

# STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

# UTENOS KOLEGIJOS STUDIJŲ PROGRAMOS MAISTO PRODUKTŲ TECHNOLOGIJA (valstybinis kodas – 653E42001) VERTINIMO IŠVADOS

EVALUATION REPORT
OF FOODSTUFF TECHNOLOGY
(State code – 653E42001)
STUDY PROGRAMME
at UTENA COLLEGE

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Išvados parengtos anglų kalba Report language – English

# DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Maisto produktų technologija
Valstybinis kodas	653E42001
Studijų sritis	Technologijos mokslai
Studijų kryptis	Maisto technologijos
Studijų programos rūšis	Koleginės studijos
Studijų pakopa	pirmoji
Studijų forma (trukmė metais)	nuolatinė (3), ištęstinė (4)
Studijų programos apimtis kreditais	180
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Maisto produktų technologijų profesinio bakalauro laipsnis
Studijų programos įregistravimo data	2008-08-25

INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	Foodstuff Technology
State code	653E42001
Study area	Technology Sciences
Study field	Food Technology
Type of the study programme	College studies
Study cycle	First
Study mode (length in years)	Full-time (3), part-time (4)
Volume of the study programme in credits	180
Degree and (or) professional qualifications awarded	Professional Bachelor in Foodstuffs Technology
Date of registration of the study programme	25-08-2008

Studijų kokybės vertinimo centras

The Centre for Quality Assessment in Higher Education

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### 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.

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

Utena College (hereinafter UK) is a public higher education institution established in 2000 by a merger of Utena Medical and Business Colleges of Further Education into one institution. UK is organised into a Faculty of Business and Technologies (FBT) and a Medicine faculty. There are seven departments in the FBT, one of which, the Department of Technologies, implements the Foodstuff Technology study programme (FT SP) as one of 12 programmes operated by the department. The FT SP was introduced in 2008 and was evaluated by an expert panel on behalf of SKVC in 2012. This evaluation resulted in the accreditation of the FT SP for three years.

## 1.4. The Review Team

The review team was completed according *Description of experts' recruitment*, approved by order No. 1-01-151 of Acting Director of the Centre for Quality Assessment in Higher Education. The Review Visit to HEI was conducted by the team on 22<sup>nd</sup> April 2015.

- 1. Prof. Dr Frank McMahon (team leader), Emeritus Director of Academic Affairs, Dublin Institute of Technology, Former Director of DIT College of Tourism & Food, Ireland.
- 2. Prof. Dr Raul Filipe Xisto Bruno de Sousa, Former Professor at the Department of Sciences and Engineering of Biosystems, School of Agronomy, Technical University of Lisbon, Expert of A3ES Quality and Accreditation Agency, Portugal.
- **3. Assoc. Prof. Dr. Robert van Deun,** Lecturer at Agro- and Biotechnology Department, Thomas More University College, Expert of Belgian Quality and Accreditation Agency (NVAO), Belgium.
- **4. Assoc. Prof. Dr. Rimgailė Degutytė,** Lecturer at the Department of Food Science and Technology, Faculty of Chemical Technology, Kaunas University of Technology, Lithuania.
- **5.** Ms. Aušra Išarienė, Head of Food Department at the State Food and Veterinary Service, Lithuania.
- **6. Ms. Inga Kalpakovaitė,** Bachelor student of Molecular Biology, Vilnius University, Lithuania.

Evaluation coordinator Ms. Natalja Bogdanova

#### II. PROGRAMME ANALYSIS

# 2.1. Programme aims and learning outcomes

In the opinion of the Review Team, the aims of the programme are well defined, clear and publicly accessible and are in compliance with the requirements set for the first cycle higher education college studies. The aims of the programme are in line with the goal of UK. They are in accordance with the requirements set for a first cycle higher education studies providing the training of general erudition, the theoretical basics of this study field, and the training of professional skills, allowing self-dependent work and entrepreneurial performance. It should be noted, however, that there is a lack of some issues aiming for the enrichment of training e.g. in new technological processes, aiming to follow food industry evolution.

Three optional specializations are offered: dairy products manufacturing technology; meat products manufacturing technology; bread and bread products manufacturing technology. Apart from the specialization options offered it would be desirable that the learning aims were

more ambitious seeking to go beyond the professional skills though specialized. Further components in this training are not addressed that the Review Team considers essential to improve the skills of future professionals, in addition to the need to improve the capacity to participate in research /innovation during professional activities.

The Learning Outcomes are divided into 5 categories: *Knowledge and its application*, *Skills to perform research*, *Special abilities*, *Social abilities*, *and Personal abilities*. They are consistent with the learning outcomes for first cycle degrees of the Bologna Framework. Also they are based on the Dublin Descriptors and are compatible with the level 6 of the European Qualifications Framework.

