



STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Vilniaus universiteto  
***STRATEGINIS INFORMACINIŲ SISTEMŲ VALDYMAS***  
**(621N20003)**  
**VERTINIMO IŠVADOS**

---

**EVALUATION REPORT**  
**OF**  
***STRATEGIC MANAGEMENT OF INFORMATION***  
***SYSTEMS (621N20003)***  
**STUDY PROGRAMME**  
At Vilnius University

Grupės vadovas:  
Team leader:

Prof. Roger Hilyer

Grupės nariai:  
Team members:

Assoc. Prof. Dr. Gyula Bakacsi  
Prof.dr. Guenther Dey  
Prof. Dr. Pantelis G. Ypsilantis  
Prof. Dr. Su Mi Dahlgaard-Park  
Dr. Ingrida Mazonaviciute

Išvados parengtos anglų kalba  
Report language - English

Vilnius  
2012

## DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<i>Strateginis informacinių sistemų valdymas</i>
Valstybinis kodas	621N20003
Studijų sritis	socialiniai mokslai
Studijų kryptis	vadyba
Studijų programos rūšis	universitetinės
Studijų pakopa	antroji
Studijų forma (trukmė metais)	1,5
Studijų programos apimtis kreditais	90
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	vadybos magistras
Studijų programos įregistravimo data	

## INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	<i>Strategic Management of Information Systems</i>
State code	621N20003
Study area	Social Studies
Study field	Management
Kind of the study programme	University
Cycle of studies	Master (second cycle)
Study mode (length in years)	1,5
Scope of the study programme in credits	90
Degree and (or) professional qualifications awarded	Master in Management
Date of registration of the study programme	

## CONTENTS

I. INTRODUCTION .....	4
II. PROGRAMME ANALYSIS .....	4
1. Programme aims and learning outcomes.....	4
2. Curriculum design.....	6
3. Teaching staff .....	8
4. Facilities and learning resources .....	10
5. Study process and students' performance assessment .....	10
6. Programme management .....	12
III. RECOMMENDATIONS .....	14
IV. SUMMARY .....	15
IV. GENERAL ASSESSMENT.....	16

## I. INTRODUCTION

Vilnius University (VU) is the oldest (established in 1579) and the largest Higher Education Institution in Lithuania. VU is a state and public university with similar management structure to that of most European Universities.

The university is very strong in providing advanced (second and third cycle) studies with over 100 graduate study programmes, 30 areas of doctoral studies, and residents in over 50 residency study programmes, along with over 60 undergraduate and integrated study programmes, with an excellent overall student / staff ratio of about 17.1.

The University has recognized the importance of Quality Assurance in Higher Education and a Quality Management Centre (QMC) at university level was established to introduce, coordinate and perform quality assurance measures for improvement of the quality of studies and student learning.

The Faculty of Economics (FE) has a history over 70 years during which several transformations took place. The last one in 1990-1991 with emphasis in changes regarding the character of the taught subjects, and the fields of research to reflect the economic and political changes in the country. Currently the faculty of Economics is staffed with 159 members, including 21 professors, 74 associate professors and PhDs, and over 60 assistants. The 9 Departments of the faculty offer three (3) undergraduate and fifteen (15) postgraduate programmes in several areas in Economics, Finance and Management. The student /staff ratio in the faculty is about 25.2 about 50% higher than the overall university ratio.

The master programme *Strategic Management of Information Systems* is an evolutionary development of previous graduate programmes in the department of Economic Informatics at the Faculty of Economics of VU namely the masters in *Economic Informatics* (1997-2002) and *Management Information Systems* (2003-2011). The transformation reflects the advances in the IT field that turned IT into a strategic resource giving organizations strong competitive advantages in a global economy, and subsequently the need in the Lithuanian market for specialists in this field.

According to recent results from student evaluation done by the VU QMC, the programme is rated among the top two (2) within the Economics Faculty and in the top 20% among all VU master programmes.

## II. PROGRAMME ANALYSIS

### ***1. Programme aims and learning outcomes***

Graduate programmes in Strategic Management of Information Systems aim generally to provide and advance special management skills of professionals enabling them to develop and implement IT strategies for organisations. Such programmes at the master's level promote the state of the art in the field but at the same time are also characterized by the strong practical and professional orientation to the curriculum.

The overall aims of this programme along with the stated Learning Outcomes (LOs) fit the above objectives. The aims and LOs are at proper level for a second cycle programme (according to Dublin Descriptors), and in accordance with the Lithuanian NQF. They focus on extending the knowledge usually acquired at the first level (i.e. emphasizing in strategic elements of management) and require students to apply understanding, knowledge and critical thinking in broader and more complex context.

There is a general perception that the bachelor and master programmes together constitute a coherent programme of career development. During the meeting with experts, the master students and graduates clearly regarded the programme in this perspective. They were for the most part established professionals who had chosen to enrol the master programme aiming at further career development. They sought additional knowledge and skills essential for their careers, beyond those acquired at bachelors level, and were entirely satisfied with the outcome of the programme. Some of the social partners that were interviewed also shared this view.

