

ASSESSMENT REPORT**Institution:** Eesti Infotehnoloogia Kõledž (*The Estonian Information Technology College*)**Assessment committee:**

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Coordinator: Ms Maiki Udam**Dates of the assessment visit:** 16-17.04.2013**Component assessment (mark with 'X'):**

	conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
Organisational management and performance	x			
Teaching and learning	x			
RDC	x			

Service to society	x			
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Comments: The Estonian Information Technology College (ITC, the College) is a private College, owned and administered by the Estonian Information Technology Foundation (EITF). The College's **Mission** is to provide the best applied IT education in the region, combining high-tech know-how and the practical needs of the information society. The College's **Vision** for 2020 is to be a provider of professional higher education and in-service training in the field of information and communications technology (ICT), and a conductor of applied research to support instruction, which also meets the requirements of an information society and has an international reputation. The Assessment committee found that the College is making significant efforts to achieve its Mission and Vision and is in many respects successful. It provides an innovative curriculum which helps to prepare students for the workplace and encourages a supply of competitive graduates. It enjoys a high reputation amongst its stakeholders and has excellent connections with the business and industry communities. It capitalises on these links to improve the curriculum and the student learning environment. Students have a good learning experience, appreciate the quality of their teaching, and feel well-supported. Drop-out rates are lower than the average for similar institutions. Contribution and service to society is enthusiastic and includes diverse activity related to the mission of the College. The main development areas for the College relate to its committee and management structure, which is very flat and relatively informal; to its strategy for encouraging mobility amongst students; and to a clearer articulation of its RDC activities.

The Committee wishes to thank ITC for its co-operation during the site visit and in preparing a helpful self-assessment report.

Commendations:

1. The College is commended on the management and upkeep of its facilities (Section 1.3)
2. The College is commended on its planning and provision for students with disability (2.1)
3. The College is commended on the innovative design of its curriculum and its effectiveness in producing competitive graduates (Section 2.2).
4. The College is commended on the technical and educational technology resources available to students, in particular the Study Information System (SIS) (Section 2.4).

Worthy of Recognition:

The comprehensive approach to ensuring effectiveness of teaching and learning is thought to be worth of recognition in the College.

Recommendations:

1. The College should consider whether if it grows further, and in a time of change, a slightly more formal committee (deliberative) structure is necessary. For example, the Rector's management could be supported by further levels (for example a College Management Board, or formal Executive Committee) (Section 1.1)
2. The College may wish to consider whether a more formalised reporting structure might be necessary to ensure that programme development continues to take place in a coherent and timely fashion (Section 2.2)
3. In drawing up its new Development Plan the College should consult widely on the purposes of internationalisation and student mobility and provide strategies for encouraging internationalisation of the student body which are appropriate to its own mission and circumstances (Section 2.4)
4. The College should clearly define which activities fall under the RDC category, set explicit objectives in the Development Plan and Activity Plan correspondingly, define adequate indicators and then regularly measure them. All information concerning RDC activities should be disseminated among all staff members and stakeholders (Section 3.1)

Assessment committee sent the preliminary report to EKKA: 17/05/2013

Assessment committee received the comments of the institution under accreditation: 05/06/2013

Assessment committee approved the final version of component assessment with 5 votes in favour and 0 votes against.

Date: 07/06/2013

Assessment of sub-areas:

1 ORGANISATIONAL MANAGEMENT AND PERFORMANCE
<p>General comments:</p> <p>The Assessment committee found that all the requirements in this area are substantially met and the area conforms to requirements. The Assessment committee identified one commendation and one recommendation in this area. The College has defined its Mission and role in Estonian society clearly and enjoys a high reputation amongst its stake-holders. There is a Development Plan based on the Mission and activity plans and these are monitored. The Assessment committee commends the College on the upkeep of its facilities.</p> <p>The College has a very flat hierarchy and streamlined committee system and the Assessment committee recommends that the College explores whether a slightly more formalised structure is necessary. In common with other institutions in Estonia the future government funding system is not clear beyond 2016 and this presents some uncertainty to the College. However, the Assessment committee considers that the risks are being managed as well as possible given the information available.</p>

