STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Panevėžio kolegijos

APLINKOS APSAUGOS STUDIJŲ PROGRAMOS (65304T102, 653H17001)

VERTINIMO IŠVADOS

EVALUATION REPORT

OF *ENVIRONMENTAL PROTECTION* (65304T102, 653H17001)

STUDY PROGRAMME

at Panevėžys College

Grupės vadovas: Team Leader:	Prof. David Eastwood
Grupės nariai: Team members:	Prof. Maris Klavins
	Prof. Dietwald Gruehn
	Lina Šleinotaitė – Budrienė
	Edgaras Kuodys

Išvados parengtos anglų kalba
Report language - English

Vilnius
2013

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	***Aplinkos apsauga***
Valstybinis kodas	65304T102, 653H17001
Studijų sritis	Technologijos mokslų
Studijų kryptis	Bendroji inžinerija
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	Aplinkos inžinerijos profesinis bakalauras
Studijų programos įregistravimo data	2002 m. rugpjūčio 30 d. Švietimo ir mokslo ministro įsakymu Nr. ISAK – 1515

INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	***Environmental Protection***
State code	65304T102, 653H17001
Study area	Technological Sciences
Study field	General Engineering
Kind of the study programme	College Studies
Level of studies	First
Study mode (length in years)	Full-time (3), part-time (4)
Scope of the study programme in credits	180
Degree and (or) professional qualifications awarded	Professional Bachelor of Environmental Engineering
Date of registration of the study programme	30 of August 2002, under the order of the Minister of the Ministry of Education and Science of the Republic of Lithuania No. ISAK – 1515

CONTENTS

I. INTRODUCTION

The procedures of the external evaluation of Panevėžys College (hereafter, the College; PC) Professional Bachelor study programme *Environmental Protection* were initiated by the Centre for Quality Assessment in Higher Education of Lithuania nominating the external evaluation peer group formed by the head, professor David Eastwood (University of Ulster, Ireland), professor Maris Klavins (University of Latvia, Latvia), professor Dietwald Gruehn (Dortmund University of Technology, Germany), Lina Šleinotaitė – Budrienė, employer representative (Lithuania), Edgaras Kuodys, student representative (Vilnius University, Lithuania).

For the evaluation the following documents have been considered:

1. Law on Higher Education and Research of Republic of Lithuania;
2. Procedure of the External Evaluation and Accreditation of Study Programmes;
3. General Requirements of the First Degree and Integrated Study Programmes;
4. Methodology for Evaluation of Higher Education Study Programmes;
5. General Regulations for Technological Science (engineering) Studies.

The basis for the evaluation of the study programme is the Self-Evaluation Report (hereafter, SER), prepared in 2012, its annexes and the site visit of the expert group to the PC on 12 March 2013. The visit incorporated all required meetings with different groups: the administrative staff of the Faculty of Business and Technology, staff responsible for preparing the self-evaluation documents, teaching staff, students of all years of study, graduates and employers. The expert group evaluated various support services (classrooms, laboratories, library, computer facilities), examined students' final works, and various other materials. After the expert group discussions and additional preparations of conclusions and remarks, introductory general conclusions of the visit were presented. After the visit, the group met to discuss and agree the content of the report, which represents the expert team consensual views.

The vision of the PC is of a modern, flexible, constantly learning organisation, that participates actively in the life of the country and the democratic traditions and organization that creates opportunities for each member of the academic community; winning regional, national and international recognition of the higher education institution. The mission of the PC is to train specialists acquiring the Professional Bachelor's degree to meet the needs of the labour market, specialists being able to work in the information society and to implement the principal of lifelong learning, to educate personal abilities while developing and maintaining the College

infrastructure, corresponding to international standards and employees' competences. Accordingly, the purpose of the Professional Bachelors' programme in *Environmental Protection* is to train specialists who are able to organise the activity of environmental protection in companies, state and private institutions, design and realise new environmental technology, conduct researches of the quality of environment, collect and interpret environmental information with a view to diffusing it to society and be able to integrate into the competitive labour market (SER: p. 4; PC marketing material).

PC recently drafted an Environmental Policy and joined the Global Compact Network, thus prioritising the sustainability and environmental issues at the top of the institution's agenda, as well as emphasising social and environmental responsibility. Therefore, the study programme is inseparable from the vision and mission of the College and helps to implement the common PC mission and strategic plan (2012-2014), as well as implement environmental policy goals.