There is also some uncertainty among current bachelor students (and potential candidates) in respect of the master programme. The vast majority of BA Management Information Systems students were determined to continue their studies at the department's master level course, seeing it as an extension of their studies. Among them, some saw it as maintaining the broad generalist approach of the bachelor programme, some anticipated a "spike" of specialty. Whereas there is no need for bachelor graduates to have this knowledge until they apply, it may be advisable for the Faculty to reconsider its communication with students in this respect, given that bachelor graduates constitute the main market for the master programme. Reference to specific examples of job prospects / job positions suitable for the programme graduates can make the programme's aims clearer for prospective students and employers.

From the discussions with study programme committee and the social partners it appeared that a main dimension of the programme's aims and corresponding competences is not communicated clearly, to prospective students and interested employers. The programme provides competencies related to the Strategic use of Information. It gives a strong emphasis in this area which is supported by several subjects in the curriculum. Discussions with the academic staff confirmed that this was intentionally done to satisfy social partner needs, something that has been verified during the interviews with employers who referred explicitly to the need for competences in the strategic use of information and seemed to be very interested in this dimension of the programme.

In certain places the aims of the programme should be stated more clearly, without losing any of its value (although this may be caused by the translation of the document into English). For example: *a strategic aspect of activity support, to be understood as the exploitation of the potential of information systems for flexible support of the implementation of the organization strategy*).

At an era of intensive globalization it is not to the benefit of the students to structure the programme "... based on the needs of the Lithuanian labour market ...". The market for IT / IS specialists has been globalized more than any other job market. There is no explicit reference to this fact LOs neither at the programme level nor at specific LOs at subject level.

Besides its practical orientation which is necessary to meet the market needs, the programme should also meet the needs of the NQF stated objective for level VII, that "*qualifications of this level include abilities to independently carry out applied research so that the aims of the programme fit the purpose of providing proper research related skills for students who wish to continue on to third cycle studies (doctoral)*". Research methodology and thesis writing do serve this aim. But master students should also be asked to research for current developments in the various modules of the programme so they get in touch with the forefront of knowledge across all relevant areas.

Despite the above drawbacks, the programme is well positioned in the Lithuanian market where the IT sector is expected to contribute up to 25% to the GDP by 2015, with 50% of the product to be exported. Given that statement at the SER, an urgent need emerges to inject an internationalization element into the programme.

Administration recognizes the importance and significance of Learning Outcomes (L.O.s) as the cornerstone of the development and delivery of the programme. A great amount of work from both course administrators and teaching staff went into a full scale development of LOs at both the programme and subject level and a mapping scheme of linking L.O.s at programme level

with the specific subject in the curriculum does also exist. The results of this effort provide a solid base for future development.

Still, substantial improvements are necessary to make the Learning Outcome orientation of the programme more effective. L.O.s are currently overstated in many cases (e.g. *Linked to professional activities of "Heads of information systems and technologies in organizations; that complies with the world-known position abbreviated as CIO - Chief Information Officer"*), while they seem weak in other instances (i.e. LOs for a master's degree should aim in advanced knowledge not in "*fundamental knowledge*"). At the subject level L.O.s are stated in exhaustive detail and they need to be refurbished.

Further development is needed to integrate L.O.s in the teaching process. During the meetings and the discussion with the teachers, it was noticed that there is no full awareness from their side to this effect as for example linkage of L.O.s to the assessment processes.

### ***Strengths***

The main strength of the programme is that it is well positioned in the market and it currently faces very little competition as it is the only one in Lithuania in the area of Strategic Management of Information System

Social partners (employers and field practitioners) were strongly involved in the development of the programme's L.O.s that are continuously monitored and reviewed, thus showing the commitment of the department and faculty to student learning.

### ***Weaknesses***

The ambiguity about its positioning with regard to the bachelor's level programme in Management Information System offered by the same department. If no correction action is taken it could eventually be considered as an extension of the BA programme thus limiting its ability to attract more students from other universities. Lack of international dimension even though there is awareness of the fact that 50% of the information technology sector product in Lithuania is exported.

## ***2. Curriculum design***

The study programme has been defined recently (2012) as an upgrade of the graduate programme in *Management information Systems*. The structure of the programme complies with the norms allowed for graduate programmes in Lithuania and with EU policies in Higher Education as defined in the Bologna documents. The workload of the study programme amounts to 90 ECTS credits spread over three (3) semesters. The amount of contact hours to self-study hours is well balanced and appropriate for master level programme. As it is evidenced from the discussion with the students, the learning activities (individual assignments, group work, and project based activities) that students must perform during their studies justify the self-study portion of the working load

All of the taught subjects (60 ECTS) are subjects in the study filed. Semesters 1 and 2 include fundamental subjects in the professional area, while semester 3 includes other related subjects that expand the competencies of the students. In each semester students have the flexibility to choose an elective subject among those offered in the programme. The faculty organizes bridged courses for students having completed BA studies in a non-related study area. Area. Also students coming from another study field, who have completed college level studies, acquired the degree of Professional Bachelor can apply after completion of respective compensatory studies at Vilnius University.

