the reporting period, most of which in journals, books or conference proceedings at the national level (annex 4). In order to further increase the role of applied research activities in the programme (cf. Table 33), it would be required to encourage staff members and

students to more actively publish in international peer-reviewed journals in English language. Likewise, in order to increase the number of incoming international exchange students enrolled into the programme (Table 33) it would be required to offer subjects in English language for exchange students. The ET noted that teachers hardly use audio-visual teaching aids in English language (e.g., YouTube videos) in their classes; nor do they regularly give the students assignments in foreign languages. Such and other measures could easily contribute to further improving the students' foreign language skills, which are considered very important by teachers, students and social partners alike. These aspects clearly point out the need to further increase the English language proficiency among the academic staff.

24 teaching staff (paragraph 58 of the SER) were available to teach a total number of between 150 and 118 students between 2013-2016 (paragraph 64). A total number of 4356 pedagogical hours of all teaching staff is available for the programme. Assuming that a full position translates into 540 pedagogical hours per year (18 pedagogical hours per week for 2 semesters of 14 weeks), the student-to-teacher ratio ranged between 18.6 and 14.6 in the reporting period. The number of students in seminars and practical training classes is described to range between 12 and 16 (paragraph 64). In addition to teaching staff, the Department employs 6 technical staff who seem to contribute to all programmes at the Department, among them a secretary, a head of the practical training and testing laboratory, 0.5 laboratory assistant and three technical workers (paragraph 63). While the available teaching staff resources seem to be (more than) adequate to ensure the operation of the programme, the number of technical staff is low. However, it has been confirmed during the meetings that the small number of technical staff is not a limitation with regard to preparing and conducting practical teaching subjects, such as laboratory courses, exercises or practical student projects.

After the reorganization of the college structure and the creation of the Department of Environmental Engineering in January 2017, positive effects can be expected for the *Agribusiness Technology* programme in terms of staff and material resources availability according to the SER (paragraph 61). During the visit it was explained to the ET that by merging two departments located at different places previously a variety of new teaching subjects could be offered to students, e.g. GIS, and lecturers can now cooperate more easily.

Fluctuation among teaching staff seems to be low. Most teaching staff have been contributing to the programme already since the start of the study course in 2003. Three young staff members have been recruited during 2014-2017, reducing the average age of the lecturers from 56 years in 2014 to 50 years in 2017 (paragraph 62 of the SER). According to the students, teachers and management this has had positive impact on the atmosphere in the programme, with young

teachers being particularly motivated, innovative and full of energy to further develop and improve the programme.

Teaching staff participate in the college's professional development programme, which aims to increase the participants' formal and informal education. According to the SER, 3 staff members currently upgrade their qualification by pursuing their doctoral studies (paragraph 66). Furthermore, staff members participated in international mobility programmes to upgrade their language skills, e.g. 3 staff members in the period from January-March 2017 (paragraph 67) and attended trainings to upgrade their computer literacy and pedagogical qualifications among others (paragraph 68). The ET concludes that college works effectively towards upgrading the academic qualification, pedagogical and personal competencies of teaching staff.

2.4. Facilities and learning resources

The Department was transferred to the central campus in Kaunas in 2013. The ET could convince itself that the buildings are modern, easy to access, adequately equipped and a number of auxiliary services are being provided at the campus (e.g., canteen, library, recreation and sport facilities) (paragraph 75 of the SER). During the staff meeting one teacher stated that many colleagues, who originally were concerned and only hesitantly relocated to Kaunas three years ago, are very happy about their decision today and are convinced that the relocation has considerably improved the quality of the programme.

