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OF STALLS TECHNOLOGIŲ IR DIZAINO

STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

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Nr. 7-04-0000

### **DĖL IŠORINIO VERTINIMO**

Atsakydami į Jūsų prašymą "Dėl studijų programų Gamybos vadyba ir Vežimo kelių transportu vadyba" vertinti Jūsų aukštojoje mokykloje vykdomas vadybos ir verslo administravimo krypties studijų programas *Gamybos vadyba* (valstybiniai kodai – 65303S163, 653N25001) ir *Vežimo kelių transportu vadyba* (valstybiniai kodai – 65303S174, 653N27001) (toliau – Programos), informuojame, kad, vadovaujantis Studijų programų išorinio vertinimo ir akreditavimo tvarkos aprašo (toliau – Aprašas) V skyriumi bei Vykdomų studijų programų vertinimo eigos aprašo ir metodinių nurodymų (toliau – Metodiniai nurodymai) II skyriumi, Studijų kokybės vertinimo centro (toliau – Centras) pasitelkti ekspertai atliko Programų išorinį vertinimą (vertinimo išvados pridedamos).

Pažymėtina, kad šios ekspertų išvados vadovaujantis Metodinių nurodymų 7.3.2, 51, 53 punktais, taip pat Studijų vertinimo komisijos nuostatų<sup>3</sup> 6, 7.1 punktais, buvo svarstytos 2010 m. lapkričio 26 d. Studijų vertinimo komisijos (toliau – Komisija) posėdyje, kuriame buvo nuspręsta ekspertų išvadoms pritarti.

Centras, atsižvelgdamas į ekspertų parengtas Programų vertinimo išvadas bei Komisijos pritarimą, vadovaudamasis Aprašo 34 punktu, priėmė sprendimą Programas įvertinti teigiamai, kadangi surinkta po 16 balų, ne viena vertinama sritis nėra įvertinta "nepatenkinamai".

Nesutikdami su šiuo Centro sprendimu, Jūs turite teisę vadovaudamiesi Aprašo VI skyriumi bei Metodinių nurodymų 60 punktu Centrui pateikti apeliaciją per 20 dienų nuo šio sprendimo išsiuntimo dienos.

Įsiteisėjus šiam Centro sprendimui pagal Aprašo 28.2 punktą Programos akredituotinos 3 metams.

#### PRIDEDAMA:

1. Vilniaus technologijų ir dizaino kolegijos *Gamybos vadybos* studijų programos išorinio vertinimo įšvados, 13 lapų;

2. Vilniaus teehnologijų ir dizaino kolegijos *Vežimo kelių transportu vadyba* programos išovinio vertinimo išvados, 15 lapų.

Direktorius

Artūras Grebliauskas

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<sup>3</sup> Patvirtinta Centro direktoriaus 2010 m. sausio 18 d. įsakymu Nr. 1-01-9 (Žin., 2010, Nr. 476).

<sup>&</sup>lt;sup>1</sup> Patvirtinta Lietuvos Respublikos švietimo ir mokslo ministro 2009 m. liepos 24 d. įsakymu Nr. ISAK-1652 (Žin., 299, Nr. 96-4083).

<sup>&</sup>lt;sup>2</sup> Patvirtinta Centro direktoriaus 2009 m. spalio 30 d. įsakymu Nr. 1-94 "Dėl vykdomų studijų programų vertinimo eigos aprašo ir metodinių nurodymų patvirtinimo".



# STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

# VILNIAUS TECHNOLOGIJŲ IR DIZAINO KOLEGIJOS *GAMYBOS VADYBOS* PROGRAMOS (65303S163, 653N25001)

# VERTINIMO IŠVADOS

### **EVALUATION REPORT**

# of *PRODUCTION MANAGEMENT* (65303S163, 653N25001) STUDY PROGRAMME

at Vilnius College of Technologies and Design

Grupės vadovas:

Team leader:

Dr. Michael Emery

Grupės nariai:

Prof. Vilija Aleknevičienė

Team members:

Prof. Eva Jansson

Dr. Brian O'Connor

Prof. Jozsef Temesi

Išvados parengtos anglų kalba Report language - English

# DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Gamybos vadyba	
Valstybiniai kodai	65303S163, 653N25001	
Studijų sritis	socialiniai mokslai	
Studijų kryptis	vadyba	
Studijų programos rūšis	koleginės studijos	
Studijų pakopa	pirmoji	
Studijų forma (trukmė metais)	nuolatinė (3), ištęstinė (4)	
Studijų programos apimtis kreditais <sup>1</sup>	120	
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	gamybos vadybos profesinis bakalauras, vadybos ir verslo administravimo profesinis bakalauras, vadybininkas	
Studijų programos įregistravimo data	2003-05-29	