II. PROGRAMME ANALYSIS

1. Programme aims and learning outcomes

The programme aims are twofold: "to train environmental engineering specialists being able to organise environmental protection activities in companies, state and private institutions; to design and realise new environment protection technology, carry out research of environment quality, collect and interpret environmental information and present it to the society, as well as to provide sufficient knowledge and skills to continue professional studies" (SER: Appendix 6). Besides two core aims, eleven intended learning outcomes are defined and explicitly grounded. Additionally, a table has been developed (SER: Appendix 6), indicating the relationship between study programme subjects and the above mentioned intended learning outcomes.

The programme aims and intended learning outcomes are ambitious, clear, sound, well defined and focussed on academic and professional requirements, public needs, including life-long learning, as well as partly on labour market needs. The intended learning outcomes of the study programme are defined according to the Dublin's descriptors and correspondent with the requirements of the European sixth level qualification structure (SER, Chapter I, page 6), and include three object types which are known as: knowledge, skills and wider competences, including personal and professional achievements.

Programme's aims, intended learning outcomes, study subjects, practises, as well as career opportunities are publicly accessible and attractively presented, not only on the PC website (www.panko.lt), but also in various brochures and marketing materials developed and distributed by newly established PC Career Centre and the programme's staff.

The programme's ability to reach the above-mentioned aims and intended learning outcomes was partly confirmed by present full-time and part-time students, alumni and employers when interviewed by the evaluation team (partly because of a lack of appropriate practical training, this point is discussed in the 2 area – Curriculum design).

Taking into account the demographic problems of the region, as well as the competition from similar study programmes, a greater analysis of job market issues and trends in Panevėžys and its neighbouring regions is therefore suggested in order to focus the programme more on the unique intra-regional needs of both the industrial and public sectors. Also, it should be noted that the aims of the programme, and the considerations of profession – specific skills, abilities and intended learning outcomes are based more on international and national strategies and policy documents rather than on real professionally surveyed regional public / local labour market

needs. Existing surveys that were provided during site visit are old, fragmented and not representative. Beyond that, despite a close cooperation with social partners, their involvement, particularly in reviewing programme aims and intended learning outcomes, is limited and needs to be further improved.

2. Curriculum design

The curriculum design considers different needs of full-time and part-time students. The duration of the programme is 3 years for full-time students and 4 years for part-time students. The programme has no specialisations and this is considered as a very positive and flexible strategy among students, teachers, alumni, and employers for the future graduates' flexibility while approaching the labour market.

However, review visit evidence suggests, that some of interviewed programme management staff have uncertain vision on the future development of the programme (e.g. approach towards specialisation, content development, specific regional or national aspects, unique aspects among other similar study programmes) and some of the staff provided clearly contradictory views. For example, there is a plan to introduce subjects targeted towards an increased focus on environmental conservation, but no clear line of argument or justification for this was provided. During the interviews, a plan to introduce (register) a new programme (Energy Systems of Buildings) was mentioned, but the relation and synergy of this with the current programme remained unclear, as is also the case for another plan to introduce minor Environmental Management studies which could open more possibilities for the graduates.

Programme's curriculum design meets legal requirements. But week point of the curriculum design is the content of introductory and professional practises and their organisation. The evaluation visit gave evidence that there is a lack of practical training in some of the practises. This was addressed not only by students, but also by staff as well. It was even mentioned that there are partly non-practical (or even theoretical) lessons offered; in other practises students are only introduced to the activities of the laboratory (laboratory that is situated in the premises of Regional Environmental Protection Department), but do not have the opportunity to practice the works themselves. During interviews students asked for more practical approach during professional practises. This could be improved by a greater use of the extensive list of social partners (150) approached by the Programmes staff and provided for evaluation team, as well as 10 long-term contracts already signed and evident process of active involvement of social partners in the programme content (e.g. companies providing materials, demo material and IT programmes; company representatives giving lecturers and providing possibilities for

professional practise trainings, including greater participation in reviewing final thesis proposals and assesments).