1.1 General management	conforms to requirements	x	partially conforms to requirements	does not conform to requirements	worthy of recognition
<p>Requirements:</p> <p><i>A higher education institution has defined its role in the Estonian society.</i></p> <p><i>The development plan and the related action plans of a higher education institution arise from the concrete purposes that are built on its mission, vision and core values, and that consider the country's priorities and society's expectations.</i></p> <p><i>Key results of a higher education institution have been defined.</i></p> <p><i>The leadership of a higher education institution conducts the preparation and implementation of development and action plans and includes the members and other stakeholders in this work.</i></p> <p><i>Liability at all management levels has been defined and described, and it supports the achievement of institutional purposes and the coherent performance of core processes.</i></p> <p><i>Internal and external communications of a higher education institution (including marketing and image building) are purposeful and managed.</i></p>					
<p>The Estonian Information Technology College (ITC, the College) is a private College, owned and administered by the Estonian Information</p>					

Technology Foundation (EITF). EITF was founded in 2000 by the Ministry of Education, the University of Tartu, Tallinn University of Technology, AS Eesti Telekom and NPO Estonian Computer Association. The EITF also oversees the Estonian e-Learning Development Centre (supporting and developing activities regarding e-learning in higher education and vocational education), administers the IT Academy, ICT programs, and the Tiger University — an ICT-related support programme addressed to universities. The EITF coordinates the development and administration of the Admissions Information System of Estonian educational institutions (SAIS) and the Study Information System of professional higher education institutions (SIS). The EITF Management Board consists of four members including the rector of the College.

The Self-evaluation Report (SER) records that as at 10 November 2012 there were 882 students (including 123 students on academic leave); 62 external students; and 6 visiting students); there were 31 employees, including 12 members of teaching staff.

In its SER the College notes that its Mission is 'to provide the best applied IT education in the region, combining high-tech know-how and the practical needs of the information society'. Its key role is preparing IT specialists and labour market-oriented opportunities for life-long learning. The current Development Plan for 2011-14 is based on this Mission. The College indicates that a set of aggregate indicators, defining key results, has been part of the College development plan since 2010.

The Assessment committee found that the College has established a distinctive position and role in the Estonian High Education (HE) landscape, based on its Mission and the needs of Estonian society. The Assessment committee was told that development of the curriculum is supported by cooperation with IT industry representatives in the Estonian Qualification Authority and via other networks. To satisfy the overall ITC labor supply increase needed in the future, the IT College, with other HE institutions, focuses on developing its facilities and cooperation with other partners (such as Tallinn Technical University, Estonian Association of Information Technology and Telecommunications (ITL) member companies, etc.). The Assessment committee heard various views about whether the College was in competition with other IT institutes/departments, but on the whole the Assessment committee was given the impression that mainly the relationship with other institutions and government was cooperative, and that a small amount of competition with other providers was considered healthy.

The College is highly regarded by its stake-holders. The EITF Supervisory Board members and representatives of different IT industry, all expressed direct interest and support of the College's development. The Assessment committee heard from the different stake-holders that the College differentiates itself from other Estonian HE entities by focusing on the management and development of both Information and Communication Technology (ICT) and Services. The practical emphasis of its programmes is also distinctive. Graduates and employers' representatives told the Assessment committee that the emphasis on practical training is very valuable in preparing students for the workplace. Students told the Assessment committee that the College was student-friendly and that lecturers were interested in students' success. Employers said that they were very satisfied with the quality of ITC graduates.

The Assessment committee found that the College's main goals, strategic development objectives, Key indicators and measures are all defined and accompany the Development Plan. The Plan has five main goals which are spread across four sectors of College activity. The goals cover areas such as internationalization, co-operation with partners, study programmes, student numbers and staff and organizational culture. An annual Activity Plan lists the objectives of the Development Plan together with areas of the College involved in achieving the objectives, indicators and targets. However, it was not always apparent to the Assessment committee that much research had gone into choosing the indicators or the value of the indicators and whether they are the most appropriate ones. Although the Assessment committee heard that the Plan was a 'living document' and 'not set in stone', there seems to be little flexibility within the planning system for changing indicators which are no longer appropriate or have been exceeded, such as number of undergraduate students, and number of further education students. It was not clear either how the consolidated indicators mapped directly with the main goals of the Plan. The preparation of the plan begins with the Rector of the College and the Assessment committee heard that others are consulted, but it was not clear how widespread consultation was, nor how well published the plan and indicators was in the College. There is a document which sets out the process for updating of the Development Plan and preparation of action plans.

