

# STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

# Vilniaus universiteto

# VADYBOS INFORMACINIŲ SISTEMŲ (612N20002) VERTINIMO IŠVADOS

# EVALUATION REPORT OF MANAGEMENT OF INFORMATION SYSTEMS (612N20002)

## STUDY PROGRAMME

At Vilnius University

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### DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Vadybos informacinės sistemos
Valstybinis kodas	612N20002
Studijų sritis	socialiniai mokslai
Studijų kryptis	vadyba
Studijų programos rūšis	universitetinės
Studijų pakopa	pirmoji
Studijų forma (trukmė metais)	4
Studijų programos apimtis kreditais	240
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Vadybos bakalauras
Studijų programos įregistravimo data	

INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	Management of Information Systems
State code	612N20002
Study area	Social Sciences
Study field	Management
Kind of the study programme	University
Cycle of studies	First (bachelor)
Study mode (length in years)	4
Scope of the study programme in credits	240
Degree and (or) professional qualifications awarded	BA in Management
Date of registration of the study programme	

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#### 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 study programme of Management Information Systems has been implemented in the present format since 1999, when the admission to the programme in the Faculty of Economics was returned to the first year. Several years before, students could only choose the specialism of Management Information Systems since the 3rd year of studies which resulted in significant decline in the demand for the programme. After the programme started re-admitting students from the 1st year of studies, the demand for it increased steeply, and for several years it stayed among the most demanded undergraduate study programmes on the national scale.

In 2008, the component of practice was significantly reinforced in the first cycle study programmes, which called for revision of the whole study programme.

Recently (2012), the Faculty of Economics completed the project *Updating of the First Cycle Study Programmes and Implementation of Innovative Methods at the Faculty of Economics of VU*. Within the framework of the project, the study programme of *Management Information Systems* updated about 50% of the programme credits, In addition the system of ECTS credits was revisited and a teaching load norm system was implemented, the provided competences and the intended learning outcomes were redefined, and advanced teaching methods were approved and implemented including case study, business simulation models, and project management methods in group assignments.

#### II. PROGRAMME ANALYSIS

#### 1. Programme aims and learning outcomes

The knowledge economy and the growth of digital enterprises have created a strong demand for individuals who understand business practices, functional disciplines and computer applications. University MIS programmes are generally aimed in providing students with the educational background to articulate the economic value and the role of IT and to develop and implement information systems. Such a programme incorporate essential components that are critical for future MIS careers like Managerial skills, Business/MIS theory and concepts, IT architecture and infrastructure, Software and programming language skills.

Although there is an effort to state the aims of the programme along those lines, there is a lack of clarity and certain ambiguities (e.g. "...to train specialists of management information systems able to independently do complex work requiring broad outlook and systemic thinking skills in the following fields..."). As a result the information provided to potential students has until recently been seriously misleading in one respect. Students were not aware of the level of knowledge of informatics that was required to commence the programme. Their impression was that the program's orientation was mainly in management. It is clarified during the visit, that the students recovered the deficit in due course and are now content to be studying on the programme. They also stated that they are now satisfied with their choice to enrol the programme. It is their understanding however that the misleading information has not yet been corrected.

Providing more specific examples of job prospects for graduates such as (indicative): Business analyst, Systems Analyst; Business software developer, Database analyst; Database designer; Business information analyst, etc. can make the programme's aims clearer to prospective students and employers.

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.

The students, who graduated from the bachelor programme and left the University, even though they might return at a later date to take the Master programme, were content that their studies provided a coherent education complete in itself. Despite the Faculty's understandable keenness to recruit to the Master programme, there is no complaint that the programme team are focusing on the needs of these students who do intend to proceed to the Masters, at the expense of those who wish to leave.

The employers' views were somehow mixed. While they did not reject directly the case of hiring BA graduates of this programme, they repeatedly responded that they like to offer position for practical training but they hire graduates of the master programme of this department. Employers seem to view the bachelor and master programmes interconnected and a characteristic statement in this direction is that "flows to MA programme will increase as a result of restructuring the BA programme".