The programme uses 12 classrooms, 8 of which are specialised classrooms and laboratories including 2 IT-labs. Classrooms range from 14 to 40 seats in size. The ET could convince itself during the visit that the campus and classroom facilities are very modern, up-to date and in excellent conditions. Some of the classrooms have been equipped with new desks and benches; other classrooms have been equipped with specialized software, such as SpecWare 9 Professional for GIS data analysis, software to adjust parameters of greenhouse environment, or special software designed for pest and disease modelling and forecasting. Some of these facilities and equipment have been demonstrated to the ET during their visit. On the campus, open-air training areas are located, such as the training garden in Pramonės pr. 20 inner yard, training flower gardens (mixed borders) at the façade side of the buildings situated in Pramonės pr. 20 and 22, and the interior phyto design studio is located in the halls of the ground, first, second and third floor (paragraph 76 of the SER). The ET has visited the training garden and the phyto design studio and concludes that these facilities, while still being further developed, adequately support practical study subjects. IT labs and a library and self-study centre are also available for students. The library has 311 working places for visitors, 41 of them are computerised (paragraph 79). During their visit, the ET was

introduced to the library facilities on campus and could convince itself that they are highly adequate, intensively used by students and in very good overall condition.

In addition, the college offers sufficient places in student dormitories, which allows all students who are interested to be provided with accommodation (paragraph 113 of the SER).

The SER lists in detail the available laboratory equipment and technical devices available to students and academic staff, among them an electronic hygrometer, soil pH meter, VIS spectrophotometer, air pollution detection equipment, a digital microscope, a penetrometer, tape recorders, a video camera, digital cameras etc. Significant investments of approx. 83,000 EUR have been made during the reporting period to acquire new equipment and tools (paragraph 79 and Table 17). The ET was informed that sufficient budget is available to cover the operating costs and running the necessary laboratory courses, exercises and practical projects.

According to the SER (table 21), laboratory and practical training infrastructure is currently underutilized, pointing at further potential to increase applied research and development activities using these resources. The meetings revealed that the staff is aware of this point and working towards increasing the utilization of research facilities by attracting additional applied research projects.

In addition to the above mentioned resources, further experimental laboratories (quality control, landscape design) and a modern fruit orchard are available. A training greenhouse is being built (paragraph 81 of the SER), regular excursions/ trips with students to farms and enterprises in the vicinity of the university have been conducted (paragraph 82) and an outdoor experimental training base and "supporting farm" shall be established on the premises of a social partner (paragraph 83). During their visit, the ET has been shown a short video introducing the supporting farm and found it adequate to support practical study subjects. These measures aim to increase the students' exposure to practical professional problems and applications.

Furthermore, the college has concluded practice agreements with 36 farmers, higher education institutions, joint stock companies and other stakeholders to allow final year students to conduct their final projects and theses in these organizations (paragraph 85 of the SER). During the last year, the college has further expanded the network by concluding cooperation agreements for students' practice with international partners (e.g., from Denmark, the Netherlands and Poland). The network of partners comprises of enterprises in various business sectors and specializations (e.g., conventional vs. ecological farms, mixed vs. vegetable farms and so on), which gives broad learning opportunities to the students. In addition, the practical training centre of the college helps students to find their own internship placements. The ET comes to the conclusion that the network of business and social partners sufficiently compensates for the fact that the college does not own

and/or operate an extended teaching farm itself and is very well suited for students to achieve the practical LOs.

It has been reported that a number of students also perform these practice periods on their parents' farms. ET was originally concerned that this may cause problems of quality control and unequal demands; however, the ET found that lecturers are very well aware of this risk and measures are in place that ensure that requirements and conditions are comparable for all students.

The library provides access to about 32,000 titles and 127,000 copies of printed documents; 170,000 electronic books and about 17,000 scientific journals from 17 international subscribed databases (Academic Search Complete, Business Search Complete, EBSCO Publishing, Taylor & Francis, Emerald Management). In addition, there are 500 electronic text-books available in the Lithuanian language. The library subscribes to about 110 titles of periodicals, 36 of which in foreign languages. The programme subscribes to 11 periodicals, including 2 titles in English and Russian. Students and staff members can get access to library materials from the college and remotely through a VPN (paragraph 87 of SER). The ET has confirmed during it visit that library facilities are excellent and frequently used by students.