A second recommendation would be to move several subjects that are assigned to the subjects of the study area (SER; Appendix 5, tables 1 and 2, Subjects of study area) but are not in line with the essence of the study area of Technological Sciences (e.g. general college study subjects or optional subjects established by the college, namely Basics of Economics, Management and Business Economics, Law Basics). Instead of subjects, such as Protection of Soil and Ecosystems, Protection of Biological Variety, Waste Management and Equipment, Equipment and Cleaning Technology, assigned to the optional subjects could supplement subjects of the study field. Equally it is necessary to mention, that it would be better to exclude study subjects not just on the basis of study area, but on the study field as well.

The content of the subjects and / or modules is consistent with the type and level of the studies. Study subjects and modules are almost evenly spread and, what is more important, the themes are not repetitive. However, at times there is evidence of a low level of connection and interrelations made between modules or subjects, and an absence of integrative schemes among subjects as well as some weakly developed courses (in terms of content, literature references as well as teaching methods). Weak subjects / modules that currently need strongly updated content and literature inputs are Waste Management and Equipment, Equipment and Cleaning Technology.

Taking into account the trends of the present labour market, missing subjects \ modules \ topics are:

1. There are no subjects with enough content on social skills development (related with emotional intelligence and similar);
2. A very weak focus on prevention in general (eco-design, integrated product policy, etc.); an overtly ‘end-of-pipe’ approach is dominating;
3. A weak relation with necessary practical skills and practical / integrative / interdisciplinary approaches applying integrated tools (possible study subjects or modules: environmental impact assessment (EIA), environmental social impact assessment (ESIA), application of legislation, case-studies analysis);
4. No content or subjects on the topic of Environmental Management Systems.

During interviews it was confirmed by the students that the programme managers and staff are very helpful and flexible when it comes to individual learning plans. Individual plan options

(including those for part-time students) have started to consider modules carried out through distance-learning and utilising the MOODLE VLE system. It should be noted however that there is a need to introduce a distance-learning efficiency evaluation system as it was revealed that only approximately 50 percent of teachers currently use the MOODLE environment.

Decision to increase number of individual work hours (SER; p. 11) by 15% in the programme will need more attention in terms of additional staff training on individual supervision and working methods.

3. Staff

The study programme is provided by staff meeting legal requirements. 32 teachers are involved in the programme, 27 percent of the study field subject volume is delivered by teaching staff having a degree of science; 62 percent of the teaching staff have no less than 3 year of practical experience. This means the qualification of the teaching staff meets legal requirements and is adequate to ensure achievement of intended learning outcomes. However, it is reccomended to involve more teachers with a doctoral degree. The teaching staff turnover is sufficient to ensure an adequate provision of the programme in the mid- or long-term. There were no complaints by the students about the age structure of the programme staff.

According to SER (p. 14), teachers are appointed by public competition. Agreements with teachers are signed for a five-year term, or two years for a fixed term period. It was discovered during the visit that every year department collects teaching staff CVs with their yearly achievements indicated, but this collected data does not apparently undergo further evaluation procedures. Attestation is organised on a 5 year basis, but no system of teaching staff evaluation according to various criteria (pedagogical, scientific, social) has yet been introduced.

Despite the fact that regulations are designed to promote competition among the teachers, the scientific activities of most of the teachers are not well developed. During the 2006-2012 period, 25 teachers prepared 37 teaching / learning and methodological publications, but these activities are not extensively reflected in the SER.

The College SER (p.15) notes that 84 percent of lecturers state that they need to improve qualifications in their teaching subjects, 62 percent wish to attain more practical skills and 42 percent would like to improve foreign language. Moreover international staff mobility is very low, largely because of insufficient English language knowledge amongst teachers. Based on these findings, there is a self evident need to introduce increased motivation and promotion of teacher continued professional development.

In the future, it is recommended that, in the area of teaching staff, administration of the study programme should:

1. Focus more actively on scientific work and improving scientific results; there is a need to introduce (at department level) motivation and a professional development promotion system including more targeted financial support based on internal competition;
2. Increase the volume of studies in foreign languages, including courses for teaching staff as pre requirement for attestation, as well as introducing study subjects of the study process in foreign languages (English and / or Russian);
3. Invite English speaking guest lecturers from abroad, as well as from other Lithuanian institutions.

