**EXAMPLES OF EVALUATION OF LEARNING OUTCOMES BY EXPERT PANELS
(Extracts from Final Reports and Self-evaluation reports)**

**EXAMPLE 1**

**EXTRACT FROM EXPERTS` JOINT ASSESSMENT REPORT:**

*“The Experts Team’s analysis of the subject-specific competences and learning outcomes indicates that the programmes aims and* ***learning outcomes are consistent with the type and level of studies and the level of qualifications offered****, and that the names of most programmes, their learning outcomes, content and the qualifications offered are compatible with one another. However, our discussions with staff and students revealed that the Common European Framework of reference for Languages: Learning, Teaching, Assesment is not obvious and should be taken into account when designing and assessing language courses. See CEFR http://www.coe.int/t/dglinguistics/source/framework\_en.pdf Its implementation has several advantages: comparability across different languages taught, support for teachers in planning their lessons, as self-assessment tool for students, and detailed criteria for assessment. Although the* ***Team is satisfied that internal discussions and actions do take place****, the channels and parameters of improvement measures should be formalised and more visible.”*

**EXAMPLE 2**

**EXTRACT FROM EXPERTS` JOINT ASSESSMENT REPORT:**

 *“The expert team evaluates this element as insufficient on different levels:*

 *- As mentioned, on the masters level, students from different bachelors come together,* ***without a clear differentiation between the competences which need to be present to start the master program****.*

*- There can be a combination of students of the different level programs in joint lectures. Although this could be fruitful, for instance because of the interaction between the students, the goal of bringing these students together is not always clear and these joint lectures hold the risk of leading to unclear objectives of the programs.*

*- The expert team evaluates that the* ***admission criteria are clear, but it seems that they are not used properly, in the master level study program*** *… All study course descriptions include predetermined requirements that need to be fulfilled to pass the study courses. Attendance is usually one of the criteria, however* ***the expert team would strongly suggest to revise this requirement as it does not prove achievement of any of intended learning outcomes mentioned in the curricula****.”*

**EXAMPLE 3**

**EXTRACT FROM EXPERTS` JOINT ASSESSMENT REPORT:**

*“The HEI has* ***set too much learning outcomes****. In addition, the learning outcomes vary in different sections of course descriptions (there are three different sections in course descriptions, where the learning outcomes of the subject are mentioned, but those are different in some cases and are not in coherence with the aim and title of the subject, eg. subject “Quality Management in Business” in Russian (unfortunately the descriptions in English and in Russian do not match and the description in Latvian is missing at all)). Thus, it is difficult to comply with all of them.* ***Many learning outcomes are too broad and do not describe the intended results of the subject.*** *Too much learning outcomes contains such terms as know, understand, be familiar, and have a good understanding. These learning outcomes are vague and accordingly often not observable or measurable. In addition, they reflect low level of cognitive skills. Students who intend to obtain first level higher education should according to qualification framework also demonstrate higher level of competence (analyse, characterize, categorize, compare, differentiate etc.)”*

**EXAMPLE 4**

**EXTRACT FORM SELF-ASSESSMENT REPORT OF HIGHER EDUCATION INSTITUTION**:

*“In the planning process of outcomes of study programmes, we have introduced formulation of learning outcomes from the view point of student, thus determining a student’s knowledge and skills after successful acquirement of the particular study course and study programme. Description of each study course contains 3-6 learning outcomes to be achieved, formulated by the developer of the course. Combination of these learning outcomes from all acquired courses characterizes actual learning outcome of the studies of every successful student.*

***Intended learning outcomes of the study programme***

*Pursuant to the Cabinet Regulations No. 990 “On Classification of Education of Latvia” (adopted on 2.12.2008), after successful completion of the bachelor’s programme Computer Science, holder of the bachelor’s degree must show the knowledge, skills and competences complying with the EQF 6th level:*

*1)Knowledge (knowledge and understanding): Graduates of the programme are able to show the basic and specialized knowledge characteristic to the respective field of science or occupation, as well as critical understanding of this knowledge; furthermore, part of the knowledge complies with the level of highest achievements of the respective field of science or occupation; graduates are able to show understanding of the most important concepts and regularities of the respective field of science or professional area.*