The description of the programme aims and expected learning outcomes are publicly accessible on the internet. Programme aims are based on the professional requirements and competencies for the specialists in food technology: to assess the quality of food industry raw materials, substances and production; to design a technological process; to manage food technological processes; to organize a food company (division) activity.

This programme claims to stand out from similar study programmes provided in professional higher education institutions (HEIs) in Kaunas, Klaipeda and Vilnius. As evidenced through the surveys and meetings with the teaching staff and the social partners, the main feature of this programme is to satisfy primarily the food industry needs of the College influence zone, without prejudice to the futures graduates pursuing their professional activity nationwide. In general, all other trainings offer similar specializations and here there is not a clear distinctive element.

Learning outcomes are specified and used in the design of the programme. Acting on the recommendations of the last evaluation process in 2012, in 2014 the study programme was reviewed aiming to match the study results to the international recommendations and to the national legal acts. A *Research on the Competences and Demand of the Professional Bachelor of Foodstuff Technologies* was performed aiming to promote the study programme not only in the region, but in the country. To attend those objectives, initially a study programme publicity plan has been implemented followed by meetings with employers and social partners, but also school-leavers and gymnasium students of the region trying this way to establish closer relations with the most significant "active forces" in the region; in between a national scientific-practical conference 'Safe and Healthy Environment – a Concern of Each of Us' was organized in April, 2014 involving professionals from various Lithuanian food industry enterprises, teachers of higher schools and students. Also a seminar 'Unified Assessment of Dairy Products for all EU Countries' was held in January, 2014 and hosted employers from Lithuanian milk processing enterprises. The Review Team noted the efforts carried out by the institution seeking to meet the 2012 evaluation recommendations. The initiatives developed revealed the training needs and the

interests of social partners from the region. However, given some limitations both in terms of training of the teaching staff to cover new thematics and in terms of facilities, (laboratories), the Review Team believes that more efforts will have to be developed to deepen the training spectrum of the students, giving them new skills meeting the future development of food industries of the region and of the country.

In 2014 the FT Study Programme Committee performed a research on the *Competences* and *Demand of the Professional Bachelor of Foodstuff Technology*. In order to evaluate the situation on foodstuff production in Utena district, the research aimed at surveying the managers, technologists, other professionals of food industry enterprises to identify the main areas of employment in the food industry sector for the Utena FT graduates. The employers stated that Utena graduates may be employed as technologists, production foremen, and equipment operators and the main areas of activity will be meat, dairy, bread, pie and confectionery products. The number of applications for the programme and the availability of placements in industry for students and graduates of the programme indicate success in meeting labour market requirements. Social partners who met the Review Team during the visit have expressed themselves satisfied with the aims of the programme and the intended learning outcomes.

Anyway, those attributes expressed by social partners could be attained more efficiently by introducing in the programme some themes not addressed that the Review Team considers important, to extend and strengthen the training spectrum of students (e.g. New technologies and processes, Global and Local Food Markets, Logistics and Distribution of Food Products).

Learning outcomes are used in the design of the programme, are clearly specified and are consistent with the level of studies and the level of qualification offered and harmonised with study programme aims; they are achieved by teaching specific subjects included in the curriculum. They are consistent with the learning outcomes for first cycle degrees of the Bologna Framework.

The name of the programme, Foodstuff Technology, its learning outcomes, its content and the qualification offered are all compatible with each other. The programme has three specialisations within the degree: *Dairy Products Manufacturing Technology/Meat Products Manufacturing Technology/Bread and Breadstuff Manufacturing Technology*. These all appear to be compatible with the overall thrust of the programme.

The Review Team suggests UK to consider changing the name of the study programme from the traditional, but somehow outdated and clumsy "Foodstuff Technology" to shorter and more comprehensive "Food Technology", which better reflects the scope and contents of the studies.

## 2.2. Curriculum design

The curriculum design meets the legal requirements for Professional Bachelor degree which include 180 ECTS. At least 15 credits for general studies (there are 15); at least 135 credits for main courses of the study field (there are 156 – subjects of the study area 96 credits + practices 33 credits + subjects of specialization 15 credits + final work 9). Subjects determined by the college and selected by a student, practices from 30 to 60 credits (there are 45 credits) – 15 credits are made of selective subjects according to specialization + 3 credits of alternatively selected subjects + 9 credits freely selected subjects + 18 credits for practice (cognitive, foodstuff manufacturing research and technological) by selecting freely enterprises of different specializations.

The Review Team is satisfied that the subjects are spread evenly and are not repetitive.