4. Facilities and learning resources

The programme utilises study space provided by the Faculty of Business and Technology and this space, both in terms of classrooms and laboratories, is clearly adequate for the programme needs, as are computing facilities. The equipment available for teaching and learning is generally good and this constitutes one of the strengths of the programme. The Faculty and the programme staff have been recently successful in their efforts to obtain European Union Structural Funding for the upgrading of equipment and their efforts in this respect merit congratulations.

Additional practical training resources are available in a wide range of areas through networked social partner organisations in both the public and private sectors.

The College's response to previous evaluation recommendations with respect to learning resources has been demonstrably positive, for example in the provision of modern GIS training resources.

Teaching materials, such as textbooks, reference books and periodicals are adequate and are supplemented by on-line provision which is good. However, in order to gain the maximum benefit from its on-line provision, the College self-evaluation does recognise a need for additional training courses in accessing on-line provision, for example in accessing on-line international journals and extant databases. Training support is supplemented and available through the College's Virtual Learning Environment (MOODLE VLE). However, this facility is currently used largely as a data management and information dissemination system, for example in the dissemination of lecture materials, rather than as a genuinely interactive teaching resource and which would be of especial value in benefiting the increasing numbers of part-time students.

Both full-time and part-time students interviewed during the course of the evaluation visit expressed their general level of satisfaction with the overall quality of the programme's facilities and its learning resources.

5. Study process and student assessment

Student admissions are stable and stand for 27-36 new entrants every year; the admission procedures are well formulated, easily available and conform to Lithuanian admission regulations.

Student numbers on the programme have increased substantially over the last 5 years and this increase is especially noticeable in the growth of part-time student numbers. Good student support and careful academic monitoring has also led to a small, albeit encouraging, fall in current drop-out rates.

Study plans have been revised recently to make them European Credit Transfer and Accumulation System (ECTS) compliant, and this has created greater opportunities for individual study plans which are also facilitated by an excellent informal and flexible system of teaching support and by the positive development of distance learning teaching, including the use of the College's MOODLE VLE. This inherent programme flexibility is clearly of benefit, especially to part-time students, and contributes substantively to the programme's popularity.

Given the nature of the programme at a college-based, Professional Bachelor's level, programme students have relatively little opportunity to participate in basic scientific research. However, this is to some extent compensated by opportunities for applied research training available in conjunction with local social partners in both the public and private sectors and which, in turn, leads to a largely free choice of individual Final Project topics.

Student opportunities to participate in mobility programmes are limited by financial constraints, but also by linguistic limitations. In particular, limitations in English also restrict opportunities for teaching in English, which in turn also restricts inward exchange mobility of both foreign students and visiting foreign teachers.

Academic and social support is good and students interviewed during the evaluation visit commented very positively on the helpfulness of the academic staff and on their ready availability. The supporting role of the practice manager in facilitating practical training opportunities with social partners was viewed as especially valuable. Student support is also available at a College level, for example through the Career Centre which organises practical

training, for example in self awareness, virtual job searching and CV development. Academic and social support is also available through the Student Scientific Society which provides opportunities to refine conference and oral presentational skills.

The assessment system of student performance is clear, publically available and operates on a conventional basis of continuous assessment and final project work. Students interviewed expressed a high level of satisfaction with the transparency and fairness of the assessment process. However, it is worthy of note that social partners are involved in assessing students, but receive neither training nor mentoring in this respect through which to standardise assessment marking. Similarly, the relationship between the final projects and the social partners is also unclear with respect to its timing and levels of interaction, including specific roles and responsibilities.

The levels of employability of the programme's graduates are generally good (currently 58.4%) and, despite the exigencies of economic recession, the levels of employability have risen slightly in recent years. However, programme specific employment in the area of environmental protection, while improving slightly, remains only modest.

6. Programme management

Responsibilities for programme management are clear in theory, and rest with a 7 person Programme Committee. However, the operation of this committee appears to be uncertain in practice. For example, teachers interviewed during the evaluation visit tended to identify their potential input for programme change at departmental committee level, rather than at programme committee level, possibly because departmental committee meetings are more frequent (monthly) than those of the programme committee (per semester). The 'ownership and leadership' of programme responsibilities amongst its practitioner programme staff therefore appears unclear.

Organised through the Quality Division and the Quality Council, while appearing to tend to be sporadic and single issue focussed, quality assurance data collection at a College level is reasonable, but it is significantly weaker at the specific programme level. Thus, while the College conducts surveys of specific major issues, such as examination efficacy (2008) and staff development (2012), in specific years, less attention is focussed on surveys at programme level on an annual quality assurance basis.