Overall, it seems that there is a lack of clarity in the aims of the programme, as interested parties have different perception about it.

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.

The programme study committee claims that Learning Outcomes were deliberately "set in an ambitious way in pursuit of higher competitiveness (SER)". Although the review team-understand the aspiration of the program study committee, such an approach may mislead students and employees, and create expectations that are certainly not fulfilled at a bachelor level programme. Indicative examples are: "they will be able to forecast", "will be able to identify the interrelationship and interaction of phenomena", "will perceive the requirements of quality and social responsibility and will be able to implement them", "will be able to use the help of consultants and experts", and others of this nature that are overstated and vague. No convincing justification resulted from the discussion of this matter with the study programme committee.

It seems that the learning outcomes have been revised several times over the recent years as a result of programme restructures, while the last revision took place last year, therefore not enough time has passed to allow for evaluation of the changes introduced.

Further development is needed to integrate L.O.s in the teaching process. During the meetings and the discussion with the teachers, the review team noticed a lack of full awareness from their side to this effect, as for example linkage of L.O.s to the assessment processes. Moreover it is evident

from the discussion with the teachers that the development of L.O.s did not involve all of the teaching staff, as some of them do not seem to even grasp the very basic concepts of the L.O.s in the design of a programme and how they determine the delivery and the assessment of the subjects they teach.

#### Strengths

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.

Social partners (employers and field practitioners) are willing to provide support and contribute to the development of the programme, working with the academics, in making it more appealing to the market needs.

#### Weaknesses

The main weakness is the prevailing ambiguity in the aims of the programme which may create false expectations to students and employers. An urgent need for revisiting the programme's aims and objectives arises so that it becomes clear that this programme stands as a fully autonomous programme providing employment prospective to its students upon graduation

The learning outcomes of the programme are not aligned with the aims and objectives of the programme and in many instances are overstated in a way that it is too difficult (maybe not possible) to achieve at the level of a first cycle programme.

The integration of learning outcomes in the teaching process has not been achieved to a satisfactory level yet.

#### 2. Curriculum design

The study programme has been updated recently to comply with EU policies in Higher Education as well as national legal requirements and University regulations. The Management Information System programme comprises seven semesters of taught modules plus a final semester of professional practice and a bachelor's final thesis that are integral part of the study programme. The curriculum is based on the ECTS with a total load of 240 credits.

The current curriculum is in place since 2010, so it has not gone through a full cycle yet and there has not been a full review yet. A recent restructure of the curriculum to combine relative subjects into 10 credit modules was commented positively by social partners who at the same time stated that more changes to curriculum are necessary.

The review team expresses some serious concerns about the structure of the curriculum as follows:

- The curriculum contains compulsory and elective subjects thus giving students flexibility in following their own preferences and interests. However the amount of elective subjects seems to be disproportional to the compulsory ones (27 compulsory and 33 electives students choose 11) In addition the electives are not structured in any way (i.e. general subjects, business subjects and IS subjects, with a rationing between the groups, as it happens only in semester 6). Students may have difficulties making choices.
- It is strange that in a Management programme students attend an introductory module about Management for the first time in the fourth (4<sup>th</sup>) semester of studies. Furthermore students are given the choice to a more specialized module Innovation Management earlier in their 3<sup>rd</sup> semester of studies. An Introduction to Management module should be included in the very beginning of their study so that can put the content of modules like Management Information Systems (1<sup>st</sup> semester) and Information Systems Design (3<sup>rd</sup> semester) into the managerial context. A similar approach should be followed for the Introduction to Accounting module, since much of Management Information Systems serve accounting-based functions.
- There is a disproportional weight to basic theoretical subjects like Economics (3 compulsory and two optional course), Mathematics (2 subjects) Statistics and Econometric (3 subjects). On the other hand, subjects that address business functions that require the support of MIS (i.e. Operations Management, Quality Management, Logistics, Marketing Management, Innovation

Management, Knowledge Economy), or are essential for MIS operations (i.e. Security of IS, Business Application Development) are not included in the programme at least as compulsory modules.