*2) Skills (knowledge application skills, communication, general skills): With the acquired theoretical basics and skills graduates of the programme are able to perform professional, artistic, innovative or researching activities, formulate and analytically describe information problems and solutions of their field of science or occupation, explain these problems and solutions and discuss in a well-argued fashion thereon both with specialists and non-specialists; they are able to structure their studies independently, direct further studies and professional improvement of their own and their subordinates, show scientific approach to the solution of problems, undertake responsibility and initiative, when performing the work individually, in a team or managing work of other people, adopt decisions and find creative solutions under changing or unclear circumstances.*

*3) Competence (analysis, synthesis, assessment): Graduates of the programme are able to gain, select and analyse information independently and use it, adopt decisions and resolve problems in the respective field of science or occupation, show the understanding of professional ethics, assess impact of their professional activity on the environment and society and participate in the development of the respective professional area. These requirements for the learning outcomes are detailed in the document “Framework Standards and Accreditation Criteria for Informatics Programmes”, approved by the organization “European Quality Assurance Network for Informatics Education” (EQANIE). Each description of study course indicates, which knowledge, skills and other competences specified in the document are promoted by the respective course.*

***General assessment principles:***

*Learning outcomes of the study programmes are assessed pursuant to the by-laws approved by the HEI Senate. Every teacher is obliged to define accurately his/her requirements and assessment criteria in the introductory lecture of the course. Requirements for successful passing of course and assessment criteria have been defined also in the descriptions of study courses available in internal system; requirements and assessment form a part of the description of course.*

*Depending on the specific character of the course, teachers of the Faculty of Computing widely apply the allowed freedoms in assessment of learning outcomes. Four key variants of the assessment of learning outcomes can be found:*

*1) “short” tests on the topics discussed in lectures are organized on regular basis; outcomes affect the final assessment.*

*2) 1-2 “long” tests are organized, forming a part, for example, 10% of the final assessment.;*

*3) 2-4 works for independent solution are assigned during the semester, and later students submit these works to the teacher for corrections; quality of solution and periodofexecutionaffectthefinalassessmentinsofarasspecifiedinthedescriptionof the course;*

*4) Student or a group of students independently develops an information system project, implements it and presents by the computer, demonstrating their system to the teacher or commission. (Assessment of the project accounts for (for example, in the course Software engineering) 50% of the final assessment.)*

**EXTRACT FROM EXPERTS` JOINT ASSESSMENT REPORT:**

*“The mechanism for the development and approval of study programmes is divided in three parts – development and evaluation of the concept of study programme, development of study programme, evaluation and approval of study programme.*

*Study programmes are developed on the basis of the Law on Institutions of Higher Education, the Law on Professional Education, the State Standard for Higher Education, Regulations on Study Programme Licensing, and the Regulations on UL study programmes, and are harmonized with the definition of higher education goals by the Council of Europe and the UL strategic plan for 2010-2020. The goals of each specific study programme include the achievement of a set of knowledge, skills and competence in accordance with the description of same issues in the relevant European Qualification Framework. Study courses are tailored to collectively fulfil these goals. At faculty level study programmes are evaluated by employers, but at university level by external experts. Students are involved at all levels. While the procedure for development and approval of a programme is defined and implemented, a continuous monitoring is not fully implemented and the number of students following a subprogramme is not analysed.*

*The description of the study programme clearly reveals the overlap between study programme learning outcomes and study course learning outcomes. The study programme includes many course of mathematics which was positively evaluated by the employers whose activities are related with research. It was also noted that mathematics allows adjusting flexibly to changing conditions in the labour market and acquiring any programming language. On the other hand, some employers, noted that it would be necessary to intensify training of programming languages. All employers were satisfied with the quality of students' qualifications.”*

**EXAMPLE 5**

**EXTRACT FORM SELF-ASSESSMENT REPORT OF HIGHER EDUCATION INSTITUTION – how employers evaluate whether graduates have achieved learning outcomes**

***“Assessment of graduates of bachelor level study programmes:***

*By contrast, the most wide range of assessment is provided for graduates’ ability to use the theoretical foundations and skills, to perform professional, innovative or research activity, to formulate and analytically describe the information, problems and solutions in their field of science or profession, to explain them and have reasoned debate on them both with specialists and with other stakeholders****. 73% of employers have recognized that these learning outcomes have been fully reached or rather reached, but 27% of employers indicate that these results were rather not reached****. In our [HEI] opinion this is* ***due to insufficient practical experience****. While most of the graduates already during studies work in the chosen profession, it cannot be attributed to all. Therefore, insufficient work experience prevents from full demonstration of the spectrum of all these learning outcomes.*