The College self-evaluation describes a formal process of student satisfaction surveys operative at subject / module level. However, full-time students interviewed were apparently unsure about

the operation of such a process and part-time students were adamant that their opinions had never been sought. Evidence of student surveys provided to the expert panel were dated 2004.

The process of student representation at programme and departmental committee levels is also unclear and students interviewed suggested that the process of student representation operated on a basis of appointment, rather than students' selection. The College self-evaluation acknowledges a lack of student interest in representation or submission of suggestions to the programme committee, but also acknowledges that "there is a lack of clear dissemination of feedback" to either students or teachers.

The role of social partners in the programme's development is also unclear. Again, data is collected centrally from employers at a College level, but, at a programme level, the participation of employers is described as "inconsistent" and all employers interviewed during the evaluation visit were unfamiliar with any formal survey process. Similarly, the views of the graduate representatives present had not been surveyed.

At the level of individual teachers and individual subjects / modules programme-related data is clearly collected at an informal level via individual teachers. However, the expert team found no evidence of any systematic, formal collection, or formal collation of such data at the programme level. Thus, while central College data collection and quality assurance processes are currently being developed in line with new ISO 9001 standard requirements, greater rigour remains very necessary at the programme level.

III. RECOMMENDATIONS

1. That the College should introduce extensive professional survey on regional public / local labour market needs.

2. That the College should review the study plan with a view to the introduction of subjects, content and / or interrelations within / between subjects that are focused more on integrative, holistic, preventative approaches.

3. That the College should introduce a formal system for the annual appraisal of stakeholder opinions (students, graduates and social partners) with respect to the current programme and its potential development, including reviewing of programme aims, intended learning outcomes, curriculum. A system of effective stakeholder actioned feedback should also be introduced.

4. That the College should strengthen introductory and professional practices, including their content, methodologies, processes; increase of student enrolment level. Social partners should be actively involved in the process.

5. That the College should introduce (at department level) staff evaluation and / or motivation and a professional development promotion system including more targeted financial support based on internal competition according to various criteria (pedagogical, scientific, social activity).

6. The introduction of additional programme for staff training on individual supervision and working methods should be used for individual work assignments. The introduction of a social partners mentoring programme.

7. That the College should consider opportunities to increase student scholarships in order to maintain more reasonable living conditions and to enable opportunities for entries from surrounding Panevėžys region.

8. That additional emphasis should be placed on linguistic training, especially in English, in order to facilitate greater inward and outward mobility of both students and staff.

9. That a clearer system of programme ‘ground level ownership and leadership’ should be introduced; this should include regular active participation of all programme teaching staff, and with active stakeholders’ representation.

IV. SUMMARY

In conclusion, the programme aims and intended learning outcomes are well defined, clear, and publicly accessible, details of the programme are obtainable not only from the PC website, but also from other material and advertisement means provided by the programme staff. There is an interaction with external stakeholders in the programme curriculum development process, organisation of practises as well as thesis defence process, but their involvement in particularly reviewing programmes aims and learning outcomes is limited and not systematic. Improvements are necessary in the area of strengthening the introductory and professional practices, in terms of content, processes, evaluation of their effectiveness as well as student involvement level.

The programme provides a sound first cycle qualification in environmental engineering and the name of the programme, the intended learning outcomes, content and qualifications offered are all fully compatible with this. The intended learning outcomes are broadly based and are in line with academic, professional and partly employment demands. In order to strengthen programme content, get higher graduates employment figures there is a clear need to do greater analysis of labour market needs not only within Panevėžys and Panevėžys region, but also outside the Panevėžys region.

The curriculum is broadly based and consistent with the type and level of the studies and partly supports the achievement of intended learning outcomes. More emphasis therefore is suggested on improving existing professional practises (in terms of content) as well as more careful assignment of study subjects and modules within the study plan. Despite the latest plans to introduce new modules and subjects into the programme, weaknesses centre in the curriculum is on some outdated subject contents and reference materials (Waste Management and Equipment, Equipment and Cleaning Technology). Improvements may be connected with inclusion of study courses supporting more holistic approach to environmental protection speciality, such us subjects that more focus on integrative / interdisciplinary approach as well as on pollution prevention and environmental management.