• There is no uniformity in the student workload, with only 25 ECTS in the first semester and 35 ECTS in the last semester. The student's project in *Information Systems III* during the last semester could perhaps be integrated with the practical training, while an Introduction to Management module could be added to the first semester, to bring all semester to equal work load of 30 ECTS, without harm in the content of the curriculum.

The need for changes in the curriculum was also indicated by both students, and social partners.

Specifically, students were concerned about too much emphasis in theory and almost no practical topics until the fourth semester of studies, and pointed out that the content of some subjects necessitates changes in their sequence (e.g. *IS design* should precede *Analysis of IS*). Students also referred to problems arising because few "places" are allocated for the students of this programme in GUE modules. As a result, not all students can take the electives they would like, and are forced to take those for which "places" are available.

Employers were satisfied of recent changes made to curriculum but stressed the need for further changes including new subjects ("more project management", "business analysis related modules" in the curriculum.

It seems that the fact that the programme runs in the Faculty of Economics played a role in the design of the curriculum, especially in a number of elective subjects. Besides the General University Electives, other subjects like Theory of Economics, History of Civilization, Population and Economic Development, Money and Credit, Audit, Quantitative Analysis of Econometrics, although very interesting, usually are part of an award in Economics or related areas, but are not common in similar MIS programmes. If the programme is to meet its stated aims "to train specialists of management information systems able to independently do complex work requiring broad outlook and systemic thinking skills in the following fields: implementation of information and communication technology, development and implementation of management information systems, maintenance and development of management information systems,..." the weight of the non-informatics subjects should move from economics to management.

As it is stated in the SER, "the study programmes of the most prestigious universities of the world include fewer subjects and are more concentrated on the field topics". This should be the target for a new reform of the curriculum.

#### Strengths

There is a strong momentum towards reformation, (at least among the chair, the study programme committee and the core team of teachers), as a result of the recent ESF-financed project in the Faculty of Economics to reform first cycle programmes. The programme was essentially revised, the system of ECTS credits and a teaching load norm system were implemented, the provided competences and the intended learning outcomes were redefined, and advanced teaching methods were approved and implemented as case study, business simulation models, and project management methods in group assignments. This momentum can provide the required leverage to further reforms.

#### Weaknesses

The current curriculum needs extensive reforms to support the achievement of the intended learning outcomes. A technically easy task like this, can turn into a socially very challenging process under the present circumstances (Scientific orientation of the staff towards economic studies, with many close to retirement age).

The sequence of the subjects of the curriculum does not provide the means for the students to develop in parallel their knowledge in management and IT areas and see IT in the business management context.

Lack of an international dimension. No parts of the programme are taught in English in order to facilitate student mobility.

Lack of uniformity in students' workload between semesters.

#### 3. Teaching staff

The composition of the staff teaching on the study programme Management Information Systems fully complies with the requirements set by Lithuanian regulations for undergraduate study programmes. A total of 34 academics teach the subjects of the programme; the vast majority of them (30 out of 34) are holders of a Ph.D. degree. As it is expected most of them teach in other study programmes in the Faculty of Economics at all three levels.

The core team comprises the staff members from the Economics Informatics department (1 professor, 7 assoc. professors, 2 dr. lecturers and 1 assistant) who teach the informatics related subject, most of which have long professional, teaching and research experience. This same team supervises to a great extend the final thesis projects of the students. The common profile of the core team is that almost all carry a great deal of experience in academia, being with the Vilnius University for many years (20+), most of them starting their career as research assistants and developing their careers to academic positions. This is explainable given the political situation in the Baltic States until 1990. As the core team is approaching retiring age (most at age of 60+), there is an urgent need for new recruitments that will work closely with the existing experienced staff to ensure the continuity and the sustainability of the study programme.

The large number of the teaching staff delivering the bachelor programme could have worked to the benefit of the programme in the sense that staff teaches only subjects of their specialization but what was observed was exactly the opposite: communication problems, not effective monitoring of the teaching process, lack of awareness about standards and processes.