The College has a flat management hierarchy and a very streamlined committee structure. The Statutes require a College Council and an Advisory Board to the Council. In addition, the SER mentions a Curriculum Council and a Student Council. All business of the College is dealt with by these bodies. The flat structure was explained by the College management and Foundation Supervisory and Management Board members as the optimal structure for management of a small organisation. It gives flexibility to react to the changes in the IT industry and labour market developments in Estonia. However, the Assessment committee noted that reporting within the structure does not seem to be very formalized and may not provide sufficient opportunities for detailed debate about major issues. The Assessment committee **recommends that the College should consider whether if it grows further, and in a time of change, a slightly more formal committee (deliberative) structure is necessary. For example, the Rector's management could be supported by further levels (for example a College Management Board, or formal Executive Committee).**

The College's management team supports and leads the improvement of processes and achievement of institutional purposes. The Assessment committee found that liability at all management levels is defined and documented. The responsibilities of the Rector and Vice-Rector are set out in the Statutes. For management process development and quality improvement, in the 2010-2011 academic year, the College participated in a quality assessment project based on the EFQM Excellence Model (European Foundation for Quality Management). Organizational processes, such admissions and graduations are reviewed on regular bases.

Internal and external communication of College is well established and generally covers all stakeholders. For internal communication of everyday activities and long term objectives mostly electronic channels, such e-mail (e-mail groups) and internal applications are used on a regular basis. Every day management and internal/external communication is supported by technological innovations such as video conferencing capabilities

(Skype), a simple and user friendly Study Information System (SIS) and other applications. The SIS (see section 1.3) is stated as the official communication channel with students. By implementing modern ‘e-management’ tools the College management handles all necessary activities in an effective way. There is cooperation with the ITL and its member companies, and the College is taking an active part in popularizing the field of ITC.

1.2 Personnel management	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition	
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Requirements:
The principles and procedures for employee recruitment and development arise from the objectives of the development plan of a higher education institution, and ensure academic sustainability.
When selecting, appointing and evaluating members of the academic staff, their past activities (teaching, RDC, student feedback, etc.) are taken into account in a balanced way.
The principles of remuneration and motivation of employees are clearly defined, available to all employees, and implemented.
Employee satisfaction with the management, working conditions, flow of information, etc., is regularly surveyed and the results used in improvement activities.
Employees participate in international mobility programmes, cooperation projects, networks, etc.
Employees base their activities on principles of academic ethics.

The main goal related to employee recruitment in the Development Plan: is ‘Motivated and professional staff (academic and support personnel and students)’, and area 3.4.3 of the Plan deals with ‘Personnel of the IT College’. This area includes academic sustainability and motivation of personnel. The Assessment committee heard that the workforce sustainability strategy involves targeting alumni to fill the post of visiting lecturer and then training and developing the visiting lecturer to be qualified for a permanent post. However, if a permanent post becomes vacant then an open recruitment competition would be held, with advertisement in relevant places. The SER indicates that between 2008 and 2011 the average rate of competition for academic posts has been between 1 and 2 applicants per post. It was explained that competition for posts is low due to the salary level which can be offered compared to those in industry. 50% of staff have a PhD and 16.7% have a Master’s degree.

Remuneration rules of the Foundation (which apply to the College) are set out in a written document approved by Management Board directive in 2012. This includes an Annex dealing with the principles for calculating teaching workload. The document also sets out the additional benefits for staff which include various forms of leave and allowances. The staff of the College told the Assessment committee that principles of

remuneration are clear to them and they were happy with the management, working conditions, and communication within the College. There is a minimum required qualification for the different categories of posts, for example a Docent must hold a PhD or equivalent qualification.

Conducting satisfaction surveys and regular development interviews with the Rector help to improve the motivation of College personnel. Their work is supported by a modern working environment. Staff told the Assessment committee that they were proud of the College and the Assessment committee noted that there is a strong sense of belonging in the College community; alumni also made this point. According to the SER staff satisfaction declined slightly in 2010. The Assessment committee heard that this was because of changes to College management at that time. The 2012 survey shows an improvement of overall satisfaction of College staff.