<sup>1 -</sup> vienas kreditas laikomas lygiu 40 studento darbo valandų

### INFORMATION ON EVALUATED STUDY PROGRAMME

Name of the study programme	Production management	
State codes	65303S163, 653N25001	
Study area	social sciences	
Study field	management	
Kind of the study programme	college studies	
Cycle of studies	first	
Study mode (length in years)	full-time (3), part-time (4)	
Volume of the study programme in national credits <sup>1</sup>	120	
Degree and (or) professional qualifications awarded	professional bachelor in production management, professional bachelor in management and business administration, manager	
Date of registration of the study programme	2003-05-29	

<sup>&</sup>lt;sup>1</sup> – one credit is equal to 40 hours of student work

Studijų kokybės vertinimo centras

Centre for Quality Assessment in Higher Education

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#### I. INTRODUCTION

Vilnius College of Technologies and Design (VCTD) was established in 2008 after reorganisation, when Vilnius Technical College merged with Vilnius College of Construction and Design. VCTD is a state higher education institution providing higher professional education in the study areas of technologies, arts and social sciencies. The VCTD consists of four faculties: Design Faculty, Construction Faculty, Petras Vileisis Faculty of Railway Transport, and Faculty of Technical Sciencies. The college offers 22 study programmes of which three are in the social science area. The study programme Production Management is implemented as a full-time and part-time study programme. It was implanted in 2003.

The self-evaluation report was prepared by six persons, among them one external stakeholder and one student. The report was presented to the Center for Quality Assessment in Higher Education in June 2010.

The expert team received the self-evaluation document in August 2010 and a preliminary report was then produced together with a series of questions and queries to be asked by the team during the site visit. The site visit took place on Wednesday, 22 September, 2010. The team of expert evaluators was: Dr Michael Emery (Head of Team), Professor Vilija Aleknevičienė, Professor Eva Jansson, Dr Brian O'Connor; and Professor Joszef Temesi. After the site visit, the team held a meeting to discuss their findings and produce a draft evaluation report.

#### II. PROGRAMME ANALYSIS

### 1. Programme aims and learning outcomes

#### 1.1. Programme demand, purpose and aims

### 1.1.1. Uniqueness and rationale of the need for the programme

There is a constant analysis of production sector and changes of specialists demand using official statistics and other documents published by the government. A survey made among employers, graduates, students and teachers also showed the demand for the analysed programme. Other scientific work reveals a demand for specialists in production management. A high percentage of graduates stated that they were satisfied with their chosen profession. The labour exchange report mentioned that only two graduates of VCTD applied to the labour exchange in 2009. The Production Management study follows the standard regulations in the study field of Management and Business Administration. The analysed programme is only implemented in VCTD, although there are other similar programmes in Lithuania. The difference is that students at VCTD are trained for production enterprises.

The number of applicants is quite high both for full-time and part-time studies although final enrolment is quite low. Full-time students may get state financed places. The number of non-financed places is unlimited. The number of enrolments decreased in 2009 both for full-time and part-time studies.

Master studies in Production Management are implemented in Siauliai University but is open only to students of bachelor studies in engineering field.

# 1.1.2. Conformity of the programme purpose with institutional, state and international directives

Production Management is prepared in accordance with standards of Business Management Training and regulations of the study field of Management and Business Administration. All

activity spheres regulated are foreseen in the programme. The study programme is in compliance with the VCTD's strategic plan goals, that are to prepare technology, social, and art area specialists, but is not in the list of regulated professions of Lithuania. Similar studies are implemented in other European countries such as Estonia and Poland.

### 1.1.3. Relevance of the programme aims

The students of this programme are trained to be able to manage technological processes of production and maintenance, equipment and instruments, business environment, and take optimal decisions; they will be able to organise processes of integrated production, establish an enterprise, use modern technologies and successfully compete in the market.

There is a high correlation between the aims and the purpose of the programme. The aims correspond with Standards, Regulations and first level of college studies.