A significant number of the teachers are unable to communicate effectively in spoken English. The review team of experts did not seek evidence of their capacity in written English, but a serious concern remains regarding the capacity of some of the teaching staff to maintain currency in a discipline where the bulk of publication is in English,.

The programme seeks to develop capacity in two areas, informatics and business. There are in addition elements of support disciplines such as Research Skills and Statistics. The team was very interested in finding out whether there was a cohesive staff team delivering these disparate subjects. As it was explained, a small group of colleagues in the informatics area constitute the core teaching team of the programme.

Graduates, students and social partners signified the differences among the staff between the "core team" that teaches subjects in informatics, research skills and supervises their thesis, from those teaching the business subjects in terms of teaching methods, provision of additional teaching material, and general involvement. Graduates and social partners were very critical about the quality of teaching in non-core subjects. Apparently there is a two-boss syndrome for those belonging to other departments and delivering a subject to MIS students but the lack of cohesion the absence of a team spirit works against the quality of the programme as it is discussed in section 5.

A great concern exists concerning the fact that the staff team is large and diverse and that there may be a difficulty communicating the Faculty's requirements to them. For instance, it was clear that many of the teaching staff were uncertain about the concept of learning outcomes, although when asked they declared that they had participated in the development of LOs.

The involvement of practitioners from industry helps to bring students in touch with current issues and developments in the field of Business Informatics, thus enhancing the delivery of the programme and the realization of the learning outcomes in a field that is characterized by rapid developments and changes in technology. Students acknowledge this and seem very satisfied.

Professional development of the staff is very limited. Only a small number of the staff who teaches in the programme (about 10 individuals) participated recently in applied research, projects, and research activity related to the programme and a small number (mostly the same people)

participated in scientific conferences, research trips, seminars, and exchange programmes. No participation in teaching exchanges in the field of studies is reported.

The academic staff (the core team) is involved in research in relative areas, which obviously cannot be comparable to international standards, 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. Even if research is not a priority requirement, when it comes to first cycle studies, the lack of a research strategy at the department level may hinder the possibility of the team to join research consortiums and exploit research funding 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 core team of enthusiastic and dedicated teachers which is complemented by field practitioners has assumed the leading roles in the planning and delivery of the programme (programme design, learning outcomes, teaching the core subjects, supervision of thesis work).

#### Weaknesses

The majority of the staff does not seem to share the same interest about the course and its further development. The course management team should work towards preparing quality substitutes for the teachers of the programme who are going to retire due to age in the nearest future.

A significant part of the staff remains unaware of the changes happened in the last reformation of the curriculum, seem not to comprehend the concept of learning outcomes.

Limited capacity in English Language for some of the staff sets an additional barrier to their academic development in the field of information systems.

#### 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.

Available electronic resources (Virtual Learning Environment) are not used yet by all teachers in the programme. As students reported some prefer to send additional teaching material to one student who is forwarding them to the rest of the class. Since the VLE provides many more functions than just the upload of teaching material, students and teachers must be encouraged and directed to use it a central learning support system.

#### Strengths

The facilities for the implementation of the programme are sufficient both in their size and quality.

#### 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' performace assessment

The admission of students follows the regulations set by the University. During the recent years the number of students admitted to the programme remains constant around 40 students.

The number of applicants has declined dramatically over the years. Year 2012 applicants are about one third of 2009 applicants. This creates serious concern for the long term sustainability of the programme.

An investigation is needed to identify the causes of this decline. Demographic reasons alone cannot cause changes of that magnitude in such a short period of time. It could be a down turn of demand for studies in informatics because of market situation, a possible drawback of the specific programme with competing programmes within VU or other universities, etc. According the social partners view, the recent reforms in the programme will result in attracting higher number of applicants; an implicit indication that the structure of the course is one of the factors that affects prospective students' interest.

On the bright side, the programme attracts students of high calibre (at least those admitted at state financed positions), while the scores of the few students admitted in non-financed positions are much lower.