Mobility of Academic staff is monitored and included in the consolidated indicators in the College development plan. The Assessment committee saw a list of the different activities in the staff mobility program. The total number of participants in different international events shows a growing trend and in 2012 was more than 35.

There is a policy on academic ethics and staff are aware of it. The processing of personal data is regulated by Foundation procedures. The College is taking action to document how to handle copyright issues transparently.

1.3 Management of financial resources and infrastructure	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition	
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Requirements:

The allocation of financial resources of a higher education institution as well as the administration and development of infrastructure are economically feasible, and are based on the objectives of the development plan of an institution of higher education and national priorities (except private institutions).

A higher education institution uses information systems that support its management and the coherent performance of its core processes.

The working conditions of the staff, and the learning and RDC conditions of students (library, studios, workshops, laboratories, etc.) meet the needs arising from the specifics of an institution of higher education and the expectations of members.

In the SER the College explains that planning and implementation of the College's budget is distinguishable from the general budget of the Foundation. The College aims at constantly keeping revenues and expenses in balance, and the College development plan contains a financial projection for up to 2014. At the time of writing the SER 80% of the College's revenue came from tuition fees.

The allocation of financial resources has been economically feasible until now and based on the objectives of the development plan. The distribution of revenues and expenditures has generally been balanced, despite the 2009-2010 economic recession. The College's cash flow has been adequate until now and small interruptions can be smoothed out by the Foundation's financial processes. A clearly-defined investment policy has led to the renewal of laboratories on a regular 3-year basis and this has resulted in state-of-the-art equipment for students. The support of industrial partners under the form of donations has also been relevant towards achieving this goal.

The Higher Education Reform starting in Fall 2013 will radically alter the income dynamics of the College, though it is not yet known how in detail. The Reform states that full-time students in an Estonian-language curriculum can be charged tuition fees only if they have not completed the amount of required credit hours by the beginning of the semester. The College has recently signed an agreement with the Ministry which guarantees a certain level of funding until 2015. The College is confident at this stage that its financial resources for the next three years will be adequate for its current activities and infrastructure. The College is not the only institution in Estonia in this position and it is not clear what the national funding position will be from 2016 onwards. The College is aware that 2014 will be an important year for deciding on financial planning for the future. To that purpose the Department of Academic Affairs is monitoring and analysing at the fine-grain level the students' progress in their studies, whereas the Rector and the Foundation monitor events at a higher level. The College has carried out some scenario planning to manage the risks of this situation and has some contingency plans.

The Assessment committee acknowledges that there is some uncertainty and risk at present but consider that the Foundation (and as part of it, the College) is managing that risk as responsibly as it can do, given the information available to it.

The College's information systems are well-planned and effective and facilitate good management and coherent performance of its core processes. The Study Information System (SIS) was developed in-house. It provides a full range of functions to both students, faculty staff and administrative staff. It is extensively used by all categories of users and compares very well with respect to other systems used at other Institutions. It has also been adopted by other higher education institutions in Estonia.

The Assessment committee toured the College building. The teaching rooms are equipped with modern teaching equipment, the laboratories are well equipped with state-of-the-art hardware and software. The opening hours of the building and of the laboratories generally allow students and staff to fit in their own schedule conveniently. The Robotics Laboratory's facilities are available also to students coming from High Schools for practical activities related to robot design. This is a significant service the College is offering to society at large. There is an agreement with Tallinn Technical University to allow students and staff to share the University Library and its services. Two members of the Assessment committee visited the Data Centre (DC) room, located in the same building. The Assessment committee heard that there is currently no off-site back-up of the College's systems and encourages the College to prepare DC Disaster Recovery procedures.

The working conditions of both faculty and administrative staff meet the needs arising in an institution of higher education. Academics are satisfied with their working conditions; the staff whom the Assessment committee met thought the physical facilities of the College excellent. As noted above, staff show a profound sense of belonging to the College and are proud of it. A similar feeling was expressed by the visiting professors as well.