### 1.2. Learning outcomes of the programme

### 1.2.1. Comprehensibility and attainability of the learning outcomes

The learning outcomes foreseen are: value business environment, plan and organise activities of an enterprise, prepare a strategy for the enterprise, organise work processes, manage financial and human resources among other activities. The content of the programme assures these learning outcomes. The analysed programme fulfils the first social sciences sphere cycle of college education, the complexity level of learning outcomes satisfy the level 6 qualification requirements described in the European and National Qualification Framework. Learning outcomes are achieved by full-time students in three years and part-time in four years.

#### 1.2.2. Consistency of the learning outcomes

The study subjects are laid out in a consecutive way in order to correlate them. The order is not always adequate. (See Curriculum design). Subject learning outcomes are combined with programme outcomes, for example, "Manage present facilities and finance resources" is achieved in areas as Accounting, "Understand management principles of warehouse and storage" in Logistics. Sometimes learning outcomes are achieved through several subjects, for example, learning outcome "Be able to plan and organize activity of an enterprise:" is achieved through studies of Law, Production Management, Fundamentals of Business, Organization of Enterprise Units and Performance of Practices in Enterprises.

After graduation students should be able to work in production and maintenance enterprises in different areas.

### 1.2.3. Transformation of the learning outcomes

The learning outcomes validity is permanently assessed by questionnaires to students, graduates and other stakeholders. Learning outcomes are renewed in accordance with changes in the market, especially in the production sector. New subjects have been introduced into the study programme while renewing it according to Regulations: Organization of Production Business, Analysis of Financial Activity, Marketing, Statistics, Production Management Organization of Enterprise Units, Work Regulations, and Content of Fundamentals of Business.

#### 2. Curriculum design

#### 2.1. Programme structure

#### 2.1.1. Sufficiency of the study volume

Full-time studies last for three years and consist of 120 credits, corresponding to 4800 hours in total, of which 46% are contact hours. Part-time studies last for four years, the same amount of

credits and hours, but less contact hours, only 14%. The studies are divided in a general, basic, and a professional part. There are also practices in companies, and a final project is required. The subjects are divided into compulsary, alternative and optional. Optional subjects can be taken outside the Faculty in other higher education institutions. The study volume seems sufficient to achieve the learning outcomes.

The study programme consists of subjects in engineering and subjects in management and business administration. The expert group's opinion is that as the programme belongs to management field more emphasis should be given to managerial subjects. The relation between managerial and engineering subjects is not adequate, as it favours the latter ones. To improve this situation the College is looking for a partner institution that would help to increase the managerial aspects of the programme in the future. The experts support this.

### 2.1.2. Consistency of the study subjects

The sequence of subjects is not always adequate. Only economic and business subjects are evaluated. More managerial subjects, especially more basic ones, such as Accounting and Statistics, should be taught earlier in the curriculum. As for now, Accounting is taught in the 4th semester in the full-time studies and in the 6th in the part-time studies. Different parts of statistics are found in Applied Research, Applied Mathematics and in Statistics. Unifying these parts might be convenient and be covered in the first year, and at the site visit teachers did not think this was an inconvenience. There are also overlapping topics in some subjects, for example, in Marketing and in Applied Research. The expert team's opinion is that teachers should discuss contents of each subject, so there will be no overlapping, and more consistency. The sequence of subjects should also be improved.

The expert team believes that subjects are too small; it would be a better programme with fewer subjects of bigger contents and more credits.

The professional activity practices are well distributed.

#### 2.2. Programme content

### 2.2.1. Compliance of the contents of the studies with legal acts

According to the self-evaluation report the study programme complies with Standards and Regulations' requirements. The General part consists of 11 credits, Fundamental part of 42 and professional part of 55. Optional subjects are assigned six credits. Practices in companies and Final project get 20 and six credits respectively. Two branches were foreseen in the programme: Machine Production Management and Wood Production Management. The latter was not introduced because of the students' lack of interest for this branch.

### 2.2.2. Comprehensiveness and rationality of programme content

The expert's opinion is that there could be more introductory managerial subjects in the first General part of the programme. Anyway, the teachers' opinion is that it is relevant to have these subjects of more general cultural aspect included in the programme.

As mentioned before, learning outcomes are frequently achieved through different subjects. "To value role of the staff and its objective having in mind aims of an enterprise and its situation" is achieved through: Management, Production Management, Psychology, and Human Safety. Subjects are renewed in accordance with changes in production processes and innovations.