The final thesis is an integral part of the studies. The list of the final thesis over the last years shows that students have addressed very interesting topics in their area of studies. Even though a rigorous process for examining and assessing final thesis does exists, a course descriptor for the final thesis should be developed that will also include instructions and assessment criteria.

The weaknesses mentioned in the previous sections regarding the disparities among teachers, the lack of cohesion and team work, affect the quality of the teaching and the assessment processes. Based on our discussions with teachers and students the following drawbacks are indicated:

- Teachers have not a clear understanding about the processes of modifying the module descriptors and are very confused as to what changes are affecting learning outcomes and which ones are changes in the delivery of the content. Some of them have not a good grasp of the learning outcomes concept. As a result changes in content and changes in the assessment methods are sometimes taking place during the semester.
- In general there is no link of the subject learning outcomes to specific types of assessments, neither clear assessment criteria for each assessment element, especially in assignments.
- Feedback on assignments and exams is provided when asked by students, but there is no policy
  or it is not followed if there is one regarding providing feedback to students, posting indicative
  answers.
- There is no informal or formal moderation of exam questions. It so happened that the exam questions in a module (finance) were out of content.
- Not efficient use of the Virtual Learning Environment by the teachers (most do not use it)

  Overall, students, feel, that, they are provided appropriate social, and academic support

Overall students feel that they are provided appropriate social and academic support, and commended the policy of the department to providing mentoring to new students by senior ones.

While some of the students of the programme enjoy the opportunities of participation in exchange programmes, the ratio is far less than the European target of 20% and should be improved so that students can take advantage of opportunities to get a global prospective and enhance employability after graduation. The department should make this target as one of its priorities taking specific measures, such as: enhancing students' awareness, enlarging its international network of exchanges, having previous beneficiaries inform students, provide teaching of foreign languages, being flexible in recognition of credits earned abroad etc. At the same time the department should consider teaching certain subjects in English for its own students as well, so that it attracts incoming exchange students.

Besides the assessment of individual courses during the study programme, an overall assessment of the programme's learning outcomes and objectives should take place at the completion of the programme by students. This will provide valuable input in the programme review process.

#### Strengths

The programme attracts high calibre students. Recent reforms are in place regarding the teaching and learning activities of each subjects documented in a full set of very detailed module descriptors.

#### Weaknesses

There are no common standards across all the large size group of teachers who deliver the course. That creates anxieties to students who try to solve any problems arising by informal means and direct communication with the teachers or the study programme committee members.

Many of the staff members have no awareness and direction about existing processes regarding the quality standards.

The management of the programme relies on the subject descriptors as the main tool for quality assurance of the teaching process. The exhaustive level of detail of the descriptors (in certain cases they specify the exact time to be allocated to each topics to be taught) create frequently needs for modifications / adjustments through a process that is not clear to staff.

#### 6. Programme management

Decisions regarding the development, review and implementation of the *Management Information Systems* bachelor 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.

The chair of the Management Information Systems Study Programme Committee is prof. dr. R. Skyrius, an academic with long academic and professional experience, both in Lithuania and abroad, experience in management of academic activities and an active researcher. Other members of the Study Programme Committee include: assoc. prof. dr. O. Barčkutė, assoc. prof. dr. L. Gaižauskas, student representative Viktorija Kazakevičiūtė and a stakeholder G. Rumšas. The Study Programme Committee is accountable to the Faculty Council.

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).

Although there is a system for assessing 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.

Several shortcomings were identified during the discussion with teaching staff, students and graduates.

- Teachers enjoy academic freedom, but it seems that teaching staff has no clear idea about the decision making process and authority. For instance when asked about the management of changes in subject descriptors several answers were given ("senior staff can decide to make changes", "it is up to the chair", "it requires a study programme committee decision", "we first try to solve the problem informally").
- It seems that no effective mechanisms exist to ensure that student assessment is linked to LOs.
- Students also reported that their requests about changes "are treated positively by their teachers". The same view was confirmed by graduates who reported that "teachers were responsive to our requests".