The conditions for students for studying and carrying out RDC activities meet the requirements and the expectations of a higher education institution. The students extensively use the SIS and feel that lecture material and recorded lectures support them in effectively completing their studies. The students whom the Assessment team met commented on the quality of the building, access to the UT Library, and access to the building at the end of the study day.

During the visit, the Assessment committee found the facilities of the College are modern and up-to-date. The computers were said to be renewed every third year, which indicates that the College sees the importance of modern equipment in the field of information technology. The classes and laboratories are open for free use of students except during lectures and conducted laboratory exercises. Also a specially equipped computer for students with special needs is available.

The College is commended on the management and upkeep of its facilities.

2 TEACHING AND LEARNING

General comments:

The Assessment committee found that all the requirements in this area are substantially met and the area **conforms to requirements**. The Assessment committee identified three commendations and two recommendations in this area. In addition, the comprehensive approach to ensuring effectiveness of teaching and learning is thought to be worth of recognition in the College. The Assessment committee found a positive atmosphere within the College and a motivated student body. Study programme development pays attention to the needs of employers and other stake holders and the College is commended on the innovative design of its curriculum and its effectiveness in producing competitive graduates. However, the College may wish to consider whether a more formalised reporting structure might be necessary to ensure that programme development continues to take place in a coherent and timely fashion. While student progression might be slower than expected the College has explored reasons for this and is aiming to reduce drop-out rates. There are good support

processes for learning and in particular College is commended on its planning and provision for students with disability. The College faces some challenges in encouraging students to take part in mobility activities. The College is commended on the technical and educational technology resources available to students, in particular the Study Information System (SIS).

2.1 Effectiveness of teaching and learning, and formation of the student body	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition	x
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Requirements:
A higher education institution has defined its educational objectives and measures their implementation.
A higher education institution educates students so they are nationally and internationally competitive.
The number of student places is planned in accordance with the social need and the potentials and purposes of an institution of higher education.
The admission rules are consistent with the mission and purposes of an institution of higher education and support the formation of a motivated student body.
Students are provided with opportunities to study at a higher education institution regardless of any special needs.

The College has defined its educational objectives in its Development Plan and measures their implementation. Yearly objectives appear in the Activity Plan and include ‘Co-operation with companies active in the field of ICT, their associations and the public sector’, ‘Modern academic and technical foundation for studies’ and ‘Optimal number of students’. Measures for tracking implementation are attached to these objectives.

The College provides the necessary structures and environment to ensure that its students are nationally and internationally competitive. Both the design of the curriculum and the facilities for its delivery contribute to this. The Assessment committee heard from employers and alumni that they were very satisfied with the quality of graduates. Some employers take ITC graduates year after year. The Assessment committee also heard from the students of the College that they were very satisfied with the quality of the teaching. They felt that the subjects were up to date, practically oriented and gave them good starting point for their working life. They commented on the practical emphasis of the study programmes, the high quality internships, and the ease of obtaining jobs after graduation.

The Assessment committee heard from the students that the community of students is strong and that the students feel the atmosphere of the College is student-friendly. The teachers were felt to be easily approachable without any hierarchical obstacles. The Assessment committee also

found that one indicator of the good spirit among the students was the fact that the students of study groups kept up contacts also after studies. Some of the alumni had set up companies together and some told that they had hired the other alumni from the college.

On the basis on the self-evaluation report and what the Assessment committee heard during the visit it is obvious that the need for ICT professionals in Estonian society is high. Judging by the numbers of applicants, the College is an attractive study environment. In the year 2012, for budgetary places, the ratio of the applicants to the number of the yearly intake was 5.39, which indicates that the college is an attractive higher education institute. This can also considered as an indicator showing that the quality of the College as a whole is perceived as high and that the quality of the teaching is perceived to be of a high standard.

The College offers different forms of studies: in addition to normal day time studies it is possible to study during evenings or to participate to distant education studies. During the interviews both with the students and the alumni the Assessment committee got positive feedback from the students about these different ways for studies. Although students thought workload was high, particularly for evening students, it was felt to be manageable. These give the students the possibility to work during their studies, which seems to be quite a common strategy. Already among the first year students, it is usual that students work; 22% of the daytime and evening matriculates of the year 2012 were working and 51% of the distant students. Thus the flexibility of the study forms attract students who are already in the workplace and thus widens the recruitment base of the College.