The programme is composed of separate subject courses which should contribute to the streamlining of the studies and help the student to orient herself/himself within the overall structure and aims of the programme. The teaching staff and the students expressed themselves as satisfied with the programme as it is implemented. As pointed out in the 2012 evaluation report, UK should consider the possibilities of modularizing the programme providing separate modules in the form of seminars or workshops. In the Review Team opinion UK should continue efforts to deepen the module system. In this structure the subjects contents must be organized in independent training units – the modules – which may be combined so as to constitute an "itinerary" adapted to student's needs, to technical, technologic and organizational developments.

The content of the subjects is consistent with a Professional Bachelor degree and appears to be appropriate for the achievement of the learning outcomes. Course units on basic sciences and on general college studies are identifiable by their names and subject plans. Also attention is paid to particulars of professional orientation. Three optional specializations in meat, bread or milk product manufacturing technologies are chosen during the last year both full time and part-time studies. Final practical training for the work place at which the Final Work will be written, is given to the students.

The teaching methods include lectures, laboratory practices, including practical experience in the Utena Regional Vocational Training Centre and practice in industry (The Number of Practice Places within Enterprises increased about 42% from 2012). But some subjects are based on outdated bibliographies which require to be updated.

In addition, the Review Team recommends some improvements. More could be done in the programme in relation to fundamental issues for a food technologist such as: sustainable food and sustainable food production, e.g. the problem of water in the food industry; the management of food waste; deepen the basic principles of sensory analysis; there should also be focus on marketing of food products with special attention for packaging and distribution of food products; auditing for Food Safety deserves more attention.

The Review Team discussed the operation of the programme with students, graduates and industry personnel on any perceived weaknesses associated with graduates of the programme and were satisfied that the teaching activities are appropriate.

The scope of the programme (3 years full-time, 4 years part-time) appears adequate to allow the achievement of the learning outcomes within the given time-frame. As a Professional Bachelor programme it focuses on applied topics and aims to train food technology specialists.

The completion rate of full-time and part-time students for the most recent cohort according to table 13 of SER is not so high and therefore deserves careful attention by the programme management team.

While there has been good progress in developing research since the last evaluation of the programme (in 2012) the Review Team concluded that the content of the programme reflects the latest achievements in technologies but not in science. The review team found that some of the works published are not related to the scope of the programme. There is a close correlation between programme contents and teachers research activities (applied in this case). The Review Team assessed carefully this situation and concluded that although there are good efforts to increase scientific activities, more must be done taking full advantage of the structures available. (laboratories and library facilities, sabbatical periods, participation in meetings, etc.)

In the period 2012-14, thirteen students presented papers at conferences. This outcome is somewhat interesting and must be continued, fostering students to participate in applied research activities.

## 2.3. Teaching staff

The Review Team is satisfied that the method of selecting staff is in accordance with UK rules of procedures and accords with the Labour Code of the Republic of Lithuania. The requirements set out for teaching staff comply with *The Order for Organisation of Teacher Assessment and Contest to Occupy Positions at Utena* approved by the Academic Board. These include both academic qualifications and experience of working in industry. In regard to the latter, there is a requirement that at least half the teachers should have 3 years or more work experience in industry. In fact, 60,9% of teachers have more than 3 years' experience in the food industry while 87% have at least 3 years teaching experience.

According to Annexe 4 (SER), 78,3% of teachers have a Master's degree or equivalent while 21,7% have a doctorate. This enables UK to claim that it meets the requirement that "no less than 10% of the scope of the subjects must be taught by scientists (those with a doctorate). The common age group of the teachers under 55 makes 69.5% of the total academic staff, nearly

two thirds of the total number of the study programme teachers. Also there has been very little staff turnover in recent years. So if UK wishes to further develop its teaching qualifications activities (both research and pedagogical), it should try to increase the proportion of teachers with a doctorate by assisting current staff members to complete a doctorate, also contact local industry to allow team members to get more experience in the food industry should continue.

The total number of staff teaching on the programme is 23 of whom 16 (70%) were full-time while 7 (30%) are part-time. The Review Team was satisfied that this number is adequate to teach the programme. Students and graduates commented favourably on the availability of teachers to meet and assist them when requested, even on Saturdays (once a month, for part-time students) which supports the view that the number of teachers is adequate.

As said, there has been very little staff turnover in recent years, so staff turnover is not a problem. However the problem can arise in the future after the retirement of a few solid-experienced teachers. During the last three years the potential of the academic staff with a scientific degree or a significant practical experience was strengthened by inviting teachers (7 cases) from other Lithuanian and foreign research and higher education institutions to implement a study programme, by concluding fixed-term employment contracts.