The review team appreciates the responsiveness of the teachers and the management team to the student needs and is convinced that responses to any requests resulted in corrective action to the benefit of students' learning.

However with so many teachers involved in the delivery of the programme, and a large number of them coming from other departments (two-boss syndrome) an urgent need exists to formalize the processes of collecting feedback, managing student complaints, have regularly planned review meetings and a clear and transparent process for change management. Otherwise these informal processes may in the long term degenerate, loose their efficiency and functionality, and this should be avoided by all means.

The Economics Informatics department is one of the nine departments in the Faculty of Economics and as such a small entity (11 persons) within a large faculty (159 persons). The faculty focuses mainly on postgraduate programmes (15 programmes) rather than undergraduate ones (3). All of the 18 programmes except the *Management of Information Systems* and the *Strategic Management of Information Systems* at postgraduate level are on the mainstream of the Management field. Furthermore, doctoral studies at the Faculty are offered only in the areas of Economics as well as Management and Administration.

It is important therefore for the department of Economics Informatics to establish their own identity, mission policy, strategic plan and goals, a departmental culture that will provide them with a distinct identity.

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

The head of the department is an academic with long academic and professional experience, both in Lithuania and abroad, experience in management of academic activities and an active researcher. The managing team is in a position to apply professional and coherent management of the course, to integrate the teachers into a team and to improve the quality of teaching in the

programme. Reforms taken place during the implementation of the ESF funded project have generated a strong momentum which should be utilized.

#### Weaknesses

Weak control of the teaching and learning process, if continued, may harm the quality of the programme. The large size of a non-homogeneous teaching team require more formal processes in place

Most of the teaching staff is not aware about the need to have processes in place that will guarantee the quality of teaching and there will probably be a resistance to changes.

Lack of formal feedback mechanisms to students regarding their assessment results.

Little transparency regarding the rating of the teaching process by the students.

#### III. RECOMMENDATIONS

- 3.1. Build a strong identity for the BA Management Information Systems as a standalone programme that provides graduates with knowledge and skills for employability in jobs related to management information systems. To achieve that a crisp definition of aims and learning outcomes is required along with a restructure of the curriculum with less general education subjects and more emphasis to the business content of information systems.
- 3.2. Establish quality assurance processes that will be clear and transparent to all parties involved (administration, teaching staff and students) so that the recent reforms regarding the implementation of learning outcomes approaches in teaching and learning yield the expected benefits in quality improvements and enhancement of students learning.
- 3.3. Enrich the teaching staff with new members with recent industry experience in the field of information systems so that they can gradually replace older staff that approaches retirement age. Provide staff development actions that help to integrate the teaching staff (old and newer, management and informatics) so that students and stakeholders can feel that there is a team approach among all involved teaching staff.
- 3.4. 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.

#### 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. The programme committee is very keen in keeping the programme aligned with developments in the field and market needs. So far the programme attracts high calibre students.

The programme has gone through a major update in 2012 within the framework of the European Project *Updating of the First Cycle Study Programmes and Implementation of Innovative Methods at the Faculty of Economics of VU*. As a result teaching and learning became more alligned with EU and Bologna declaration standards and policies. As a side effect this exercise generated dynamics for further reforms within the department.

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 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.

A very enthusiastic core team of teachers with a very good mix of academic and professional skills that can lead necessary reforms, exists among the teaching staff. The involvement of practitioners from industry enhances the delivery of the programme in terms of the practical aspects of Management Information Systems.

The department has access to excellent facilities to support teaching and learning for its students.

#### Negative Aspects

There is an ambiguity and a lack of clarity in the aims and learning outcomes of the programme which are rather overambitious and overstated vis a vis the level of the programme, which are not served by the curriculum, which in any case needs to be reformed.

The programme lacks an international dimension although it aims in producing graduates to be employed in a much globalized field.

Large disparities and lack of cohesion among teachers. Besides the core team, a significant part of the staff remains unaware of the changes happened in the last reformation of the curriculum, seem not to comprehend the concept of learning outcomes, and do not share the same interest as the programme committee and the core team of teachers, regarding the development of the programme. Limited capacity in English Language for some of the staff is an additional barrier to their academic development in the field of information systems.