*5% of employers indicate that the outcome has rather not been reached in the ability to independently acquire, select and analyse information and to use it, to make decisions and solve problems in the relevant field of science or profession, to show that* ***they understand professional ethics, assess influence of their professional activity on the environment and society and to participate in the development of the professional field.*** *That assessment was provided by one employer, he also pointed out that this is connected with the graduate’s insecurity. Otherwise, this* ***particular employer characterized the graduate as a responsible, interested in the profession, with sufficient mastery of theoretical knowledge and practical skills****.”*

**EXAMPLE 6**

**Extract from Expert report on how to evaluate learning outcomes:**

*The key objective of the Creative and Cultural Industries (hereafter CCI) programme (see page 7, SER) is to train highly qualified professionals of creative and cultural industry with the worldview and professional thinking focused on the needs of creative society (SER, p. 7). The SER also lists specific objectives, such as the development of a creative society, promoting smart growth of the economy, promoting the integration growth of economy, seeking sustainable development, and development of skills for permanent education by providing the latest scientific, artistic, cultural, technological and methodological knowledge, developing understanding, building abilities and skills (p. 7).*

*The Review Team (hereafter RT) believes that the objectives of the programme are rather ambitious (development of a creative society, … promoting smart growth of the economy … promoting the integration growth of economy) and formulated at a very high abstraction level (integral scientific, artistic, and technological knowledge … knowledge allowing the development of the creative economy … realities of the knowledge society … socio-cultural interoperability … integrated cultural and creative methods of communication and commercialisation … the latest scientific, artistic, cultural, technological knowledge).*

*The RT believes that the objectives that are listed in the SER most probably make sense in light of the current needs of the industry and society in Lithuania and Europe, but that the general and abstract level at which these objectives are formulated makes it rather problematic, if not impossible, to judge to what extent the programme and the graduates fulfil these objectives. The RT is of the opinion that it is necessary to concretize the objectives and to confine the scope of the objectives in order to make them manageable and feasible. The myriad of aims seems to obscure the true core of the programme such that external observers (or prospective students, or prospective employers of the programme’s alumni) might be confused as to what the core of the programme’s contribution is to the academic and professional development of the students. The RT therefore advises to align the key objective more to the actual study fields that are most prominent in the programme.*

*Table 3 in the SER (p. 8 and 9) describes the links between the objectives and the 12 learning outcomes of the study programme. The SER also details the relationships between the learning outcomes of the programme, the learning outcomes of each study subject (‘results of the study subject’), and assessment of the students in each subject (Annex 1). The programme aims and learning outcomes are publicly accessible. The RT is positive about this systematic approach underlying the programme.*

*The RT is of the opinion that the programme aims and learning outcomes are based on the academic and professional requirements, public needs and the needs of the labour market. The SER refers to the EU strategic documents which ‘highlight the mobilisation of scientific, business, political and society potential for the enhancement of creative and cultural industry activities’ (p.6). The European growth strategy “Europe 2020“ presents culture as a fundamental value, and as the cornerstone and the horizontal priority for the development of other activities.*

*CCI is based on the European model that is officially termed as Creative and Cultural Industries in the European Union (*[*http://ec.europa.eu/europe2020/index\_en.htm*](http://ec.europa.eu/europe2020/index_en.htm)*). The title of the programme reflects this. Programme aims and learning outcomes are formulated at bachelor’s level and focus on various aspects of creative and cultural communication, and are therefore consistent with the type and level of studies and the level of qualifications offered. The programme aims, learning outcomes and content of the study subjects all focus on creative and cultural communication and are systematically and explicitly related to each other. The RT is of the opinion that learning outcomes, content and the qualifications offered are compatible with each other.*

*The RT is not convinced that the programme aims and especially the learning outcomes are ‘well defined’ and clear. Programme aims and learning outcomes (of programme and study subjects) are formulated on a very general and abstract level which makes it difficult to judge them and to assess to what extent these different elements correspond. For example, the intended study results of the course ‘Creative and cultural industry studies’ are aimed at learning outcome 1.1 (‘Students must have the latest scientific, artistic, cultural and technological knowledge in the field of creative and cultural industries’). The intended results of this course include: (1) students will know: context of creative and cultural industries, political documents, operating principles, and economic experience of the world economy of culture; (2) Students will be able to: full analysis of the added value generated by creative and cultural industries and their relationship with other industries; (3) students will be able to: independently and as a team to organise projects of creative and cultural industries using scientific, artistic, cultural and technological knowledge in the field of creative and cultural industries (see Annex 1, SER). It is not (made) clear how these intended study results contribute to this specific learning outcome.*