A novelty of the programme is that the writing of the Master's final thesis is developed and assessed at three stages (30 ECTS in total), throughout the duration of the programme, starting in the first semester, along with a module on *Research Methods*, and a first stage *Thesis project*, continuing in the next semester with the second stage *Thesis project* before the Master final

thesis in the third semester. The main reasoning for this feature is that students consistently work on a chosen theme for all the three semesters and analyse the problem defined in their thesis from the various theoretical and practical (applied) aspects as they are presented in the taught module through the duration of the programme. Another gain for the students is that they acquire the necessary knowledge and tools for research oriented work at an early stage, which is useful for the work required in the rest of the taught modules.

To assess the scope and the appropriateness of the content of the programme one should keep in mind that a programme in *Strategic Management of information Systems* looks at the IS function beyond its "service" role to organizations but as a critical area of operations that may provide opportunities for exploiting information-based strategic advantage. From this perspective, it should focus on how IS and the constituent technologies can be used to alter the definition of the industry structure, redefine corporate strategy, and reorient a company's business (competitive) strategy. The programme structure and content in general lies within this framework.

The design of curriculum reflects on stakeholder's considerations with respect to development of analytical competences, while social partners insist also on more emphasis on management subjects like project and programme management (to be enhanced) and business analysis.

Furthermore, some specific points of consideration exist, such as:

- Absence of a module on *Strategic Technology Management or Technology Strategy* so that curriculum is aligned with aims and learning objectives of the programme as they are listed in the SER: "*Possession of fundamental knowledge of the role of information systems and technology in the implementation of the strategy...*".
- Similarly, to meet the also stated L.O.: "*The ability of objective and versatile assessment of the opportunities of application of information systems in the contemporary society development processes*" the curriculum should include subjects related to Information Systems Security as well as the Ethics and the Social context of IS and Internet systems.
- There should be a continuous review of the content of the subjects. Topics that represent latest achievements in information science should be emphasized (e.g. *Knowledge Management*, an essential area for Strategic Management of IS, has a weak presence in the programme, just a two hour session as part of an elective module).

All subjects are described in extensive detail in the corresponding subject (module) description document. Indeed, this is a highly commended practice that aims to maintain teaching standards. However, as was found out during the discussion with teachers, many find the need to deviate or change their teaching schedule to reflect new trends and changes in technology. It was noticed that there is a grey area as to where the authority of changing the teaching schedule lies, and furthermore, there was not a clear understanding among teaching staff as to the level of flexibility in their teaching approach, while ensuring that subject learning objectives are met.

The assessment methods of the subjects include a lot of group and individual assignments as well as project work in alignment with the aims of the programme to develop specific competencies of students. However, there was no evidence that students are urged to seek and explore and assess the latest developments in their field in individual subjects (except in their thesis) and there is almost no reference to scientific journals within the subject descriptors.

### ***Strengths***

The clear structure of the curriculum, which addresses Organizational / Systems / Technology / Analytics subjects, being well balanced between practical and theoretical aspects. Strong orientation on active learning of students with emphasis on student's work through projects, and group and individual assignments.

### ***Weaknesses***

Certain imbalances of the programme structure regarding the fulfilment of some of the programme's learning outcomes (as pointed above) and the lack of an international dimension.

### **3. Teaching staff**

The composition of the teaching staff on the study programme Management Information Systems fully complies with the requirements set by Lithuanian regulations for second cycle study programmes.

Most of the teaching staff in the programme comes from the Economics Informatics department, while business related subjects are taught by staff from other departments of the Faculty (Management, Marketing, and Finance). They are employed full time by the university and are selected and hired in accordance with the general requirements of Vilnius University, following public and open calls for job openings, while their work is assessed in attesting procedures every five years.

Certain subjects are taught by highly qualified practitioners, who have professional careers in industry, mainly in banking (all of them for the programme under consideration) and are associated with VU as part time faculty.

Social partners and students indicated disparities in teaching among staff members. For example, students reported a profound difference between the core of the teaching staff coming from the Economics Informatics department and those who come from other departments of the faculty, regarding their commitment and the interest showed in their teaching at the particular programme. It seems to them that those not belonging to the department show less involvement and engagement.

On the other hand, social partners, but students as well, reported their very high satisfaction from the practitioners who teach in the programme, which according to them is one of the programme's strong points. According to social partners this is one of the strongest points for this programme.

The views of the students and the social partners reinforced the exact same notion residing among the members of the review team regarding the teaching staff, with whom a meeting was held before interviewing students and social partners.

A more diverse (regarding industry sector) selection of external practitioners could add more value to the programme, although it is understandable that there are difficulties in finding practitioner's that also have an academic profile and proper teaching skills.