2.5. Study process and students' performance assessment

In line with national regulations, students are admitted to the programme through a competitive system which is based on maturity examinations. While the popularity of agricultural study programmes among the best graduates of secondary schools is generally declining (paragraph 121 of the SER), this programme was able to attract an increasing number of particularly motivated students whose parents operate their own agricultural enterprises during the last years (paragraph 95 of the SER). The ratio of graduates in number of admissions is rather high and ranges between 64% and 91% in the reporting period (Table 24). This indicates that the organization of the programme ensures that students can successfully complete their studies in a period of six semesters. Drop-out rate ranges between 13.5% (2013-14) and 22.5% (2015-16) mainly in the first year of studies (paragraph 98). According to the SER, teaching staff provide individual advice on study organization to students who intend to terminate their studies. During their visit, the ET could confirm that measures are in place at KC to control drop-out, such as providing students with more detailed information on the requirements, study contents and/or career opportunities, as well as more and more targeted/ individualized support during their first semesters.

Students have various opportunities to get involved in scientific or applied research activities. Examples mentioned in the SER (paragraph 101) comprise the Students' Scientific Fellowship in 2014, an annual national students' conference "Application of Innovations in

Technologies"; an annual contest "Ideas in Practice"; participation in the science festival "Spaceship Earth", the science event "Nights of Researchers", etc. In addition, 23 students delivered presentations and published 10 articles on their research projects (paragraph 102). During the meeting with students the ET learned that at least one student was able to attend an externally provided GIS course due to financial support provided for this purpose by the college.

Students are encouraged to participate in mobility programs under Erasmus+ to study abroad and/or complete their practical projects/ internships abroad. The total number of outgoing students ranged between 16 and 32 per year from 2011-12 to 2016-17; the proportion of students going abroad ranged between 15% to 21% during this period (Table 30 of the SER). A number of activities have been initiated to increase the number of outgoing students, among them making information on existing study abroad opportunities more easily available to students and implementing an electronic application portal (paragraph 107). However, Erasmus+ mobility currently is not fully balanced yet with only between 1-3 incoming students (paragraph 109). The ET has noted a number of activities started at the college to increase the number of incoming students, such as conclusion of new international partnerships and exchange agreements, making available information on the programme in English language, and the appointment of an international coordinator for incoming exchange students at the department.

Students are provided with various forms of support including grants and loans, social and incentive scholarships, information on events, mobility and career opportunities as described in paragraphs 110 and 112 of the SER. Information is made available through notice boards, websites and verbally through the academic group tutor. Group and individual consultations are integral component of the programme (paragraph 111). The students confirmed the ET that social and academic support provided by the college was adequate.

Student achievements are identified by means of individual cumulative assessments using a ten-point criteria scale (appendix 2.1.1of the SER). Grading criterial are documented to students in the description of the programme and announced to students at the beginning of each semester (paragraph 115). Thus, grading requirements are clear, public and appropriate to address the LOs. Although, the fact that most final theses are evaluated with 8.92 and 9.13 marks (paragraph 119) suggests that the lecturers could more confidently exploit the full range of the grading spectrum to mark the students' performances. The ET also raised this point during the meeting with staff and management.

The number of graduates that are registered in the Lithuanian labour exchange office is typically at or below 10% of graduates. Between 60% and 75% of the graduates of the programme found employment in the reporting period, more than 60% of which according to their

specialization (Table 32 of the SER). Social partners appreciated the practical skills of the graduates. However, overall the number of graduates was considered too small to satisfy the demand for highly qualified academic staff in the agribusiness technology sector.

During the meeting with the social partners, the importance of professional education in the field of agribusiness technology has strongly been expressed. The ET can unreservedly state that this programme corresponds to the economic, social, cultural and future development needs of Lithuania given the significant importance of the agribusiness sector in the Lithuanian economy and the cultural and socio-economic importance of a modern farming sector for most rural areas of the country.

The ET could convince itself that learning conditions and learning environment at the college are very favourable. This equally relates to the excellent infrastructural facilities, as well as to immaterial aspects such as the high motivation of lecturers, approachable staff and open interactions between students and teachers and the encouraging and inspiring learning atmosphere at KC. Students have many extracurricular activity possibilities, such as arts (folk dance group and choir) and sports.