*The RT suggests to define the learning outcomes more specific and measurable and to relate the learning outcomes of the programme and the intended results of the study subjects more clearly and directly. That would make it possible that they really guide the development and evaluation of the programme. At the same time, in further evaluating the programme internally and communicating about the programme, the RT has the opinion that an international comparative perspective might be wise.*

**EXAMPLE 7**

**Extract from Expert report:**

*The aim of the Programme is to train graduates with broad basic competences in environmental engineering. The Programme objectives are defined in terms of four expected competences of graduates (SER, p. 19):*

1. *broad basic competences based on mathematics, natural sciences and engineering principles;*
2. *capability to integrate perspectives of social sciences and humanities in the context of complex environmental issues;*
3. *ability to analyse and design relevant solutions for environmental problems;*
4. *ability to maintain professional competence throughout his/her life-long learning.*

*The Programme aim and objectives are clear and well defined, and are broadly in-line with the institution’s strategy and also the vision of the Faculty of Chemical Technology. Whilst objectives (1), (2) and (3) can be evaluated and verified by comparing the Programme structure, expected learning outcomes (LOs), subject contents, and assessment methods, objective (4) is difficult to ascertain. It may be more prudent to devise and define a set of essential skills, if attained, would enable the graduates to carry out life-long learning on their own.*

*As revealed from the survey on the market needs and employability of graduates conducted by the SER team, and from the interviews with the students and the social partners, the Programme meets the labour market needs. The Programme graduates may either start their career according to the obtained qualification or continue their studies on Master’s level.*

*The Programme fulfils relevant academic and professional requirements. However, the name of the Programme, its LOs, the content and the qualifications offered are only partially compatible with each other since one of the basic area of environmental issues, the soil component, is missing. The graduates of the Programme are expected to have knowledge in waste water treatment, waste management, reduction of gaseous emission exhausts, but also a strong core in general (process, mechanical, electrical and construction) engineering. This provides prerequisites for successful professional carrier as well as work in a team (SER, p. 21). After a detailed examination of the curriculum and the subject courses offered, the expert team revealed that although water environment and air environment are covered adequately, the same cannot be said for the soil. There is an element of soil under the course of “Treatment of Polluted Sites”, but this is deemed insufficient. The task of an environmental engineer is not simply preventing pollution but also remediating polluted sites, that can be air, water or the solid phase (soil, rock). Success of any remediation can be judged only by having a clear understanding on the natural (original) status that needs knowledge of this status. For this reason, students must also gain knowledge on soil (formation, types, structure, properties). Therefore, the expert team strongly recommends revising the Programme assuring balanced coverage of all three basic elements of environment – air, water and soil.*

*The learning outcomes (LOs) of the Programme are formulated according to the EUR-ACE Framework Standards for the Accreditation of Engineering Programmes with respect to the first cycle programmes, and referring to the environmental engineering context. The 18 LOs are grouped into five categories: knowledge and understanding, engineering analysis, engineering design, investigation, engineering practice and transferable skills.*

*An important aspect needing revision is linking the Programme LOs with subjects. The tendency is to cover all the Programme LOs with maximum number of subjects, while having forgotten that all these LOs need to be assessed properly. In the subject descriptions (52 altogether) LOs are listed in detail, but teaching and assessment methods are almost or exactly the same for different LOs. This indicates that the LOs are not incorporated intrinsically at subject level.*

*This is particularly true in the coverage of Engineering Design LOs C1, C2 and C3. For example, C1 “has the ability to apply their knowledge and understanding to develop and realise designs to meet defined and environmental requirements”; in a three credit subject “Building and Engineering Structures” with LO No.4 “Ability to solve design tasks in the field of civil engineering, to collect, analyse and evaluate data necessary for the design of structures and constructions, to choose adequate solutions“ is covered by individual practical exercise. Moreover, this three credit subject has 10 LOs, which is unrealistic to achieve and assess.*

*Another example of inappropriate relation between the Programme LOs and subject description is the Final Degree Project. It has the aim “to acquire knowledge and practical skills in solving particular engineering tasks in the speciality related engineering systems, as well as in providing theoretical background to these decisions”. The aim and four LOs of the Final Degree Project are not contextualised, i.e. are irrelevant of the Environmental Engineering context. At the same time they are declared to cover all 18 LOs of the Programme, which is unrealistic, especially taking into account that all this has to be assessed.*