A curriculum with imbalanced workload for students among the semesters (ECTS credits reflect that) and large volume of electives, some of them irrelevant and not attractive to students, who are obliged to take them because of limited number of places in other more interesting elective subjects.

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.

Significant part of teaching staff is not aware about the need of formal quality assurance processes. 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.

A steep decline in number of applicants for the programme creates serious concern for its long term sustainability.

#### V. 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	2
2.	Curriculum design	2
3.	Teaching staff	2
4.	Facilities and learning resources	4
5.	Study process and students' performance assessment	2
6.	Programme management	2
	Total:	14

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

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

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

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

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

<...>

#### V. APIBENDRINAMASIS ĮVERTINIMAS

Vilniaus universiteto studijų programa *Vadybos informacinės sistemos* (valstybinis kodas – 612N20002) vertinama teigiamai.

Eil.	Vertinimo sritis	Srities
		įvertinimas,
Nr.		balais*
1.	Programos tikslai ir numatomi studijų rezultatai	2
2.	Programos sandara	2
3.	Personalas	2
4.	Materialieji ištekliai	4
5.	Studijų eiga ir jos vertinimas	2
6.	Programos vadyba	2
	Iš viso:	14

<sup>\* 1 -</sup> 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

#### Privalumai

Programa dėstoma prestižiniame universitete, o ją valdo studijų programos komitetas, kurio vienas pagrindinių tikslų – palaikyti aukštą programos kokybės lygį. Programos komitetas labai siekia, kad programa būtų nuolat tobulinama šioje srityje ir, kad ji atitiktų rinkos poreikius. Iki šiol programa pritraukdavo aukšto lygio studentus.

2012 m. programa buvo smarkiai atnaujinta pagal Europos Sąjungos projektą "VU Ekonomikos fakulteto I pakopos studijų programų atnaujinimas ir inovatyvių mokymo metodų diegimas". Dėl to, dėstymas ir mokymasis buvo labiau suderintas su ES ir Bolonijos deklaracijos standartais bei politika. Be to, šis atnaujinimas paskatino katedrą vykdyti tolesnes reformas.

Administracija pripažįsta, kad studijų rezultatai (SR) yra labai svarbūs, jie – tarsi kertinis akmuo tobulinant bei pristatant programą ir todėl labai stengėsi sukurti pagrindą būsimai plėtrai.

Sukurta stipri bakalauro ir magistro programų absolventų ir socialinių partnerių bendruomenė, dauguma socialinių partnerių taip pat yra absolventai arba absolventų darbdaviai, taip pat magistrantų bendruomenė, kurių dauguma yra bakalauro absolventai, o tai rodo didelį susidomėjimą programa. Ši grupė palaiko neformalius kontaktus su dėstytojais. Jie oficialiais ir neoficialiais kanalais keičiasi nuomonėmis apie rinkos poreikius bei studijų modelį ir teikimą. Šių partnerių noras skirti laiko ir duoti patarimų programos klausimais, rodo jų požiūrį į fakultetą ir į jo programų kokybę.

Čia dirbančių dėstytojų branduolys yra labai entuziastingas, vis jie turi įvairių gerų akademinių ir profesinių įgūdžių, kurie gali paskatinti būtinas reformas. Šioje srityje dirbančių specialistų įtraukimas į programą labai pagerina jos kokybę Vadybos informacinių sistemų praktiniu požiūriu. Katedrai prieinamos puikios patalpos, kuriose gali būti mokomi ir mokosi studentai.

#### Trūkumai

Programos tikslai ir studijų rezultatai yra dviprasmiški ir nevisai aiškūs, jie pernelyg ambicingi ir išpūsti atsižvelgiant į programos lygį, kuris studijų turinyje neatsispindi ir kurį reikia keisti.

Programai trūksta tarptautiškumo, nors jos tikslas – išleisti absolventus, kurie galėtų dirbti globaliose srityse.