According to the data of 1 October 2014 (SER, page 17), there were 64 students studying on FT SP: 45 full-time students and 19 part-time students. The teaching load of the study programme makes 4.66 of workload, therefore the teacher-student rate based on the teacher's load, makes 13.7 students per one teacher workload. For the Review Team this means that there is space to take advantage of different conditions for in-service training of the academic staff, exploring opportunities to perform scientific work, participate in various courses, seminars, to take English courses as well as to participate in conferences, projects, events (even abroad), organized by the associations in the food sector, aiming at qualification improvement. Teachers are provided with conditions to update their qualification, study for PhD following the order approved by the Academic Board. Every 5 years, for no longer than 1 year, teachers may leave for a sabbatical period for scientific or academic qualification improvement. It looks as if this opportunity is not exploited. Only one teacher took advantage of this possibility and more must be encouraged. Teachers are funded to participate in conferences and seminars, and to undertake scientific applied research.

Professional development of teachers is claimed in different ways. However, there is no indication of any requirement for teachers to obtain a Postgraduate award in Teaching and Learning. The Review Team commends the steps being taken to improve the qualifications of teachers in pedagogy and assessment, it urges the College to make it mandatory for all new teachers to obtain a Postgraduate award in Teaching and Learning, as is now required in similar institutions in many countries.

The Review Team is satisfied to see that in terms of mobility the number of outgoing teachers increased in 2012-2014 from 7 to 31 due to an international project TESPA being implemented then and suggests steps being taken to improve the intensification of the incoming mobility that in the reporting period is very low.

Teaching staff members are supported to undertake master's and doctoral studies but this does not appear to have translated into so many staff members active in research to date. While some teachers are involved in research directly relevant to the Food Technology area, the number appears to be low. The number of scientific publications is relatively low too. The Review Team recommends that more teachers are involved in applied research activities and promote greater involvement of students.

The Review Team points positively to the realization in 2014 by the FT Study Programme Committee of a national conference for students, teachers and employers. It also commends the initiatives of two teachers of the Technology Department, to deliver non-formal adult education courses for food industry employees. These initiatives deserve to be encouraged.

## 2.4. Facilities and learning resources

The last evaluation report (2012) recommended "serious improvements both in the facilities for the practical training in basic science subjects and in the technologies". During the visit it was possible to see that some efforts were made to satisfy this exigency, investing in laboratories equipment and other items. Considering the fact that the number of students in the academic groups is not too large, the review team was satisfied that the facilities and learning resources are adequate. The size of premises for the delivery the programme is sufficient. Some detailed comments on the resources are included in the following paragraphs.

After 2012, as suggested, an agreement of cooperation was concluded with Utena Regional Vocational Training Centre (URVTC) that allows performing practicals in the specialization areas. The Review Team was very impressed with the facilities available there and believes it can adequately provide the necessary space and equipment for basic food processing in regard to Bread, Milk and Meat processing. So the Review Team commends UK on its agreement with the URVTC. As said, apparently there was an effort to acquire laboratory equipment and improve quality facilities for the practical training in basic science subjects and in the technologies. The physical facilities available appear sufficient for teaching and practical training but more investment is needed in laboratory equipment in order to attend the needs for research activities namely microbiology and the chemistry laboratories.

The majority of auditoria are equipped with computers and multimedia, video-audio hardware and overhead projectors. There are 6 computer laboratories with 12-18 workplaces each. There is a video conference centre which is well equipped and enables part-time students

to access lectures from home and which also assists part-time students to pursue their studies. These facilities could also be used for joint activities with other colleges in Lithuania or abroad.

General laboratories of Technology profile are equipped with the basic instruments needed for college level teaching.

The chemistry and the food chemistry laboratories are equipped with the basic instruments. Basic analytical skills can be acquired there. The Review Team considers that UK should maintain investment efforts to upgrade laboratories equipment, allowing more practical activities, provision of community services and applied research activities (e.g. infrared equipment, mineral analysis, dietary fibre analysis, flour and dough analysis as well as instruments for the on-line control of the food physical and chemical properties during processing). The Microbiology laboratory lacks most of the essential equipment and can provide only limited scope for basic analysis techniques. Modernization of the microscopy laboratories is recommended for the infrastructure development plans. That is the case for the development of activities of food safety, community services or research activities.

The laboratory safety and environment protection issues in UK basic science training laboratories are addressed properly.

The teaching staff when asked agreed there was a need for more equipment. Students appreciated the improvements that were taking place in the laboratories and the possibilities they have to practice at the URVTC and also in the food industry companies. When students were asked which changes in the provision of FT SP would be most helpful to them, some mentioned "more equipment".

Student practice sessions are carried out mainly in UK laboratories but some sessions including final practice are carried in URVTC and in various food industry enterprises in accordance with the selected specialization, their living or working location. Students perform the following practices in food processing and food industry enterprises: Cognitive, Food Production Process Research, Industrial Technological Professional Activity. Considering the actual infrastructure for the delivery of FT SP at UK, it is very important that the established cooperation agreements (68 contracts in total) with various enterprises of Utena Region must continue, where placements opportunities for FT SP students are foreseen.