The content of the programme generally reflects the latest achievements in science and technologies. However, literature references, technical equipment and software is not in all aspects state of the art. Also, it’s therefore suggested to increase of number of guest lecturers from practise, as well as lecturers from abroad.

Teaching staff does a good job in terms of student achievements of intended learning outcomes. But teachers should be encouraged and motivated to take more active part in scientific work and

to improve their scientific qualifications, especially by strengthening their international relationship, participating more at international conferences and exchange programmes as well as publishing more in international journals.

The programme facilities and learning resources are good, modern and readily available. Substantively this is the result of successful efforts to attract external European Union funding, and through the active involvement of social partner organisations. The College response to previous evaluation recommendations has also been positive, for example in the area of GIS provision. On-line provision, for example in the area of international journal access is good, but additional training is necessary in order to maximise on-line benefits. The College Virtual Learning Environment (MOODLE VLE) is a significant modern asset, but the scope which this offers for interactive teaching remains, as yet, relatively under-used.

In terms of the study process and student assessment, the programme is strong in terms of overall student recruitment and especially strong in terms of part-time student recruitment. The inherent flexibility of the programme and strong academic support is a clear attraction for students on both full-time and part-time bases. Strong staff support and careful academic monitoring are also reflected in falling drop-out numbers. The level of employability of the programme's graduates is also reasonable and, despite economic recession, is currently modestly rising.

Relationships with social partners are extensive and provide a valuable contribution to practical training experience and placement support. However, additional training or mentoring of social partners with respect to the standardisation and equalisation of assessment practices is to be recommended.

In theory, in terms of programme management, the responsibilities for the programme's monitoring and decision making clearly lie initially with the Programme Committee. In practice however, the execution of these responsibilities is less clear, with a large majority of programme's teaching staff viewing their potential input to programme development as lying at departmental committee, rather than programme committee, level. The specific 'ground level' ownership and leadership of the programme's development therefore remains obscure.

At the College level, there is clear recognition of the need to include the views of students, teachers, graduates and social partners in any viable process of quality assurance development. However, the processes by which this is being achieved at the programme level appear currently to be largely inoperative. A stronger formal system of anonymous annually surveyed data collection from students, graduates and employers is therefore essential.

V. GENERAL ASSESSMENT

The study programme *Environmental Protection* (state code – 65304T102, 653H17001) at Panevėžys College is given **positive** evaluation.

Study programme assessment in points by fields of assessment.

No.	Evaluation Area	Evaluation Area in Points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	2
3.	Staff	3
4.	Material resources	3
5.	Study process and assessment (student admission, study process student support, achievement assessment)	3
6.	Programme management (programme administration, internal quality assurance)	2
	Total:	**16**

*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:	Prof. David Eastwood
Grupės nariai: Team members:	Prof. Maris Klavins Prof. Dietwald Gruehn Lina Šleinotaitė – Budrienė Edgaras Kuodys

Vertimas iš anglų kalbos

PANEVĖŽIO KOLEGIJOS PIRMOSIOS PAKOPOS STUDIJŲ PROGRAMOS *APLINKOS APSAUGA* (VALSTYBINIS KODAS – 653H17001) 2013-05-29 EKSPERTINIO VERTINIMO IŠVADŲ NR. SV4-164-1 IŠRAŠAS

<...>

V. APIBENDRINAMASIS ĮVERTINIMAS

Panevėžio kolegijos studijų programa *Aplinkos apsauga* (valstybinis kodas – 653H17001) vertinama **teigiamai**.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	3
2.	Programos sandara	2
3.	Personalas	3
4.	Materialieji ištekliai	3
5.	Studijų eiga ir jos vertinimas	3
6.	Programos vadyba	2
	Iš viso:	**16**

* 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

Apibendrinant, studijų programos tikslai ir numatomi studijų rezultatai yra tinkamai apibrėžti, aiškūs ir viešai prieinami; informacija apie studijų programą yra prieinama ne tik Panevėžio kolegijos tinklalapyje, bet ir kitoje studijų programos personalo platinamoje reklaminėje medžiagoje. Su išoriniais socialiniais dalininkais bendradarbiaujama tobulinant studijų programą, organizuojant praktikas, taip pat baigiamųjų darbų gynime, tačiau jų dalyvavimas peržiūrint studijų programos tikslus ir numatomus studijų rezultatus yra ribotas ir nesistemingas. Tobulintina sritis – pažintinė ir profesinė praktikos, ypatingai jų turinio, eigos, veiksmingumo vertinimo ir studentų įsitraukimo atžvilgiu.