Tarp dėstytojų pasireiškia ryškūs skirtumai ir jiems trūksta bendro ryšio. Be pagrindinės grupės, didelė dalis personalo nežino apie per paskutinį studijų turinio reformavimą įvestas naujoves, panašu, kad jie nesuvokia studijų rezultato koncepcijos ir neturi tokių pačių interesų dėl programos plėtros, kaip programos komitetas bei pagrindiniai grupės dėstytojai. Ribotos anglų kalbos žinios kai kuriems personalo nariams yra papildomas jų akademinio tobulėjimo trukdis informacinių sistemų srityje.

Studijų turinio darbo krūvis studentams tarp semestrų yra nesubalansuotas (tai atspindi ECTS kreditai) ir daug pasirenkamųjų dalykų, kai kurie iš jų nesusiję su studijų dalyku ir studentams nepatrauklūs, bet jie privalo tokius dalykus rinktis, nes kituose įdomesniuose pasirenkamuosiuose dalykuose jau nebėra vietų.

Studentų vertinimo procese trūksta skaidrumo: nepateikiami vertinimo kriterijai (puikus mokėjimas, išlaikyta, neišlaikyta), atsiliepimai apie užduotis raštu pateikiami tik šiam tikslui, tiesioginiai atsakymai į egzaminų klausimus nėra galimi, nėra sukurtas egzaminų klausimų keitimo procesas.

Didelė dalis dėstančiojo personalo nežino apie oficialių kokybės užtikrinimo procesų poreikį. Dėstymo ir mokymosi procesas daugiausiai paremtas neoficialia komunikacija ir iš dėstytojų, studentų bei socialinių partnerių gaunama informacija, o oficialus grįžtamasis ryšys ir sisteminiai apžvalgos mechanizmai praktiškai neegzistuoja.

Ryškus į programą stojančiųjų skaičiaus mažėjimas kelia rimtą rūpestį dėl jos ilgalaikio tvarumo.

#### III. REKOMENDACIJOS

- 3.1. Reiktų skurti aiškią Vadybos informacinių sistemų kaip savarankiškos programos bakalauro laipsnio tapatybę, kurią bestudijuodami absolventai įgijo žinių ir įgūdžių, reikalingų užimti su vadybos informacinėmis sistemomis susijusias pareigas. Tam pasiekti reikalingas glaustas tikslų ir studijų rezultatų apibūdinimas, taip pat ir studijų turinio restruktūrizavimas, taip, kad jame būtų mažiau bendrųjų ugdymo dalykų ir daugiau dėmesio skiriama informacinių sistemų verslo turiniui.
- 3.2. Reiktų nustatyti visoms susijusioms šalims (administracijai, dėstančiam personalui ir studentams) aiškius ir skaidrius kokybės užtikrinimo procesus, tam, kad naujausios su studijų rezultatų įgyvendinimu susijusios reformos pasiektų laukiamų tikslų dėl kokybės gerinimo ir studentų mokymosi gerinimo.
- 3.3. Reiktų įdarbinti naujų dėstytojų, turinčių naujausios patirties šioje informacinių sistemų srityje, tam, kad palaipsniui jie galėtų pakeisti vyresnius personalo atstovus, šiems pasiekus pensinį amžių. Reiktų pristatyti personalo tobulinimo veiksmus, kurie padėtų integruoti dėstantįjį personalą (senai dirbantį ir naują, vadovus ir informatikos specialistus), kad studentai ir socialiniai dalininkai suprastų, kad visas susijęs dėstantysis personalas dirba kaip viena grupė.
- 3.4. Reiktų kreipti daugiau dėmesio į tarptautinį studijų dalyko lygmenį ir užmegzti bendradarbiavimą su panašiomis programomis kitose Europos studijų ir mokslinių tyrimų srityse, įgyvendinti tarptautines dėstytojų ir studentų mainų programas, dėstymo modulius anglų kalba, kviesti dėstytojus iš užsienio ir kt., kad studentai įgautų tarptautinio mokymosi patirties.

<...>