All staff members (except one younger member) have long – over 10 years and most of them over 20 years - professional, teaching and research experience and teach the subjects of the programme according to their specialization, ensuring that subject LOs are met. There is only one member of the teaching staff does not have a doctoral degree.

To meet the minimum requirement that “*20% of the study subjects to be taught by staff at professors' level*”, two professors (one from Economics Informatics and one from Management department) teach two subjects each (total of 20 credits), while the rest of the staff teach one module each.

The minimal turnover and the stability of the teaching team could be a great asset for the programme, and its further development, since it facilitates the formation of strategies, and continuous stream of improvements and enhancements. At the same time, the involvement of practitioners from industry is extremely valuable for the programme, brings students in touch with current issues concerning the development, implementation, use of IS, and their impact on organizational policies and strategies from the perspective of their own organizations.

Professional development of the staff is achieved by participation in research conferences, study trips, teaching exchange visits attending specialized, performing joint research in collaboration with other colleagues etc. A good practice was initiated by the department in the recent years



when several specialized courses were organized in the framework of the ESF financed project to enhance both didactic and analytical methodology (statistical) competencies of the staff. This set a precedence that is continued with staff participation in courses and seminars in topics like: electronic course preparation, plagiarism issues, new examination methods, etc.

Development of links with industry may help in further professional development of the staff.

- Investigate potential of staff development actions in relationship with major IS / IT companies who are active in the Baltic countries. This will be a good opportunity for students as well.
- Explore the influence of the part time staff to their organizations to develop links that can lead to setting up joint actions between the department and the organizations.
- Try to engage practitioners from IS companies as guest lecturers for special topics within the taught modules (IS companies including IBM and Microsoft have donated specialized software to the faculty, they may be interested to talk or present case studies of strategic use of IS in the area or globally)

One area that needs additional attention in terms of staff development is the integration of the subject learning outcomes into the plan of teaching activities and the assessment methods and assessment criteria, where there seems to be plenty room for improvements that must happen from bottom –up.

The academic staff (the core team) is involved in research in relative areas, and is currently active as evidenced by their recent published work. Although the research output cannot be comparable to international standards, this is explainable given the conditions in the country during the years staff was at the most research productive age. The limited interest from the doctoral degree students to perform research in this specific area, the isolation of the academic staff for many years from the international community are some of the barriers that may explain this deficiency.

The research activity over the last years shows that individual members of staff have their own research interest and pursue research activities accordingly. However, there is a lack of research strategy at the department's level that will enable the department to join research consortiums and exploit research funding that is available at European level. The stated common research area that represents the department "Complex research into information society and the need for business information" should be made clearer and described in a more specific way providing some indicative directions.

To intensify the importance of professional development of staff, the department can establish a process where all staff members draw up their own professional development plan with specific targets and acts (i.e. participation in research activities, involvement in international cooperation acts, attending conferences etc.)

### ***Strengths***

A teaching team with solid professional, teaching and research experience, high academic credentials, which also includes industry practitioners provides a good mix of theoretical and practical skills. The low turnover provides a sense of stability and allows for longer term planning regarding the improvements in the curriculum and the continuity of the efforts towards the implementation of a teaching process that fully supports the learning outcomes.

### ***Weaknesses***

Lack of a team spirit that is also detected by students could jeopardise the quality of the programme. Yet low awareness across large part of the teaching staff of the need to plan teaching and assessment based on learning outcomes. The programme meets the requirements of the minimum amount of subjects to be taught by staff at professors' level marginally. Staff at this level approaches retirement age.

#### ***4. Facilities and learning resources***

For the delivery of the program the Faculty facilities are used (45 classrooms, including 7 computer labs of 15 to 20 workplaces each).

All the classrooms are equipped with multimedia (projectors connected to computers) and in some of them interactive Smart boards have been installed with overlapping screens and voting (student survey) systems Optivote OVRF32. In addition modern video conferencing equipment can be used to facilitate the organization, management, and recording of multilateral conferences or meetings more convenient.

The Faculty of Economics was the first faculty at Vilnius University which installed (2011) the latest professional wireless Internet access equipment that allowed access to Internet in all areas of the Faculty premises.

In terms of technological equipment the number of computers of any type in the faculty increased by 30% in the period 2006-2012. In addition general purpose software but also a full list of specific commercial and scientific software packages are available to staff and students.

The Library "*Sauletekis Information Centre*" catalogue is electronically accessible by users who can locate a book in an e-catalogue and order. The Faculty of Economics spends substantial funding every year for new acquisitions in books, journals and data bases. The library also subscribes to the Lithuanian Association of Scientific Libraries and electronic full-text databases.

#### ***Strengths***

Excellent facilities are available to support student learning.

#### ***Weaknesses***

Not significant weaknesses were noticed. Teachers and students must be continuously encouraged to use the available resources (i.e. additional teaching material, access to electronic journals, self-practice at computer laboratories, etc.).