Baigus studijų programą yra suteikiamas pirmosios pakopos aplinkos inžinieriaus profesinio bakalauro kvalifikacinis laipsnis, todėl studijų programos pavadinimas, numatomi studijų rezultatai, turinys ir teikiama kvalifikacija dera tarpusavyje. Numatomi studijų rezultatai yra

pagrįsti ir atitinka akademinius, profesinius ir iš dalies darbo rinkos poreikius. Siekiant studijų programos turinio tobulinimo, taip pat aukštesnių absolventų įsidarbinimo rodiklių, reikėtų atlikti išsamesnę darbo rinkos poreikių analizę ne tik Panevėžio mieste ir rajone, bet ir už jų ribų.

Studijų programa sudaryta tinkamai. Studijų programos sandara atitinka studijų rūšį bei pakopą ir iš dalies užtikrina numatomų studijų rezultatų pasiekimą. Vis dėlto daugiau dėmesio turėtų būti skiriama esamų profesinių praktikų (jų turinio) tobulinimui, taip pat labiau pagrįstam studijų dalykų ir modulių išdėstymui studijų plane. Nepaisant ateities planų įtraukti į studijų programą naujus studijų dalykus ir modulius, aktualiausia studijų programos silpnybė yra neatnaujintas kai kurių studijų dalykų turinys ir mokomoji medžiaga („Atliekų tvarkymas ir įranga“, „Įranga ir valymo technologija“). Studijų programos sandarą galima tobulinti šiomis kryptimis: įtraukti studijų dalykus, kuriems būdingas holistinis požiūris į aplinkos apsaugą, kaip pavyzdį galima paminėti tokius, kurie labiau orientuoti į integralumą / tarpdalykiškumą, taip pat į taršos prevenciją ir aplinkos apsaugos vadybą.

Apskritai studijų programos turinys atitinka naujausius mokslo ir technologijų pasiekimus. Vis dėlto literatūros šaltiniai, techninė ir programinė įranga ne visais atvejais yra modernūs. Ekspertų grupė taip pat siūlo didinti kviestinių dėstytojų-praktikų bei dėstytojų iš užsienio šalių skaičių.

Dėstytojų pastangos užtikrininant studentų numatomų studijų rezultatų pasiekimą yra sėkmingos. Tačiau dėstytojai turėtų būti skatinami ir motyvuojami aktyviau dalyvauti mokslinėje veikloje, taip pat tobulinti savo mokslinę kvalifikaciją, ypatingai daug dėmesio skiriant tarptautinių ryšių stiprinimui, dalyvavimui tarptautinėse konferencijose ir mainų programose bei didesniems publikavimo tarptautiniuose žurnaluose rodikliams.

Studijų programos materialioji bazė yra moderni ir laisvai prieinama. Iš esmės tai yra sėkmingų pastangų pritraukti išorinį Europos Sąjungos finansavimą ir socialinius partnerius rezultatas. Kolegija taip pat atsižvelgė į ankstesnio išorinio vertinimo rekomendacijas, kaip pavyzdį galima paminėti GIS įdiegimą. Aprūpinimas internetinės prieigos mokymo ištekliais, pavyzdžiui, tarptautiniais žurnalais, yra pakankamas, tačiau reikalingas papildomas mokymas siekiant padidinti šių išteklių teikiamą naudą. Virtualioji mokymosi aplinka (MOODLE VLE) yra reikšminga ir moderni priemonė, tačiau jos teikiamos interaktyvaus dėstymo galimybės kol kas panaudojamos ne visiškai.

Studijų eigos ir jos vertinimo srities stiprybė yra bendrasis studentų ir ištęstinių studijų studentų skaičius. Studijų procesui būdingas lankstumas ir stipri akademinė parama prisideda prie studentų apsisprendimo studijuoti tiek nuolatinėse, tiek ištęstinėse studijose. Personalo parama ir

akademinė stebėsena taip pat atsispindi mažėjančiame studijas nutraukusių studentų skaičiuje. Studijų programos absolventų įsidarbinimo rodikliai yra pagrįsti ir, nepaisant ekonominio nuosmukio, šiuo metu pamažu auga.