Information on appeal and complaint process is not provided in the SER. During their meeting with students, the ET was informed that students typically talk to lecturers in case of conflicts or problems, and would involve the Head of Department if cases could not be resolved. However, according to the students this has not happened so far.

2.6. Programme management

Overall, ET evaluates management of the agribusiness technology programme as a particular strength of Kaunas college. ET found during their visit that recommendations made during the previous evaluation have been appropriately addressed and that managers and academic staff alike were highly motivated to further develop and improve the programme.

During their meeting with senior management and the SER team, the ET observed that the management team interacted very well and very openly with each other. Several staff members reported to the ET on their respective areas of responsibility (e.g., Dean Faculty of Technology, Head of Department of Environmental Engineering, Head of the programme, Quality control manager, Head of student reception department, etc.). The ET learned that responsibilities to monitor and to make decisions related to the programme are clearly allocated to individuals and collective bodies (e.g., the study programme committee).

Clear processes of continuously evaluating and further improving the programme have been presented to the ET. For example, there exists a regular process of evaluating the performance of

teachers (every five years, with annual plans and provision of appropriate trainings and development opportunities). Furthermore, the curriculum and content of teaching subjects is being reviewed at least once per academic year based on student feedback, input obtained from social partners and the analysis of professional developments in the agribusiness sector.

During their visit, ET has been presented multiple evidence of adjustments made to the programme in response to feedback obtained from students and social partners. For example, the teaching subjects “Open Source GIS” and the specialization on “Insurance in the Agrarian Sector” have been introduced in response to such feedback.

During their meeting with ET, the social partners confirmed that they have been involved in reviews and discussions of the programme, and that their feedback was truly used to modify the programme structure and contents.

The ET could convince itself during the visit that the internal quality assurance measures are effective and efficient. This observation is backed up by the fact that the programme is known well and attracts students from around Lithuania, and that it was ranked as the leading professional agricultural study programme in the country. The college publishes relevant information about the programme through a variety of channels (including brochures, websites, school visits, fairs etc.) to distinct target groups. During their meeting with ET, the students confirmed that it was easy for them to obtain the necessary information about the programme before enrolling into this programme. The social partners confirmed that they obtain the necessary information about the programme by communicating with the college.

III. RECOMMENDATIONS

1. In order to increase the number of enrolments, the ET recommends the college to continue efforts to make the programme more attractive to students who do not have an agriculture background, e.g. by introducing new teaching subjects and further specializations that add and further develop the unique profile of the programme.

2. In order to further strengthen foreign language skills of students, the ET recommends teachers to use audio-visual teaching aids (e.g., YouTube videos) and to regularly give assignments in foreign languages in their classes.

3. The ET would like to encourage lecturers to more confidently exploit the full range of the grading spectrum to mark the students' performances, in order to distinguish more effectively between excellent, very good and good performing students.

4. In order to further increase the role of applied research activities in the programme, the ET recommends encouraging staff members and students to more actively publish in international peer-reviewed journals in English language. The college should exploit the opportunities arising from the fact that a number of dynamic and motivated staff members have recently joined the college and that some staff members currently pursue their PhD degrees.

IV. SUMMARY

The Kaunas college *Agribusiness Technologies* study programme has moved to Kaunas campus in 2013. Despite earlier concerns and hesitations of staff members to relocate, the relocation has considerably improved the learning opportunities for students and the quality of the programme according to staff members, students and the ET.

The programme well addresses the demand for specialists in the rapidly advancing agricultural sector of Lithuania in line with policy priorities. Objective, aims and intended LOs are well defined, clear and consistent. They are published through a variety of channels including websites, school visits and Days of Open Doors, career events and further occasions. Curriculum structure and content of the study subjects are annually being evaluated and adjusted to changing market demands and the students' interests incorporating feedback obtained from students and social partners.