The Review Team was impressed with the UK *Business Practical Training Firms*, where students apply their theoretical knowledge in practical activity. There are 8 computer-based working places. Students work as employees of Personnel, Purchasing, Sales, Marketing, and Finance departments and use specific computer software. This initiative deserves to continue and a wider dissemination.

The library is well organized and equipped with workplaces and computers available for consultation to the various databases related to some fundamental themes of the course. The

Library stock is constantly updated and supplemented by the latest references and literature. There are subscriptions to various periodicals. Last year the UK library concluded a cooperation agreement with A. and M. Miškiniai public library allowing students and teachers to use information resources of the library, to use the library reading rooms, etc. Methodological material is in the reading-room and/or placed in the virtual learning environment Moodle commonly used by students and teaching staff and is used to assist part-time students to pursue their studies. The Review Team had the opportunity to see some of the bibliography of food technology themes and confirmed that efforts have been made to keep updated these main themes. There is free access for students to e-books, and data-bases and all electronic resources can be accessed remotely. There is free internet access and facilities for printing and binding. Deserves special mention the fact that library is open on Saturdays in order to facilitate student's works. The Review Team appreciate also the Electronic Learning Centre which is well equipped and enables part-time students to access lectures from home. There students and teaching staff can participate in conferences, listen to lectures, and participate in projects and discussions. These facilities could also be used for joint activities with other colleges in Lithuania or abroad.

## 2.5. Study process and students' performance assessment

All the entrants are admitted to UK through unified or direct admission; this one after the unified admission is completed. Admission is organized according to the rules for general admission to undergraduate and integrated studies at Lithuanian higher education institutions (LAMA BPO). Requirements for admission are clearly formulated and accessible on the internet webpage of UK. Candidates having at least secondary or equivalent education can participate in the competition. The rules of admission are designed every year (*Rules Regarding Student Admission to Utena UAS*) and are announced on the internet site of UK. The main admission criterion is a competition score calculated from secondary school final examinations. The number of applicants in 2013-2014 was a total of 236 full-time and 173 part-time. In 2013 and 2014 only 8-16 full-time and 7-12 part-time students have been admitted to the programme. The majority of students choose state-funded study places. In the opinion of the Review Team the number of admitted students is low (though somewhat higher in 2014/15 judging by the number of students who met the Review Team) and UK must pay a special attention to developing programme promotion activities to increase this number.

UK admits students coming from the URVTC by crediting this training according to the rules (*Order for the Acknowledgement of Study Achievements at Utena UAS*) following an individual route.

Also UK admits students to the higher year of studies. These are the people who have studied at UK or any other higher school but did not graduate due to certain reasons, or have

graduated but would like to study under some other study programme. Students may bridge the missing credits following an individual plan. Their gained subjects are acknowledged following approval by the resolution of the Academic Board.

Studies are organised following the *Study Regulations* approved by UK Academic Board. The Department of Studies and the Faculty Administration are responsible for the organization of the study process ensuring an adequate provision of the programme and the achievement of the learning outcomes in view of the success rate of students who enrol. Lectures and practicals, practices, examinations take place according previous approved schedules. A schedule is designed with regard to a 40 hour working week. Lectures are arranged during 4-5 workdays, even on Saturdays for part-time students (once a month), in order to distribute the working load rationally along the whole week. For part-time students there are special conditions in order to create as much as possible favourable study conditions.

At the beginning of their studies, students have a course *Introduction into Studies* introducing students to the structure of UK, the documents regulating their studies, the rules for students' behaviour, the Ethics Code for students, the existing library funds, and databases, the services of the Electronic Learning Centre, e-teaching/learning means and Career Centre. This course introduces the topics of career planning and projecting, and the prospects for their career, the services that students are offered. All the documents regarding the organisation of studies are announced publicly on the UK web site.

Students can choose freely selective subjects (optional) and their specialization. This point deserves special attention. The diminishing interest about specialization option in meat product manufacturing technologies among the students is evident. Solutions must be found in order to harmonize and increase the demand for the specializations. A minimum number of students for each specialization could be established. The description of the organisation of the programme in the opinion of the Team Review is a well-thought-out programme which has been implemented.

In the last two years (2013-2014) 26 students have finished the programme. The Review Team is satisfied too with the relatively low drop-out rate. This is a good performance, showing a high retention rate. UK points out the main reason of student drop-out as being due to academic debts or under personal request. Other reasons for drop-out are disability to study or poor motivation to study. This theme is very important and must have a special attention from those who are involved in the process.

All students must write a Final Work. During the visit, the Review Team looked at the final works by random sampling which revealed that there is a need to improve their quality, in particular the use of English (in the summaries), the exploitation of results, the conclusions and

the choice of themes. All teachers use Moodle e-learning platform and find it very useful; students also mentioned that they find it helpful.