Palaikomi glaudūs tarpusavio ryšiai su socialiniais partneriais. Šie ryšiai prisideda prie praktinio mokymo patirties ir pagalbos suteikiant praktikos vietas. Vis dėlto rekomenduojama organizuoti papildomus mokymus socialiniams partneriams ar parengti mentorystės programą, kuri būtų skirta praktikos standartizavimui ir suvienodinimui.

Formaliai studijų programos vadyba, atsakomybė už programos vykdymo stebėseną ir sprendimų priėmimą tenka Studijų programos komitetui. Tačiau šios veiklos vykdymas nėra visiškai aiškus; dauguma studijų programos dėstytojų savo potencialų indėlį į studijų programos tobulinimą suvokia katedros, o ne Studijų programos komiteto lygmeniu, dėl to lieka neaiškūs studijų programos valdymo aspektai žemiausioje grandyje.

Kolegijos lygmeniu pripažįstama, kad į bet kokius vykstančius kokybės užtikrinimo plėtros procesus reikia įtraukti studentų, dėstytojų, absolventų ir socialinių partnerių nuomonę. Tačiau tai pasiekti, dėl programos lygmeniu neveikiančių atitinkamų procesų, yra sudėtinga. Todėl būtina įvesti aiškią, formalią, anoniminę kasmetinę studentų, absolventų ir darbdavių apklausos sistemą.

III. REKOMENDACIJOS

1. Kolegija turėtų atlikti išsamų, profesionalų regioninių visuomenės / vietos darbo rinkos poreikių tyrimą.

2. Kolegija turėtų peržiūrėti studijų planą ir įtraukti studijų dalykus, ir / arba pakoreguoti jų turinį, ir /arba sąsajas studijų dalykų viduje arba tarp studijų dalykų, orientuojantis į integralumą, holistiškumą ir prevenciją.

3. Kolegija turėtų įdiegti formalią periodiškai veikiančią socialinių dalininkų (studentų, absolventų ir socialinių partnerių) apklausos sistemą, siekiant analizuoti studijų programos tobulinimo galimybes, įskaitant studijų programos tikslų, numatomų studijų rezultatų ir programos sandaros peržiūrą. Veiksminga socialinių dalininkų grįžtamojo ryšio sistema taip pat turėtų būti įdiegta.

4. Kolegija turėtų stiprinti pažintinę ir profesinę praktikas, įskaitant jų turinį, metodologijas, procesus; taip pat didinti priimamų studentų skaičių. Į šį procesą turėtų aktyviai įsitraukti socialiniai partneriai.

5. Kolegija turėtų įdiegti (katedros lygmeniu) darbuotojų vertinimo ir / arba motyvavimo bei profesinio tobulėjimo skatinimo sistemą, įskaitant tikslinę finansinę paramą, kuri remtųsi vidine konkurencija pagal įvairius kriterijus (pedagoginius, mokslinius, socialinės veiklos).

6. Turėtų būti įdiegta papildoma darbuotojų mokymo individualios priežiūros ir darbo metodų klausimais programa skirta studentų atliekamoms individualioms užduotims. Taip pat turėtų būti įdiegta socialinių partnerių mentorystės programa.

7. Kolegija turėtų apsvarstyti studentų stipendijų didinimo galimybes, siekiant užtikrinti tinkamas gyvenimo sąlygas ir sukurti studijų galimybes asmenims iš Panevėžio rajono.

8. Daugiau dėmesio turėtų būti skiriama kalbos, ypatingai anglų, mokymui siekiant didesnio tiek studentų, tiek dėstytojų mobilumo.

9. Reikalinga aiškesnė žemiausios grandies programos valdymo sistema; tai turėtų apimti visų studijų programos dėstytojų reguliarų aktyvų įsitraukimą, taip pat aktyvų socialinių dalininkų atstovavimą.

<…>

Paslaugos teikėjas patvirtina, jog yra susipažinęs su Lietuvos Respublikos baudžiamojo kodekso[1] 235 straipsnio, numatančio atsakomybę už melagingą ar žinomai neteisingai atliktą vertimą, reikalavimais.

[1] Žin., 2002, Nr.37-1341.