The programme is structured as a 6 semester programme with a total of 180 credit points. The programme fully complies with the legal requirements regarding curriculum structure and qualification of teaching staff. The curriculum is well designed and consistent. The teaching subjects and contents covered in these subjects fully correspond to the requirements of a professional Bachelor programme in agricultural sciences and allow the students to fully achieve the defined LOs. Achievement of practical LOs is ensured by using on-campus facilities as well as practical courses off-campus involving a large network of social partners representing various areas of the agribusiness sector, which sufficiently compensates for the fact that the college does not own and/or operate an extended teaching farm itself.

To further increase choice and opportunities for students to specialize according to their interests, and to further strengthen the profile and distinctness of the programme, the college could consider expanding the catalogue of elective subjects.

While the college has made significant progress on strengthening applied research and to improve international contacts of the programme, the staff members should be encouraged to more actively publish in international peer-reviewed journals in English language, to further increase their English language proficiency and to offer selected teaching units in foreign languages (for international exchange students as well as domestic students alike).

Buildings and laboratory infrastructure on campus are modern, easy to access, adequately equipped and a number of auxiliary services are being provided at the campus (e.g., canteen, library, recreation and sport facilities). Library facilities are up-to date and frequently used by students. The excellent infrastructure facilities, in addition to immaterial aspects such as the high

motivation of lecturers, approachable staff and open interactions between students and teachers, considerably contribute to the dynamic and inspiring learning environment on campus.

The ratio of graduates in number of admissions is rather high and ranges between 64% and 91% in the reporting period. This indicates that the organization of the programme ensures that the students can successfully complete their studies in a period of six semesters. Teaching staff provide individual advice on study organization to students in order to further reduce a drop-out rate.

Despite the fact that the programme is known and attracts students from around Lithuania, and that it was ranked as the leading professional agricultural study programme in the country according to the staff members, there is further potential to increase student enrolment particularly by making the programme more attractive to students from urban areas who do not have a family farming background.

Social and academic support provided by the college to students is adequate. There are clear appeal mechanisms for students in place which, however, were hardly used in the past in absence of severe conflict with lecturers according to students. Yet, the fact that most final theses are evaluated with 8.92 and 9.13 marks suggests that lecturers could more confidently exploit the full range of the grading spectrum to mark the students' performances in order to distinguish more effectively between excellent, very good and good performing students.

During their meeting with senior management and the SER team, the ET observed that the management team interacted very well and very openly with each other. Clear processes of continuously evaluating and further improving the programme are in place. Multiple evidence exists of adjustments made to the programme in response to feedback obtained from students and social partners. The social partners have been involved in reviews and discussions of the programme, and that their feedback was used to modify the programme structure and contents.

V. GENERAL ASSESSMENT

The study programme *Agribusiness Technologies* (state code – 6531IX008, 653D77002) at Kaunas College is given **positive** evaluation.

Study programme assessment in points by evaluation areas.

No.	Evaluation Area	Evaluation of an area in points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	3
3.	Teaching staff	3
4.	Facilities and learning resources	4
5.	Study process and students' performance assessment	4
6.	Programme management	4
	Total:	**21**

*1 (unsatisfactory) - there are essential shortcomings that must be eliminated;
2 (satisfactory) - meets the established minimum requirements, needs improvement;
3 (good) - the field develops systematically, has distinctive features;
4 (very good) - the field is exceptionally good.

Grupės vadovas:
Team leader: Michael Pearson

Grupės nariai:
Team members: Dietrich Darr

Endla Reintam

Povilas Drulis

Gabrielius Jakutis

Vertimas iš anglų kalbos

KAUNO KOLEGIJOS PIRMOSIOS PAKOPOS STUDIJŲ PROGRAMOS *AGROVERSLŲ TECHNOLOGIJOS* (VALSTYBINIS KODAS 6531IX008, 653D77002) 2017-06-14 EKSPERTINIO VERTINIMO IŠVADŲ NR. SV4-120 IŠRAŠAS