Studies are organised in lectures, trainings, seminars, laboratory work, course work and individual projects. In this way the students get both theoretical and practical knowledge.

#### 3. Staff

#### 3.1. Staff composition and turnover

#### 3.1.1. Rationality of the staff composition

All teachers have at least master's degree. There are two doctors of social science, one in mathematical science and one in technical science. The qualification of the teachers is considered sufficent. In total there are approximately 30 teachers. Full-time teachers compose the main pedagogical staff of the programme. Number of students per teacher varied from 13,26 in 2005 to 17,21 in 2009. Subjects are taught to groups of 30-40 students and in laboratory works groups of 15-17. Lecturers from businesses are invited to make closer contact with professional activity.

Annual workload for a teacher is 1548 hours, regulated by the government. The workload is divided between teaching, scientific, methodological and organisational work. The division depends on the teacher's function.

Although the composition of staff complies with requirements there are few teachers in social sciences. There are more than 30 teachers but only six related to social sciences. The expert group was told that even if teachers had no formal degree in social sciences, they had practical experiences in management. Looking at the CV of staff, the expert team could not find the information to confirm that.

### 3.1.2. Turnover of teachers

Turnover of staff was low and depended mainly on changes of living place, job, or retirement. The changes did not negatively affect the programme.

#### 3.2. Staff competence

### 3.2.1. Compliance of staff experience with the study programme

All teachers have participated in "Vilnius College of Construction and Design, Vilnius Technical college teachers' competences development." Most teachers prepare publications for the students and some have articles published in scientific publications. Though, teachers in social sciences have no scientific publications. The teachers seem to have good practical experiences. The coordinator of the programme has worked as a technical engineer for 29 years. She is sufficiently qualified and practically experienced.

### 3.2.2. Consistency of teachers' professional development

Teachers can improve their qualifications in a formal and an informal way. They can attend training courses, conferences, and participate in projects etc. Methods used are: practices, courses, seminars, studies, international exchange, and projects. The teachers' professional development is sufficent for the goals of the programme.

### 4. Facilities and learning resources

#### 4.1. Facilities

### 4.1.1. Sufficiency and suitability of premises for studies

In the college there are 25 seminar classrooms, two of which are for bigger audience, and there are eight laboratories. The number of classrooms is sufficient for the current number of students. Classrooms and laboratories fulfill the requirements for safety and hygiene, according to the self-evaluation report. In the library there is general reading room with 38 working places, eight of which are fitted with computer stations with access to the internet. The students can also

use the Main library of the college and the P.Vileisis Railway Transport Faculty's Library. Opening hours are 7.45-18.00 Monday-Thursday, closing 2 hours earlier on Friday. During examination period opening hours are extended. During the site visit students expressed their opinion that they had enough space, and the opening hour of the library was sufficient as they could borrow the books. Computer facilities were considered sufficient.

### 4.1.2. Suitability and sufficiency of equipment for studies

Laboratory equipment is sufficient but will be improved with more modern technologies. The upgrading is supported by EU structural funds.

There are 53 computers for students' use. General software is Microsoft Office 2003, and there is also specialized software for production processes.

During the site visit the students complained about that at the College they could only see a part of a production process, but not the whole one.

### 4.1.3. Suitability and accessibility of the resources for practical training

Practical training is accomplished only in companies where students can achieve the goals and objectives stated in the training programme. A survey carried out in the College reveal that 82% of those who responded were satisfied with their practical training, practice time is sufficient and and the places for training suitable. Students who choose there own practical training places have to inform the study programme coordinator about their choice. In a departmental meeting it is decided if the company choice is relevant.

### 4.2. Learning resources

## 4.2.1. Suitability and accessibility of books, textbooks and periodical publications

The library catalogue of the Vilnius College of Technologies and Design shows 21,644 exemplars of publications. The Faculty of Technical Science has 10,328 exemplars of which 1,724 are publications for Production Management studies. The total number of course books is 170, with approximately two main programme course books per student. There are four databases available for subscription, EBSCO Publishing and Oxford English being suitable for the Production Management programme. During the site visit the students expressed their opinion that newer books in technology ought to be included in the library.

### 4.2.2. Suitability and accessibility of learning materials

Teachers regularly publish and update their methodological publications. The approval of the publications is discussed in meetings of the Department. Students can also get access to Lithuanian Distance Learning Network.