The admission rules are clearly defined and the information is available on the Colleges web pages.

On the basis of the self-evaluation report and findings during the visit, the Assessment committee considers that the College makes necessary arrangements to give students the opportunities to study regardless of any special needs. The building is modern and special needs were taken into account during the construction phase. Almost all of the building is accessible to wheelchair users. The college has one person who is specialised to support students with special needs. The Assessment committee also heard of other initiatives to support students with disabilities besides an accessible building, like software and hardware adaptations. The Assessment committee heard that students with certain disabilities find the College an attractive destination because of the support it can provide. **The Assessment committee commends the College on its planning and provision for students with disability.**

The Assessment committee found that the College meets all of the requirements for ensuring effectiveness of teaching and learning, and for the formation of a motivated student body. However, more than this, the College provides an integrated and comprehensive approach to effective teaching and learning. This can be seen in the clearly defined educational objectives, the innovative curriculum (see below) which ensures competitiveness of graduates, the flexible approach to different forms of study, the attention paid to national needs, the efforts and enthusiasm of staff, the motivation of students and the provision for students with disabilities. Because of this comprehensive approach the

Assessment committee finds this area worthy of recognition in the College.							
2.2 Study programme development	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition
<p>Requirements: <i>A higher education institution bases its new study programmes on its purposes and the needs of the labour market, and takes into account the strategies of the country and expectations of the society.</i> <i>Development activities related to study programmes are systematic and regular, and different stakeholders are involved in the development of study programmes.</i> <i>Graduate satisfaction with the quality of instruction and employer satisfaction with the quality and suitability to the requirements of the labor market of graduates are surveyed and analysed; the results are considered in the development of study programmes.</i></p>							
<p>The College offers four programmes at present, all worth 180 ECTS:</p> <ul style="list-style-type: none"> • IT Systems Development • IT Systems Administration • Information Systems Analysis • Technical Communication (admissions to the curriculum occurred from 2004 to 2011) <p>The College’s study programmes are based on the values and purpose that it has set out in the Development Plan, and they take account of the needs of the labor market, the strategies of the country and expectations of the society. The programmes were evaluated by an national group in 2010 and as a result the College was granted the right to conduct studies in the field of information technology. The Assessment committee heard from various stake-holders that the study programmes prepare students to be competitive graduates. The committee heard that, rather than the main areas of the subject being taught as separate courses, there is an emphasis on interdisciplinarity in the curriculum. This innovative, horizontally interdisciplinary curriculum is instrumental in providing competitiveness of graduates.</p> <p>The Assessment committee commends the College on the innovative design of its curriculum and its effectiveness in producing competitive graduates.</p> <p>The Curriculum Council is an advisory body, whose goals are to ensure the provision of quality education, conformity of curricula to the Standard of Higher Education and other legislation, and compliance of curricula to the changes in the field of IT. The Curriculum Council has a</p>							

major role in developing curricula. Development activities of the curriculum take place as and when necessary in relation to feedback from stakeholders and environmental change. However, the Curriculum Council has a meeting at least every semester. The Curriculum Council meeting is convened by the Chairman of the Curriculum Council, but a proposal for the meeting can also be made by the EITC College Council. There is good representation of employers and professional bodies on the Curriculum Council. The decisions of the Curriculum Council are recorded. Changes in the curricula are approved by the EITC College Council and recommendations of the Curriculum Council are forwarded to the College Council. The Assessment committee heard that the Rector or member of Curriculum Council on College Council could also provide information on an ad hoc basis to the College Council. The Curriculum Council has worked very well in developing the programme but the Assessment committee found that there was some uncertainty amongst the staff whom it met about whether the Curriculum reported consistently to the College Council, or whether it only reported when the need arose.