UK has established a functional Career Centre, which provides support for the students at exploring the employment prospects and practical placement possibilities, helps the programme monitoring process by collecting data on professional activities of the graduates. Students take part in making decisions by being involved in the Faculty Board and the Academic Board and are responsible for their own progress.

The quantitative indicators of the participation of students in various events in the threeyear period were relatively low. Only eleven students have active participation and present the results of their activities in scientific meetings despite the national conference for students, teachers and employers *Safe and Healthy Environment is the Concern of Each of Us* organized by the Department. Much more could be done if teaching staff members were more research active and if they engaged more students in their research activities.

UK participates in the Erasmus Programme and has been awarded the Erasmus Charter. Management organises presentations to students to persuade them to undertake studies abroad. In the period 2012-14, 7 students have gone abroad and this is a good number considering the number of eligible students. However, there are no in-coming students in the programme. Efforts will have to be re-doubled in this regard.

Students refer to the great availability of teaching staff for support and answering questions and doubts when necessary. Also there were no negative references to teachers' pedagogical skills. Every full-time academic group has a tutor appointed from the beginning of the first year contacting the group constantly, helping as much as possible and a monitoring system was designed throughout the study cycle.

There are schemes in place to assist students in various ways including social grants. Students may be awarded with incentive and onetime scholarships, social, sponsor-donated (individuals, foundations, institutions and enterprises, etc.) scholarships. A student may get a one-time scholarship on the proposal of the Students' Representative Body for an active scientific, cultural, sport or social activity. The project *Assuring Study Accessibility for the Students with Special Needs* allows giving targeted payment for the students with disability. There are three dormitories (360 places) for students providing good living conditions. At the meeting with the students they refer there was only a UK basketball team and they develop their own sporting activities in Utena town. There is almost no emphasis on cultural events such as debating societies or drama.

UK developed a good method to ensure student performance. The method is based on continuous monitoring of student performance. This method is a sustained means of assessment, in providing relatively prompt feedback, it serves to reinforce or correct learned responses, and

has a sustained impact on and improves the quality of student learning. The examination regulations are publicly available and students commented favourably on the feedback they got from teachers if they failed and with the possibilities offered to repeat an examination. On successful completion of the Professional Bachelor degree, graduates may proceed to master's degrees at universities. With regard to the recommendations of the 2012 evaluation team and in order to develop partnership with higher schools of Lithuania, a cooperation agreement has been concluded with Kaunas University of Technology. However, graduates of FT SP are expected to undertake bridging studies of approximately one year before they can enrol on a Master's degree programme. During the meeting with students, two from the 9 students group was committed to undertaking a Master's programme in KTU. One of the graduates is also planning to attend further studies in KTU. From such a narrow number of persons, it is quite an impressive percent.

The analysis of graduates' employment reveals that 45 graduates have completed their studies under this study programme, 41 (91%) are employed at the moment; 32 (78%) of them in their own professional field. The unemployment rate of the study programme is 6,6%. These are very good figures.

The graduates were satisfied with the training they have received and employers commented favourably on the practical skills of graduates.

## 2.6. Programme management

The approach to ensure that the programme is well managed takes place through several management levels and is based on the attitude of responsibility of every member of the community: Department, Faculty Board, Administration Board and Self-government Institutions of UK Decision making regarding the implementation of the study programme, quality assurance, improvement and other important issues are performed in a collegial manner – by the Department, Dean's Office, Rector's Office, the Faculty Board, the Academic Board, the Board, the Board for Quality in their respective meetings. Last year, to achieve more effective internal assurance of the study quality and more flexible transformation of the programme a Study Programme Committee was established. It is responsible for constant monitoring of the quality of the study programme and for making the necessary changes and updates. The functions and responsibility regarding the management of the quality of the study programme are distributed and delegated to the employees of all management levels, with the involvement of teaching staff.

Data on the implementation of the programme is collected regularly involving students, teachers, graduates, social partners and are based on the *Quality Guide* of UK (2012) a basic document regulating the quality of the studies offered and of all the processes related to it. This document describes the Study Quality Management System and was implemented in February 2013. It is based on ISO 9001 Quality Management Standard, EFQM perfection model as well as

the provisions and guidelines for the assurance of quality in European Higher Education. There is a Manual that includes the study programme monitoring, data collection, and analysis, using various tools and procedures, e.g. students, employers, graduates surveys, whose purpose is the evaluation of the different aspects of the quality of studies: satisfaction by studies, quality of the prepared specialists, etc. These surveys are performed at least once during the academic year. The analysis of the admission to the study programme is carried out twice a year; (i) after the admission process and (ii) during the preparation for the admission. The results are considered at the meetings of the Department, Dean's Office, Director's Office. Analysis of the graduates' employment is done once a year. The students assess the quality of the taught subjects. During the meetings with students, teachers, graduates and social partners there were no negative references regarding this process.