#### ***5. Study process and students' performance assessment***

The admission of students follow the regulations set by the University. During the recent years the number of students admitted to the programme in its previous form and also after the restructure remains very low ranging from 7 to 13 students.

One of the main reasons for the low intake numbers is that the number of state financed places is very low (4 in the recent years), while the corresponding number of applicants is much higher (80-90 students) most of which are not willing to enrol unless they are assured a state financed place. The number of the applicants for non-financed places is relatively low (about 30 each year) from whom a small number enrolls the programme. It is worth noticing that most of the master students are also graduates of the department's BA programme in Management Information Systems. On one hand this shows the trust of the students to the quality of studies at the department, but on the other hand shows a limitation in attracting other graduates beyond the department's boundaries.

Over time the number of applicants remains steady (over one hundred per academic year). The low number of admitted students leads to inefficient use of resources and might affect the long term sustainability of the programme.

Almost all of the master students appear to be employed in related jobs. Although this presents an advantage for the learning process, since they can relate the learning outcomes to specific needs for their current jobs and also their professional development, it may also present a risk for the quality of the learning process, since time for self-study is limited.

The interviewed students indicated that there is a clear distinction between bachelor and master teaching approaches, with a much richer teaching environment of teaching activities in the

master programme with a satisfactory balance between the theoretical & practical aspects of their study.

Students pursue the research for their master thesis progressively over the duration of the programme in a structured way through appropriate modules at each stage. The review of some master thesis from the previous year shows that students have addressed very interesting topics in their area of studies. Work from several master thesis of previous years has been published showing evidence that the research conducted in the process of writing Master's final thesis complies with the requirements for scientific research. The obligatory involvement of practitioners in the assessment of the master thesis is an excellent practice which must be commended. The Programme Committee should continue the good practice of publishing the outcomes of the research done as part of the master thesis. A depository of Master thesis at the university library and the Web may help in increasing the visibility of the programme.

Overall, students express their satisfaction and stated that they are provided with appropriate social and academic support. The department may consider the assignment of personal advisors to incoming students as a further good practice.

There is a clear description of student assessment in each module descriptor, with the assessment methods for each subject are defined in a way to ensure that learning objectives are achieved.. A large part of the student assessment is based on project work and group or individual assignments, as it should be at a master's level. The department takes proper measures to prevent academic dishonesty acts. Especially with regard to the master thesis an effective system which includes the approval of the theses topics by the department, close monitoring of the work, a plagiarism checking system and public defence is in place.

Students' progression is excellent with attrition / failure rate very low (3 students over the last 5 years).

Overall students are provided appropriate social and academic support. The department may consider the assignment of personal advisors to incoming students as a further good practice.

Several points of concern however exist:

- It has been noticed that the assessment activities for several subjects are fragmented, making it difficult to assess the integration of knowledge and the critical thinking of students.
- Most of the teachers have not given enough consideration to specific assessment criteria (not the weights) for the non-exam assessment elements.
- According to students, there is little or no written feedback on the assignments they submit, neither posting of indicative answers for exams. The virtual teaching environment installed at VU is an excellent media to facilitate the submission of assignments and the feedback process.
- There is practically no mobility of students both inwards and outwards. Reasons for not attracting students is the language of teaching in the programme, while Lithuanian students do not take advantage of the opportunities of exchange programmes because of very tight teaching schedules and the intensity of the programme. The department could explore alternative ways to increase student mobility and internationalization of the programme through the development of Intensive Erasmus Programmes (could be in the form of Summer Schools) and participation in existing ones so students derive the benefits on an international perspective.

Besides the assessment of individual courses during the study programme, an overall assessment of the programme's learning outcomes and objectives can take place at the completion of the programme by students. This will provide valuable input in the programme review process. Along the same line, periodical alumni surveys can also provide valuable input with regards to trends in the job market, skills demand etc. that can be taken into consideration during programme revisions.

### ***Strengths***

There are solid procedures for student admission, student progress monitoring and teaching and assessment of subjects, although there is a vagueness among teachers concerning the level of flexibility in differentiating the teaching content vis a vis. the subject's learning outcomes. The study process is balanced between theory and practice and a plurality of teaching activities are used to meet learning objectives. As a results student success rate is high.

### ***Weaknesses***

Small number of students because of regulations of government funded places may create problems regarding the sustainability of the course. Lack of international dimension, practical no mobility of students. Fragmented assessment, not clear assessment criteria and very low in providing assessment feedback to students (perhaps informal processes are as efficient for the small number of students) and making

## ***6. Programme management***

Decisions regarding the development, review and implementation of the *Management Information System* study programme reside at different levels of the management hierarchy as it is defined by VU Study Regulations and VU Study Programme Regulations.

The main decisions regarding the implementation, the management of the processes and the continuous improvement of the programme is the responsibility of the chair and the Programme study committee.