*The above issues point towards the need to take a constructive alignment approach in designing the Programme aims and expected LOs, subject LOs, delivery mode, and students’ assessment. Starting from 1 September 2016 the Programme design should follow the requirements of General Regulation of Technological Sciences (Engineering) Study Field with six categories of LOs compatible with the EUR-ACE structure. The expert team recommends review the Programme aim and LOs following the principle of constructive alignment.*

**EXAMPLE 8**

**Extract from Expert report:**

*According to the SER the study programme “trains a qualified teacher/counsellor for work with children”. On the university website, this is expressed somewhat differently. On the website it is stated that the programme aims at training “family and child pedagogues/counsellors” and at the same time prepares students for third cycle level studies. These differences in descriptions highlight the lack of clarity surrounding this programme. No real clarifications of what constitutes the object of enquiry for educology, how this is integrated in the programme or what differentiates educology from education and/or pedagogy, were provided during meetings with staff during the visit of the evaluation team. Neither was the question clarified regarding what these students will actually be able to do after completion of their studies and how these graduates would differ from, for example, a social pedagogue. The use of the word “counsellor” is especially problematic since the amount of ECTS credits included in the programme concerning counselling is very unsatisfactory for developing the knowledge and skills of a professional counsellor. These are among the main problems associated with this programme. In addition, the name of the programme appears to give the impression of higher legal qualifications than are actually provided in the programme.*

*One of the key “Action Lines” of the Bologna Process is the adoption of a system of easily readable and comparable degrees, i.e. it should be clear to anybody reading a description of the degree programme what are the aims and learning outcomes of the programme. This description should be clearly understood by staff, students, external evaluators, social partners, etc. Hence there is a need for simplicity and clarity. From reading the documentation supplied in the Self Assessment Report, it is not clear what the programme aims and learning outcomes are since, instead of listing the aims and learning outcomes, a list of competencies are provided., i.e. General competencies, Instrumental, Interpersonal and Systemic competencies, and Professional competencies, Educational, Research, Communication with Family, Protection of child rights and Family and child counselling competencies. Apparently these are derived from a Tuning project and although they contain substantial wording, they do not completely mirror the knowledge forms of The Lithuanian descriptors of study cycles V-2212 from Nov 2011; Knowledge & its application, Research skills, Special abilities, Social abilities and Personal abilities. Since the Lithuanian descriptors are the official descriptors these should be followed. There appears to be a lot of confusion between the terms Aims, Learning Outcomes, Competences, etc in the documentation. When writing the aims of the programme the evaluation team would expect to find sentences such as:*

* *To give students an understanding of …….*
* *To give students an appreciation of……*
* *To make students familiar with……..*
* *To encourage students to…..*
* *To ensure that students know…….*

*etc.*

*Similarly, the Programme Learning Outcomes as written in the Self Evaluation Report did not assist the evaluation team in clarifying what students should be able to do on graduating from the programme, e.g. “to conceptualise with the help of different means of communication in different situations of social life…”. What must students be able to DO in order to demonstrate that they have achieved this? Hence, in writing learning outcomes, it is important to use active verbs, e.g.*

* *To* ***assess*** *the level of behavioural problems…..*
* *To* ***work*** *as part of a multi disciplinary team of professional in ....*
* *To* ***liaise*** *with other professionals in the area of …..*
* *To* ***analyse*** *case studies of families that are ……..*

*etc.*

*There is also a problem with the formulation of module learning outcomes which are commonly written in terms of competences rather than as learning outcomes.*

*When it comes to labour market needs and employability aspects, the SER describes these needs well but as already mentioned, the kind of positions for which these student can apply and also compete for with other graduates is unclear.*

*Information about the programme is available on the KU website. Sometimes the programme information is in fact presented in a clearer way than in the SER document. However, when describing the profile of the programme certain claims are made, e.g. “graduates will be prepared to...solve effectively their (children and families) educational, psychological, legal and social problems” are given. These claims are not realistic and can be misleading for both students and employers, e.g. the programme does not contain any psychology modules.*