<...>

V. APIBENDRINAMASIS ĮVERTINIMAS

Kauno kolegijos studijų programa *Agroverslų technologijos* (valstybinis kodas 6531IX008, 653D77002) vertinama **teigiamai**.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	3
2.	Programos sandara	3
3.	Personalas	3
4.	Materialieji ištekliai	4
5.	Studijų eiga ir jos vertinimas	4
6.	Programos vadyba	4
	Iš viso:	**21**

* 1 - Nepatenkinamai (yra esminių trūkumų, kuriuos būtina pašalinti)
2 - Patenkinamai (tenkina minimalius reikalavimus, reikia tobulinti)
3 - Gerai (sistemiškai plėtojama sritis, turi savitų bruožų)
4 - Labai gerai (sritis yra išskirtinė)

<...>

IV. SANTRAUKA

Kauno kolegijos studijų programa *Agroverslų technologijos* 2013 metais buvo perkelta į Kauną. Nors anksčiau akademinis personalas dėl perkėlimo reiškė nerimą ir dvejones, toks perkėlimas, anot dėstytojų, studentų ir ekspertų grupės, pastebimai pagerino studentų mokymosi galimybes ir programos kokybę.

Programa padeda patenkinti sparčiai besivystančio Lietuvos žemės ūkio sektoriaus specialistų poreikį ir atitinka politikos prioritetus. Programos tikslai bei numatomi studijų rezultatai yra tinkamai apibrėžti, aiškūs ir nuoseklūs. Jie skelbiami įvairiais kanalais, įskaitant interneto svetaines, apsilankymus mokyklose ir atvirų durų dienas, karjeros renginius ir kitomis progomis. Studijų plano struktūra ir studijų dalykų turinys kasmet vertinami ir, atsižvelgus į studentų ir socialinių partnerių teikiamą grįžtamąjį ryšį, pritaikomi pagal besikeičiančius rinkos poreikius ir studentų interesus.

Programą iš viso sudaro 6 semestrai ir 180 kreditų. Programa visiškai atitinka studijų turinio struktūros ir dėstytojų kvalifikacijos teisinius reikalavimus. Studijų turinys yra tinkamai sudarytas ir nuoseklus. Dėstomi dalykai ir jų turinys visiškai atitinka žemės ūkio mokslų profesinio bakalauro programos reikalavimus ir suteikia galimybę studentams pasiekti nustatytus studijų rezultatus. Praktinių studijų rezultatų pasiekti padeda kolegijos teritorijoje esanti infrastruktūra ir praktiniai kursai už kolegijos teritorijos ribų, apimantys platų socialinių partnerių tinklą iš įvairių agroverslo sektoriaus sričių. Toks tinklas kompensuoja nuosavo ar kitu būdu valdomo išplėstinio mokomojo ūkio nebuvimą kolegijoje.

Siekdama toliau didinti pasirinkimą ir galimybes studentams specializuotis juos dominančioje srityje bei toliau stiprinti programos profilį ir išskirtinumą, kolegija galėtų apsvarstyti galimybę išplėsti pasirenkamųjų dalykų sąrašą.

Nors kolegija pasiekė reikšmingos pažangos stiprindama taikomuosius tyrimus ir gerindama tarptautinius programos ryšius, akademinis personalas turėtų būti skatinamas aktyviau skelbti savo darbus tarptautiniuose recenzuojamuose žurnaluose anglų kalba, toliau tobulinti savo anglų kalbos žinias ir siūlyti pasirenkamuosius modulius užsienio kalba (tiek tarptautinių mainų programose dalyvaujantiems, tiek vietiniams studentams).

Pastatų ir laboratorijų infrastruktūra kolegijos teritorijoje yra šiuolaikiška, lengvai pasiekiama ir tinkamai įrengta. Be to, kolegijos teritorijoje teikiamos įvairios papildomos paslaugos (pvz., veikia valgykla, biblioteka, sporto ir poilsio patalpos). Biblioteka yra moderni ir studentai ja dažnai naudojasi. Puiki infrastruktūra ir nematerialūs aspektai, kaip antai aukšta dėstytojų motyvacija, draugiškas personalas bei atviras studentų ir dėstytojų bendravimas, turi didelę įtaką dinamiškai ir įkvepiančiai mokymosi kolegijoje aplinkai.