### 5. Study process and student assessment

#### 5.1. Student admission

#### 5.1.1. Rationality of requirements for admission to the studies

The admission of students is in accordance with the directives from the Ministry of Education and Science of the Republic of Lithuania. The admission was held through the programme LAMA BPO for Organizing Joint Admission. The highest grade in 2009 required for full-time students state funded was 14,54, the lowest 2,2 and average 8,37. For those not state funded the lowest was 7,8 and average the same. The main criterion for admission is the grade score of maturity examinations. The state-funded places were occupied by students with higher

scores. Since 2009 there is fixed number of state-funded places. In 2009 14 full-time students were financed and seven part-time students.

There are no special requierements for the studies of Production Management.

5.1.2. Efficiency of enhancing the motivation of applicants and new students

To attract new students Open Days are organised, College representatives visit schools and gymnasiums; information is given on the College website. The Faculty of Technical Sciences also organises meetings with graduates and social partners in order to present career possibilities and future job opportunities. There is high percentage of drop-outs, one of the motives being wrong expectations of the studies, so more emphasis should be given to the nature of the studies in this programme. There are many applications for the programme, but very few enrolments, which also shows that the information to prospective students is not efficient or effective.

### 5.2. Study process

### 5.2.1. Rationality of the programme schedule

Every year a study process schedule is approved by the Dean. The schedule consists of lectures, seminars, practical training, exam sessions and holidays. According to the self-evaluation report the programme schedule is adequate and fulfils the requirements set in the College regulations. Lectures last two academic hours, first year students (full-time) have on average three classes per day. Exams are distributed evenly with at least two days in between exams. The students thought the schedule is adequate.

Part-time students study during session periods, with three sessions per year with duration of two-three weeks.

### 5.2.2. Student academic performance

Students' performance is constantly monitored and reasons for drop-outs are analysed. Dropouts are quite high: 65% in 2005 but have gone down to 25% in 2009. Motives are mostly academic failure, the economic situation and lack of motivation. Measures are taken to reduce the number of drop-outs, as for example, consultation provided by teachers, or propositions to the student to take a break in his/her studies or change the form of studies. But as we can see from the numbers of drop-outs, so far these measures have not been too efficient. Part-time students have even higher drop-out rates: 63% in 2006 and 44% in 2009.

Teachers encourage students to be engaged in research, especially graduate students.

### 5.2.3. Mobility of teachers and students

Teachers mobility is quite high, since 2005 nearly 47% of the teachers participated in international activities. Programmes used are Leonardo de Vinci, Erasmus, Youth in Action and Gruntvig. Contrary to this, incoming teachers were only two during the same period. Both came from Germany. Several incentives are used to increase the mobility of teachers and have given good results.

There is hardly any mobility among students, only one went to Germany in 2009. One of the reasons is the lack of language skill.

#### 5.3. Student support

### 5.3.1. Usefulness of academic support

The students are supported academicly, socially, and financially. Information about the programme is published on the College's website, on the bulletin boards and in the meetings with the administration, curators and student representatives. First year students get introductory lectures about the studies, during industrial practices students get to learn about employee possibilities. Enterprises take part in students' final projects defense. There exists a possibility of an individual programme but no full-time student learned according to an individual plan during the period analysed. In 2005-2006, 33 part-time students' studied according to an individual plan.

There are possibilities to retake the exams. Exams can be retaken three times after three weekdays up to a month without subject repetition.

Part-time students are given the same support as full-time students and have even access to the teachers during weekends.

### 5.3.2. Efficiency of social support

Students also receive psychological support. Each student is assigned a tutor, who controls, for example, attendance and progress.

Scholarship are regulated by the government and only given to full-time students. According to results a student can also receive a motivation scholarship. Some students also get money for material support. Hostel accommodation is sufficient and all students who apply can obtain accommodation.

Different sport sections exist such as football and basketball. The College organises festive events.

### 5.4. Student achievement assessment

### 5.4.1. Suitability of assessment criteria and their publicity

The assessment criterias are listed in the subject curricula. Every semester teachers explain their subject, procedure and criteria. Exams are evaluated in a scale 1-10, with 5 as a pass mark and 10 the best mark. Students are evaluated on an accumulative base, which take into account all the work during the semester. The final semester grade consists of the grades during the semester and an exam, or the grade of student's individual project.

### 5.4.2. Feedback efficiency

The students' results are discussed with each student, mistakes are analysed together with the student. Students have the opportunity to improve their results. According to a survey of the students' opinions, 88% thought that the feedback is appropriate.