**EXAMPLE 4**

**Extract from Expert report:**

*The programme objectives are defined as: “Informatics is to train qualified future researchers, teachers of informatics-related study subjects, specialists in informatics, who are able to respond to rapid technological changes and relevant contemporary problems, to independently conduct analytical-applied research, to design and develop software, to supervise groups of its development as well as to manage information technology divisions in institutions”. In short the purpose of the Study Programme is to train general specialists in informatics that are able to work with all phases or the software lifecycle. Such goal clearly corresponds to the state, societal and labour market needs.*

*Moreover, there is also an element of teacher training in the aims, namely “to train … teachers of informatics-related study subjects”. Hence, the Study Programme has a unique profile in the Lithuanian higher education landscape and can be seen as corresponding to the mission of the Institution.*

 *During the site visit the different groups interviewed appeared to have different opinions about the importance of this educational component. The management and administrative staff placed little importance on the educational element, while the staff responsible for preparing the SER emphasized that the University has an educational and teacher training profile and that this is represented in the learning outcomes and curriculum. The aims are thus quite ambitious given the scope of the programme as it seems a tall order to produce graduates who can both fulfil the roles of IT-teachers and IT-specialists within the same Study Programme. One could argue that the University would benefit from pursuing one of these directions in depth instead of making a shallow hybrid mixture, that is, either educate highly qualified IT-specialists, or offer a unique study programme completely dedicated to IT-teacher training.*

*The learning outcomes can be viewed as statements that allow students, employers, other HEIs and other stakeholders get a clear understanding of what the Study Programme entails. However, some of the learning outcomes appear too generic and too close to the generic learning outcomes for the second cycle. For example, learning outcome 1.2 reads “A graduate has the ability to apply the obtained knowledge formulating, analysing and solving problems of various areas of informatics in a new or unfamiliar environment, conducting scientific research and fostering innovations and, thus, contributing to further development of informatics”. This formulation does not answer the questions to what the “obtained knowledge” is, and, what the “various areas of informatics” are. Moreover, it is unclear what “to further development of informatics” actually entail. Is it the development of local companies IT-systems, or the informatics research field. Informatics is a large field and the learning outcomes should reflect the local angle and specialisation within the large area of informatics that are taught in this Study Programme. Examples of various angles include enterprise system development, embedded development, mobile development, scientific computing, user centric systems, etc. A master specialisation in informatics should cover a few such areas, but it is unrealistic to cover all such areas. It should be clear from the learning outcomes what type of informatics specialists the graduates become.*

*Moreover, learning outcome 1.1 read “A graduate will acquire knowledge of fundamental subjects of informatics and most progressive information technologies that is necessary for second cycle studies” is only making a reference to second cycle without explaining what it means. Most readers will not be familiar with the general second cycle descriptors and such references are thus not very helpful. Also there are a number of ways to satisfy the learning outcome requirements for second cycle studies, but without explicitly describing how this is done, the statement appears uncommitted. According to the staff responsible for preparing the SER this learning outcome is meant to give students the necessary knowledge to study at the master programme, that is “that is necessary for second cycle studies”. If this is so the learning outcome is actually specifying bachelor level contents and indicates that students do not have the prerequisites to be admitted to a master programme in informatics.*

*Information about the study programme is available on the University website. The programme is presented through the various courses and seemingly not according to learning outcomes.*

*There is a high demand for informatics specialists in the Lithuanian job market as well as in the global job market. The Study Programme in Informatics therefore meets a demand in society and statistics referred to in the SER demonstrates high employment rates among graduates. Furthermore, in addition to be a general informatics programme the Informatics Study Programme also fills a niche market of informatics specialists that are employed in the education system as educators and teachers at various levels from primary school up to university. This is captures in learning outcome 3.3, namely “A graduate is able to convey the obtained knowledge to learners designing and implementing contemporary technology-based studies”.*

*The programme objectives and intended learning outcomes corresponds well with related master-level informatics study programmes internationally. The learning outcomes correspond satisfactory to the general descriptors for second cycle studies with more focus on updated knowledge in informatics and independent problem solving than what is expected from first cycle studies. Moreover, the learning objectives also include academic requirements in addition to professional software development requirement, namely graduates ability plan and carry out research and their ability to disseminate information to relevant groups.*

*The Study Programme title, Informatics, is general and highly suitable and descriptive for this type of study. This title is highly consistent with the learning outcomes and the contents. Although the title is general and generic, the content is updated and current. This is demonstrated though courses such as Cloud Computing, Big Data Mining, Information Security and Human and Computer Interaction which reflects recent technological paradigms and practices in the area of informatics.*