Teachers enjoy scientific and academic freedom, while decisions regarding the introduction of new subjects, or changes in the content of subjects are discussed by the Departments and the Study committee where decisions are made. Students are represented in the Study Committee and express their views about the programme.

A set of "Quality Measures" formulate the policy of the chair and the managing team towards quality assurance and improvements. These refer to areas of planning (*Improvement and publication of clear intended learning outcomes, Development of the structure and the content of the study programme*), Teaching process (*Information resources, Observation of student progress, Appeal system, Plagiarism prevention system, Cheating prevention, Modern computerized examining system*), Staff professional development, and Feedback and Improvements (*regular feedback from employers, representatives of the labour market, and other related organizations, Student participation in the activity of quality assurance*)

Regarding the system for the assessment all taught modules at the end of each semester, students complain that they have never received feedback on their assessment, neither have they seen any ratings of the subjects they take and their teachers. To make this process transparent, data corresponding to the ratings of the subjects / teachers should be available to students.

Some of these measures operate formally, but discussions with the management team, the students and the teachers showed that there is a lot of informal communication between all these groups that provides regular and continuous feedback to the chair and programme study committee, resulting many times in ad-hoc decisions regarding the implementation of the programme.

Furthermore a community of interleaved interested parties involving graduates from both programmes, social partners - most of whom are graduates and many are employers of graduates, and master students - most of whom are graduates of the department's BA programme. This group has easy informal contact with teaching staff. They are able to share views on the needs of the market and on course design and delivery through both formal and informal channels. The readiness of these partners to give time to advising on the programme is testimony to their regard for the Faculty and the quality of its programmes.

It seems so far this informal system works efficient and in their decisions are accepted as being in the right direction by all stakeholders. Obviously the small numbers of students and staff

involved makes that possible. However informal processes may in the long term degenerate, lose its efficiency and functionality, and this should be avoided. During the meeting with the teachers, there was a feeling that some of the teachers received not sufficient direction and guidance. For example, they were not so aware about the importance of learning outcomes, neither they were aware of the processes to change the contents of a module, especially younger members who associated the authority to that with the academic rank of individual teachers.

The review team may suggest that an annual formal internal review process should exist including the following:

- Staff – Student meetings where all of the teaching staff and all students are invited to participate, to be held at the end of each semester, to review matters that have to do with the teaching process.
- Formal annual meetings of the study committee with the social partners
- Formal review meeting between the study committee and all of the teaching staff to analyse student and social partner feedback and discuss potential improvements
- The programme study committee should also implement a programme specific teaching assessment questionnaire that addresses matters of specific interest to this programme since the university level QA questionnaires, provide a general picture of the ratings of each programme and its subjects, and a ranking of a programme within the university but their feedback is too general.

### ***Strengths***

A strong community of interest involving all stakeholders (administration, teachers, students, graduates, and employers), some in many roles that contributes to continuous feedback for improvements to the programme. Commitment of the department. The department has the ownership of the programme, most of the staff teaches on the programme.

### ***Weaknesses***

The small size of the student body and the teaching staff makes the programme manageable without the need for much formality. Such an approach makes the quality of the programme vulnerable to changes in management, in personnel, in stakeholders' behaviour and other internal or external changes.

### III. RECOMMENDATIONS

3.1. The programme should be positioned in the market as a standalone MA programme and try to attract students from other universities. Making its aims and learning outcomes clearer, stating explicitly potential job prospect and career paths for its graduates, reveal its strong orientation in strategic use of information and business analytics may help in achieving this goal.

3.2. The learning outcomes should be revisited with reference to programme management and curriculum design, while the teaching staff should be trained and actively participate in defining proper study processes, learning resources and the assessment elements and criteria in each module. Assessment feedback is an essential element of the learning process and the management of the programme should make sure that is implemented as a core policy at programme level.

3.3. Expand its stakeholder base to reach beyond former graduates of the programme. Establish formal relationships with employees who have already shown a great interest about the programme and provide feedback to them regarding plans and decisions affecting the structure of the programme and curriculum.

3.4. Built a team spirit among teaching staff integrating the three groups of teaching staff (i.e. informatics, economics / management and practitioners by sharing and exchanging experiences, joint research and other projects so that they all have a sense of ownership of the programme and appreciate how their subjects contribute to achieving the learning outcomes of the entire programme.

3.5. Focus more on the international dimension of the course by establishing partnerships with similar programmes in other European study and research areas, implementing international teacher and student exchange programmes, teaching modules in English inviting lecturers from abroad, etc. so that students receive an international learning experience.

3.6. Undertaking research is vital for the development of a study programme, especially for second and third cycle programmes. Without abandoning its good practices, the department should find ways to integrate individual research interests and develop a departmental research agenda that sets innovative, exploratory and critical research questions in order to join research consortiums and provide further opportunities for staff and students.

#### IV. SUMMARY

##### ***Positive Aspects***

The programme is offered by a prestigious university, and is managed by a study programme committee that has high aspirations to keep the programme's quality at the highest level. Student ratings put the programme among the top 2 at the Economics Faculty and in the top 20% among all VU master programmes.