#### 5.4.3. Efficiency of final thesis assessment

The final degree projects follow the legal requirements. The criterias for the final project seem appropriate. The aims of the final project should be to apply gained knowledge and skills, and the results should be practical and useful. Final papers have been written on different areas in a production enterprise and final grades have been very good. The composition of the jury follows the directions from the Ministery of Education and Sciences with stakeholders on the examination board.

5.4.4. Functionality of the system for assessment and recognition of achievements acquired in non-formal and self-education

These means are not yet developed but are gradually being introduced.

#### 5.5. Graduates placement

### 5.5.1. Expediency of graduate placement

Every year placement information is analysed. According to the Lithuanian Labour Exchange, only two students registered in 2009. A survey among graduates shows that 82% were employed, more than half according to the speciality. During the site visit the graduates confirmed that they had had few difficulties to find a job within their speciality. Part of the students have continued with university studies. Reasons for unemployment were the decrease of production in the country and lack of experience of the graduates. The graduates are content with the studies as they get knowledge in management and in production technologies and can compete better in the job market.

During the site visit the employers expressed their opinion that there was good synergy between engineering and management and that the graduates had good knowledge to work as middle managers.

### 6. Programme management

### 6.1. Programme administration

### 6.1.1. Efficiency of the programme management activities

The study programme committee consists of six members. The coordinator of the programme is the Head of the Department of Mechanical Engineering, who has managerial and practical experience working in companies. There are two external members and one student. The committee together with teachers approves changes in the study programme, new teaching methods, installation of equipments etc. The composition and the work of the committee seems adequate.

#### 6.2. Internal quality assurance

### 6.2.1. Suitability of the programme quality evaluation

The internal study quality evaluation is performed annually in line with the Quality Control Book. It is a permanent and continual process. The quality is evaluated on different levels: teachers, department, and faculty. Every year teachers present their activity plans, applied activities, projects etc. At the end of the year teachers write reports on their activities and suggests improvements. The departments present this information to the Dean, who makes the final Faculty annual report.

The fields for assessments are: staff, content of study programme, study process and its evaluation, and facilities.

### 6.2.2. Efficiency of the programme quality improvement

The results of the assessments and quality improvement are announced at public meetings of the departments and the Faculty and also to the Association of Engineering Industry of Lithuania. Students and graduates reveal teaching areas and teaching methods that have to be improved. Quality evaluation seems adequate and has resulted in a continous improvement of the programme.

## 6.2.3. Efficiency of stakeholders' participation.

Stakeholders as employers, students and teachers participate in the study programme committee and actively intervene to improve the programme. Employers help to find suitable topics for final projects and sit on the board to evaluate the final projects. The opinions of

teachers and students have an impact on the topics in different subjects. For example, new software has been introduced. Teachers not in the committee express their opinion on areas for improvements so subject programmes can be changed.

#### III. RECOMMENDATIONS

- 3.1. The title of the programme is Production Management. The expert team advises the College to consider the content in the light of the title and suggests that in any future revision of this programme there is significant management content in line with legal requirements.
- 3.2. The curruculum should be reviewed. There are overlappings in some study subjects, order of subjects could be improved and more managerial subjects introduced. Related topics taught in different subjects could be unified in one. Subject size is small, only 2-3 credit each. The expert team considers that subjects of larger size would be more adequate.
- 3.3. Number of admitted students is low and more effort should be given to increase the number. Small numbers leads to expensive study processes. Drop-out should be better monitored. If the motive is lack of motivation or insufficient background details, better information should be given to prospective students.
- 3.4. Books in engineering sciences are old and there ought to be included newer books in technology made available.
- 3.5. Staff competition could be improved. There are few teachers with background in social sciences. The number of teachers in management and economics should be increased. Both students and teachers should improve their skills in foreign languages.

### IV. GENERAL ASSESSMENT

The study programme *Production Management* (state codes – 65303S163, 653N25001) is given **positive** evaluation.

Table. Study programme assessment in points by evaluation areas.

No.	Evaluation area	Assessment in points*
1	Programme aims and learning outcomes	3
2	Curriculum design_	2
3	Staff	2
4	Facilities and learning resources	3
5	Study process and student assessment (student admission, student support, student achievement assessment)	3
6	Programme management (programme administration, internal quality assurance)	3
	Total:	16

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

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

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

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