Priimtų studijuoti ir studijas baigusių studentų santykis yra gan aukštas ir ataskaitiniu laikotarpiu svyravo nuo 64 iki 91 procento. Tai rodo, kad programos struktūra užtikrina sėkmingą studijų baigimą per šešis semestrus. Siekdamas toliau mažinti studijų nebaigusių studentų skaičių, akademinis personalas studentams teikia individualias konsultacijas dėl studijų organizavimo.

Nors programa yra gerai žinoma ir pritraukia studentų iš visos Lietuvos bei, anot akademinio personalo, buvo pripažinta geriausia žemės ūkio profesijų studijų programa šalyje, būtų galima dar labiau padidinti studentų skaičių, ypač pagerinus programos patrauklumą ūkininkavimo patirties neturintiems iš miestų atvykusiems studentams.

Kolegijos studentams teikiama socialinė ir akademinė parama yra tinkama. Nustatyti aiškūs apeliacijų teikimo mechanizmai, tačiau jais naudojamasi gana retai, nes, anot studentų, didelių konfliktų su dėstytojais nekyla. Vis dėlto faktas, kad daugelis baigiamųjų darbų vertinami 8,92–

9,13 balo, rodo, jog, vertindami studentų pasiekimus, dėstytojai galėtų drąsiau išnaudoti visą pažymių skalę ir efektyviau skirti puikiai, labai gerai ir gerai besimokančius studentus.

Susitikime su kolegijos vadovais ir savianalizės grupe ekspertų grupė pastebėjo, kad vadovybė labai gerai ir labai atvirai bendrauja tarpusavyje. Yra įdiegti aiškūs programos tęstinio vertinimo ir tolesnio tobulinimo procesai. Pateikta daug įrodymų, kad programa buvo koreguojama, atsižvelgiant į iš studentų ir socialinių partnerių gautą grįžtamąjį ryšį. Socialiniai partneriai įtraukiami diskutuojant apie programą ir ją peržiūrint, o jų nuomonės buvo panaudotos modifikuojant programos struktūrą ir turinį.

<…>

III. REKOMENDACIJOS

1. Siekiant padidinti stojančių studentų skaičių, ekspertų grupė rekomenduoja kolegijai toliau populiarinti programą tarp studentų, neturinčių patirties žemės ūkio srityje, pavyzdžiui, įvedant naujus dėstomus dalykus ir tolesnes specializacijas, kurios prisideda prie programos profilio savitumo ir jį pagerina.
2. Stiprinant studentų užsienio kalbų gebėjimus, ekspertų grupė rekomenduoja dėstytojams naudotis audiovizualinėmis pagalbinėmis mokymo priemonėmis (pvz., „YouTube“ vaizdo įrašais) ir per paskaitas reguliariai skirti užduotis užsienio kalbomis.
3. Ekspertų grupė norėtų paskatinti dėstytojus vertinant studentų pasiekimus drąsiau išnaudoti visą pažymių skalę ir veiksmingiau atskirti puikiai, labai gerai ir gerai besimokančius studentus.
4. Siekiant toliau didinti taikomųjų tyrimų veiklos vaidmenį programoje, ekspertų grupė rekomenduoja darbuotojams ir studentams aktyviau skelbti savo darbus tarptautiniuose recenzuojamuose žurnaluose anglų kalba. Kolegija turėtų išnaudoti galimybes, kurias suteikia tai, jog prie kolegijos akademinio personalo neseniai prisijungė nemažai dinamiškų ir motyvuotų dėstytojų, be to, keli dėstytojai šiuo metu siekia daktaro laipsnio.

<…>

Paslaugos teikėjas patvirtina, jog yra susipažinęs su Lietuvos Respublikos baudžiamojo kodekso 235 straipsnio, numatančio atsakomybę už melagingą ar žinomai neteisingai atliktą vertimą, reikalavimais.

Vertėjos rekvizitai (vardas, pavardė, parašas)