The programme has gone through a major transformation in 2011 reflecting the importance of the IT as a strategic resource for organizations, and subsequently the need in the Lithuanian market for specialists in this field. The aims and learning Objectives of the programme are serving well these needs.

The graduates of the programme are employed in relevant jobs and social partners recognize the value of the programme in preparing professionals with proper knowledge and skills.

A strong community of graduates from both BA and MA programmes, social partners, most of whom are graduates and many of whom are employers of graduates, and master students, most of whom are BA graduates is established that shows a high interest about the programme. This group have easy informal contact with teaching staff. They are able to share views on the needs of the market and on course design and delivery through both formal and informal channels. The readiness of these partners to give time to advising on the programme is testimony to their regard for the Faculty and the quality of its programmes.

Administration recognizes the importance and significance of Learning Outcomes (L.O.s) as the cornerstone of the development and delivery of the programme and put a great effort to build a solid base for future development.

A very enthusiastic team of teachers with strong academic and professional experience complemented by highly qualified practitioners from industry seems committed to achievement of high quality teaching.

The department has access to excellent facilities to support teaching and learning for its students, including a modern library, and access to scientific journals and other learning resources.

##### ***Negative Aspects***

There are several points for improvements as they are discussed in the previous sections. Some of the negative aspects

The prevailing perception that the MA programme is a continuation of the BA programme of the same department.

The low enrolment of students the majority of whom are graduates of the department's BA programme.

The programme lacks an international dimension although the market for IT/IS professionals has been globalized and 50% of the Lithuanian product is exported.

Little transparency regarding the students' assessment process: Assessment criteria (excellency, pass, fail) not provided, Feedback for written assignments is provided on ad-hoc basis, indicative answers to exams are not available, no moderation process of exam questions.

Control of the teaching and learning process is based mainly on informal communications and feedback from teachers, students and social partners, while formal feedback and systematic review mechanisms practically do not exist.

#### IV. GENERAL ASSESSMENT

The study programme *Management of Information Systems* (state code – 612N20002) of Vilnius University is given **positive** evaluation.

*Study programme assessment in points by evaluation areas.*

No.	Evaluation Area	Evaluation Area in Points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	3
3.	Teaching staff	3
4.	Facilities and learning resources	4
5.	Study process and students' performance assessment	3
6.	Programme management	3
	<b>Total:</b>	<b>19</b>

\*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. Roger Hilyer

Grupės nariai:

Team members: Assoc. Prof. Dr. Gyula Bakacsi

Prof.dr. Guenther Dey

Prof. Dr. Pantelis G. Ypsilantis

Prof. Dr. Su Mi Dahlgaard-Park

Dr. Ingrida Mazonaviciute



<...>

## V. APIBENDRINAMASIS ĮVERTINIMAS

Vilniaus universiteto studijų programa *Strateginis informacinių sistemų valdymas* (valstybinis kodas – 621N20003) vertinama teigiamai.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	3
2.	Programos sandara	3
3.	Personalas	3
4.	Materialieji ištekliai	4
5.	Studijų eiga ir jos vertinimas	3
6.	Programos vadyba	3
	<b>Iš viso:</b>	<b>19</b>

\* 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

### *Teigiami aspektai*

Šią programą siūlo prestižinis universitetas, jai vadovauja studijų programų komitetas, turintis didelį siekį – užtikrinti aukštą programos kokybę. Studentų vertinimu, ši programa yra viena iš dviejų geriausių ekonomikos fakulteto teikiamų programų ir įeina į 20 proc. visų geriausių VU magistrantūros programų.

2011 m. buvo atlikta nemažai šios programos pakeitimų, rodančių IT, kaip strateginio organizacijų ištekliaus, svarbą, ir tolesnį šios srities specialistų reikalingumą Lietuvos rinkai. Programos tikslai ir numatomi studijų rezultatai atitinka šiuos poreikius.

Programos absolventai įsidarbina atitinkamuose darbuose, o socialiniai partneriai pripažįsta programos naudingumą rengiant reikiamas žinias ir kvalifikacijas turinčius specialistus.

Sukurta stipri bakalauro ir magistrantūros studijų programų absolventų, socialinių partnerių, kurių dauguma - absolventai ir daugelis – absolventų darbdaviai, ir magistrantūros studentų, kurių dauguma yra baigę bakalauro studijas, bendruomenė. Ši grupė lengvai palaiko neformalų ryšį su akademinio personalu. Jie turi galimybę keistis nuomonėmis apie rinkos poreikius ir programos sandarą bei jos pateikimą oficialiais ir neoficialiais kanalais. Tai, kad šie partneriai yra pasirengę skirti laiko konsultacijoms programos klausimais, rodo jų dėmesį fakultetui ir fakulteto programų kokybę.