As said before, there is evidence that the management use the outcome of surveys to improve the programme. There is also clear evidence that UK has implemented the recommendations of the 2012 evaluation Review Team and has thereby improved the programme.

It is clear that different stakeholders are surveyed and are involved in these processes but it is not clear that there is any formal mechanism for consulting either employers or graduates on a regular basis (although it is clear that employers take part in the activity of the Qualifying Committee of FT SP for the Defence of the Final Works). Also employers have an active involvement in conferences and meetings held by UK. They highlighted the importance of this school to the region and refer to be available to continue employing the graduates of UK

Graduates who met the Review Team indicated they are in regular contact with individual teachers (which is good for the College) but that they are not members of an Alumni organisation.

The quality assurance system implemented in 2013 is based on ISO 9001 and EFQM. As mentioned earlier in this report, staff members and students are given a high level of responsibility for their own endeavours. The results of surveys of students, teachers and social partners are used as a basis for discussion to develop an improvement plan. The main outcomes of internal and external panel evaluation of FT SP are made public in the UK web site. The access to the mentioned documents is free. The updates of FT SP are publicly announced in AIKOS database what enables people interested in the FT SP or its updates to receive the newest information.

The Review Team was satisfied that the UK internal quality assurance measures are effective and efficient and furthermore that they are in line with European Standards and Guidelines. It would be interesting try to reduce the bureaucracy associated with this process that seems to the Review Team something heavy, developing efforts to make it more agile.

## 2.7. Examples of excellence \*

The UK *Business Practical Training Firms*, where students apply their theoretical knowledge in practical activity. Students work as employees of Personnel, Purchasing, Sales, Marketing, and Finance departments and use specific computer software. This initiative deserves to continue and a wider dissemination.

The agreement of cooperation concluded with Utena Regional Vocational Training Centre (URVTC) allowing the performance of practical classes in the specialization areas. The Review Team was very impressed with the facilities available there and believes it can adequately provide the necessary space and equipment for basic food processing in regard to Bread, Milk and Meat processing. UK must reinforce its agreement with the URVTC.

### III. RECOMMENDATIONS

- 1. The Review Team recommends and encourages UK to pursue the initiatives to promote and valorise the programme in order to reinforce the establishment of closer relations with the most significant "active forces" in the region: stakeholders, partners, graduates.
- 2. Review and update bibliographies of actual subjects. Extend and strengthen the training spectrum of students in relation to fundamental issues of FT by including more emphasis on issues related to the basic principles of Sensory Analysis; Auditing for Food Safety. Sustainable food and Sustainable food production, Marketing.
- 3. Consider changing the name of the study programme from the traditional, but somehow outdated and clumsy "Foodstuff Technology" to shorter and more comprehensive "Food Technology", which better reflects the scope and contents of the studies.
- 4. Consider the possibilities of modularizing the programme providing separate modules in the form of seminars or workshops aiming to deepen the module system.
- 5. Taking full advantage of the structures available more must be done to encourage teachers to undertake more applied research related with the scope of the programme and to engage more students in their research projects
- 6. Given the very little staff turnover, if UK wishes to further develop its teaching qualifications activities (both research and pedagogical), efforts should be made to further increase the number of teachers with a doctoral qualification; this could be done either by hiring staff with PhD or by assisting staff to gain PhD. Also a problem can arise in the future after the retirement of a few solid-experienced teachers. UK must establish a plan to prevent this becoming a problem.
- 7. Concerning mobility activities, efforts should be made to further increase the in-coming of teachers and students.
- 8. UK should maintain investment efforts to upgrade laboratories equipment. In particular modernization of the microscopy laboratories is recommended for the infrastructure development plans.

- 9. UK must pay a special attention to increase the number of admitted students that, in the opinion of the Review Team, is low.
- 10. Given the diminishing interest about specialization option in meat product manufacturing technologies among the students, solutions must be found in order to harmonize and increase the demand for the specializations. A minimum number of students for each specialization must be established.
- 11. Efforts must be made to improve the quality of Final Works, in particular the use of English (in the summaries), the exploitation of results, the conclusions and the choice of themes.
- 12. While social partners are consulted about programme changes and also graduates are in regular contact with individual teachers, some efforts must be made to promote the Alumni Association that could play a key role in the programme's enhancement.

#### IV. SUMMARY

The programme commenced in 2008 and is offered in both full-time and part-time modes. The overall aim of the programme is the training of competent Professional Bachelor in the field of Food Technology (FT) and it is oriented on the main food industry needs of the region. The programme aims and learning outcomes are well defined and clear and the relationship between those outcomes and the Dublin Descriptors is well established and they are compatible with the European Qualifications Framework. The learning outcomes of subjects/modules are well related to the programme learning outcomes and all the relevant parties (students, alumni, employers) expressed themselves pleased with the learning outcomes.