Administracija pripažįsta numatomų studijų rezultatų reikšmę ir svarbą, tai laikydama programos tobulinimo ir įgyvendinimo pagrindu, ir deda daug pastangų, kad sukurtų tvirtą tolesnio tobulinimo pagrindą.

Labai energinga akademinę ir profesinę patirtį turinčių dėstytojų komanda kartu su aukštos kvalifikacijos įmonių darbuotojais yra įsipareigojusi siekti kokybiško mokymo.

Fakultetas turi galimybę naudotis puikiais priemonėmis, reikalingomis studentų mokymui ir mokymuisi, tarp kurių yra moderni biblioteka, mokslo žurnalai ir kiti mokymosi ištekliai.

### ***Neigiami aspektai***

Yra keli tobulintini dalykai, aptarti ankstesniuose skyriuose. Štai keletas neigiamų aspektų:

Vyraujantis supratimas, kad magistrantūros programa yra tame pačiame fakultete dėstyta bakalauro studijų programos tęsinys;

Nedidelis priimamų studentų skaičius, be to daugelis iš jų yra to paties fakulteto bakalauro studijų programos absolventai;

Programai trūksta tarptautinės dimensijos, nors IT/IS specialistų rinka globalizuota ir 50 proc. Lietuvos produkto eksportuojama;

Nepakankamai skaidri studentų vertinimo procedūra: nenurodyti vertinimo kriterijai (labai geras įvertinimas, egzamino išlaikymas ar neišlaikymas), su rašytinėm užduotim susijęs grįžtamasis ryšys teikiamas konkrečiu atveju (*ad-hoc*), nenurodomi orientaciniai egzaminų klausimai, nėra egzaminų klausimų mažinimo procedūros.

Mokymo ir mokymosi procesų kontrolė iš esmės pagrįsta neoficialiais ryšiais ir dėstytojų, studentų bei socialinių partnerių grįžtamoju ryšiu, o oficialaus grįžtamojo ryšio ir nuolatinės priežiūros mechanizmai nesukurti.

## **III. REKOMENDACIJOS**

3.1. Ši programa rinkai turėtų būti pateikta kaip savarankiška magistrantūros programa, ir reikėtų pasistengti į ją pritraukti kitų universitetų studentus. Šį tikslą būtų lengviau pasiekti aiškiau apibrėžus programos tikslus ir numatomus studijų rezultatus, atvirai nurodžius galimas absolventų darbo perspektyvas ir karjeros kelius, parodžius stiprų programos orientavimą į strateginę informacijos ir verslo analizės naudojimą.

3.2. Numatomus studijų rezultatus reikėtų iš naujo peržiūrėti atsižvelgiant į programos vadybą ir programos sandarą, o akademinis personalas turėtų būti mokomas, jis turėtų aktyviai dalyvauti nustatant tinkamą studijų eigą, mokymosi išteklius ir kiekvieno modulio vertinimo elementus bei kriterijus. Su vertinimu susijęs grįžtamasis ryšys yra svarbiausias mokymosi proceso elementas, ir programos vadovai turėtų užtikrinti, kad tai būtų įgyvendinama kaip svarbiausia politika programos lygiu.

3.3. Išplėsti savo socialinių dalininkų bazę, kad ją sudarytų ne tik šios programos absolventai. Nustatyti oficialius ryšius su darbdaviais, kurie jau parodė susidomėjimą šia programa, ir suteikti jiems grįžtamąjį ryšį dėl planų ir sprendimų, kurie turi poveikio programos ir dalykų struktūrai.

3.4. Sukurti akademinio personalo, apimančio tris dėstytojų grupes (informatikus, ekonomistus/ vadybininkus ir specialistus praktikus), komandinę dvasią dalijantis ir keičiantis patirtimi, atliekant bendrus tyrimus ir įgyvendinant kitus projektus, kad jie visi jaustųsi programos šeimininkais ir įvertintų, kaip jų dėstomi dalykai padeda siekti visos programos numatomų rezultatų.

3.5. Daugiau dėmesio skirti programos tarptautinei dimensijai kuriant partnerystę su panašiomis programomis, įgyvendinamomis kitų Europos studijų ir mokslinių tyrimų srityse, įgyvendinant tarptautines dėstytojų ir studentų mainų programas, mokymo modulius anglų kalba, kviečiantis užsienio lektorius ir t. t., kad studentai įgytų tarptautinių studijų patirties.

3.6. Imtis mokslinių tyrimų yra labai svarbu tobulinant studijų programą, ypač antrosios ir trečiosios pakopos programas. Neatsisakydamas savo gerosios patirties fakultetas turėtų rasti būdą, kaip sujungti individualius mokslinių tyrimų interesus ir parengti fakulteto mokslinių tyrimų planą, kuriame būtų išdėstyti inovatyvių, tyriminių ir kritinių mokslinių tyrimų klausimai siekiant prisijungti prie mokslinių tyrimų konsorciūmų ir suteikti daugiau galimybių darbuotojams bei studentams.

<...>

---