Employers were involved in the development of the current programme and all teaching staff members were consulted. The programme meets the requirements of the labour market and the name of the programme, its learning outcomes, its content and the qualification offered are all compatible with each other. However, the Review Team suggest UK to consider changing the name of the study programme from the traditional "Foodstuff Technology" to shorter and more comprehensive "Food Technology", which better reflects the scope and contents of the studies.

The curriculum design meets all legal requirements and the content and methods of the subjects/modules are appropriate for the achievement of the intended learning outcomes. The teaching staff members are somewhat research active but the Review Team concluded there is

room for improvement in research related to the scope of the programme, taking full advantage of the structures available and to engaging more students in their research.

There are also some suggestions for improvement in curriculum design by more emphasis on fundamental and transversal themes such as Sustainable food and Sustainable food production, Marketing, Sensory analysis and Food Safety.

UK must consider the possibilities of modularizing the programme providing separate modules in the form of seminars or workshops aiming deepen the module system.

Given the diminishing interest about specialization option in meat product manufacturing technologies among the students, solutions must be found in order to harmonize and increase the demand for the specializations. A minimum number of students for each specialization must be established.

The programme is provided by teaching staff who meet the legal requirements but there should be efforts to increase the number of staff with PhD. The number of staff is adequate to ensure learning outcomes and there is very little staff turnover but a problem can arise in the future after the retirement of a few solid-experienced teachers. UK must establish a plan to prevent this problem. Also it should be made mandatory for all new teachers to acquire a Postgraduate award in Teaching & Learning.

UK has invested both in the facilities for the practical training in basic science subjects and in the technologies and improved laboratories equipment in recent years. This process should continue to enhance research structures, as funds permit.

The Review Team commends UK the agreement of cooperation with Utena Regional Vocational Training Centre (URVTC).

There is a good system of practice placements for students to perform practices in food processing and food industry enterprises so it is very important that the established cooperation agreements (68 contracts) with various enterprises of Utena Region must continue. The Review Team was impressed with the *Utena UAS Business Practical Training Firms*, where students apply their theoretical knowledge in practical activity.

The UK college library is well organized and equipped and all "means" available to the students are free of charge. All electronic resources can be accessed remotely. It deserves particular reference to the fact that it is open on Saturdays.

The Review Team appreciate also the Electronic Learning Centre which is well equipped and enables part-time students to access lectures from home and teaching staff can participate in various activities.

The e-learning platform Moodle is commonly used by students and teaching staff and is used to assist part-time students to pursue their studies.

The current admissions procedures meet national guidelines. In 2014 only 16 full-time and 12 part-time students have been admitted to the FT SP. It is also recommended that the information available on the UK website for potential students be improved. The majority of students choose state-funded study places. The number of admitted students is somewhat low. UK must pay special attention to developing programme promotion activities to increase this number.

UK has been awarded the Erasmus Charter. In the period 2012 -14, 7 students have gone abroad but there are no in-coming students. Efforts will have to be re-doubled in this regard.

Classes are organised at times to suit students which pleases the students. The assessment of students' performance is clear, adequate and publicly available.

Each student must write a Final Work, but efforts must be made to improve its quality, in particular the use of English (in the summaries), the exploitation of results, the conclusions and the choice of themes.

The majority of graduates whom the Review Team met were employed in jobs relevant to the programme they studied.

The programme management is generally very good and it includes analysis of data on the implementation of the programme involving students, teachers, graduates, social partners and is based on the *Quality Guide* of *Utena UAS* (2012). For constant monitoring of the quality of the study programme, a Study Programme Committee was established being responsible for the necessary changes and updates.

There is evidence that the management use the outcome of surveys to improve the programme.

It is clear that different stakeholders are surveyed and are involved in these processes but it is not clear that there is any formal mechanism for consulting either employers or graduates on a regular basis.

Employers take part in the activity of the Qualifying Committee of FT SP for the Defence of the Final Works.

The Review Team was satisfied that the UK internal quality assurance measures are effective and efficient and furthermore that they are in line with European Standards and Guidelines.

## V. GENERAL ASSESSMENT

The study programme *Foodstuff Technology* (state code – 653E42001) at Utena 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	3
5.	Study process and students' performance assessment	3
6.	Programme management	3
	Total:	18

<sup>\*1 (</sup>unsatisfactory) - there are essential shortcomings that must be eliminated;

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<sup>2 (</sup>satisfactory) - meets the established minimum requirements, needs improvement;

<sup>3 (</sup>good) - the field develops systematically, has distinctive features;

<sup>4 (</sup>very good) - the field is exceptionally good.