According to the teachers whom the Assessment committee met, program development is a continuous process. To some extent it may be slightly informally organised, developments being agreed person-to-person or through special meetings. The Assessment committee was told that in such a relatively small organization as the College, many things work very well informally because all of the personnel know each other and meet regularly. **However, In a time of change, the Assessment committee recommends that the College may wish to consider whether a more formalised reporting structure might be necessary to ensure that programme development continues to take place in a coherent and timely fashion.**

The study programme development is based on the definitions of the programme outcomes. This approach to programme development was new to the College, but the system was already in use and the programme outcomes were defined for all programmes. The Assessment committee found during the visit that the teachers who the Assessment committee met were familiar with the concept of the outcome-based programme development and they had applied it when developing their teaching subjects. The teachers had defined the learning outcomes for most of the individual subjects and these were based on programme outcomes. The assessment criteria of the subjects were based on learning outcomes and the students were familiar with this information.

Alumni are surveyed for their opinions about quality of instruction. In the past, the number of alumni has been small and the alumni surveys have been irregular. The 2012 surveys shows that the students of the college gain employment and also practically all of them are in the field of their speciality. During the visit, the employer representatives indicated that they were very satisfied with the skills of the College graduates. Employers' opinions are not surveyed but there is good contact of employers with the College and there are various ways in which they keep in contact with the College. They are involved at various levels of programme development, for example on the Curriculum Council, and though the Partner Day: a new venture where employers are invited to share what they need in ITC graduates, and what needs to be improved in the College's activities.

2.3 Student academic progress and student assessment	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition	
<p>Requirements: <i>Student academic progress is monitored and supported.</i> <i>Student assessment supports learning and is in line with learning outcomes.</i> <i>A higher education institution has an effective system for taking account of prior learning and work experience.</i></p>								
<p>In the SER the College explains that students can choose a form of study and workload suited to their circumstances when starting their studies. As described in the previous section both full-time and part-time studies are available. The SER describes various mechanisms for supporting student progress including induction, counselling, and economic support.</p> <p>During the visit the Assessment committee heard that the study times in the College are typically longer than the nominal 3 years. The Assessment committee heard from students and the alumni that the main reason for this was considered to be the fact that many of students work while they are studying. On the other hand, the Assessment committee also heard that it also seems that most of them work in the field of ICT which probably is helpful for their studies. The possibility of part-time studies and distant education studies encourages those people who are already working, especially in the field of ICT, to apply to the College, increasing the number of potential applicants to the College.</p> <p>Although the drop-out rates are relatively high, they are below the average compared with similar figures of the other higher education institutes. The College is concerned to reduce them further. During the visit, the Assessment committee heard that there may be different major reasons for the high drop-out rates. The relatively high first year drop-out may be due to wrong career selection. While this could be a difficult matter to improve, the Assessment committee suggests that applicants should receive as realistic information as possible about the contents and form of the studies, so that matriculated students are informed about the curriculum they will be required to study. The other general issue which may be related to the drop-out rates is the relatively low percentage of students presenting their final papers after declaring these. This is an area which the Assessment committee considers may need some further attention. The Assessment committee heard of various initiatives to reduce the drop-out rate, and heard of the involvement of College staff, such as the Counselor, in supporting students who might be in difficulties.</p> <p>Assessment policy is set out in the College Study Regulations which cover assessment, organisation of exams, and graduation. Assessment is</p>								

based on learning outcomes. The Assessment committee heard that discussion of learning outcomes was ongoing in the College and that employer representatives might liaise within their company about appropriate learning outcomes. There was also a recognition that staff membership of professional associations helped to make sure that learning outcomes were relevant to needs of the IT industry and society. The Assessment committee heard that learning outcomes had been formulated for the curriculum and were now being generated for individual subjects. On the whole (but not completely) assessment criteria are linked to learning outcomes. The Assessment committee encourages the College to continue to map learning outcomes to subject level and directly on to assessment criteria in a transparent way.

There is a process for assessing prior learning which is set out in a written document. There is no limit on the number of credits which can be gained through APEL. The only limits either stem from legislation (which indicates that the Diploma thesis cannot be defended through APEL) or are set out in the document relating to the regulation of APEL in the College. An APEL Committee which meets twice a year oversees this process. Credit may also be given for work experience, for example in the internship requirement, and for study on exchange programmes. On the basis of the statistics of recognition of prior learning, the system seems to work reasonably well.

2.4 Support processes for learning	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition	
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Requirements:
The organisation of studies creates an opportunity for students to complete their studies within the standard period.
A higher education institution provides students with counselling related to their studies and career.
A higher education institution supports student international mobility.
Modern technical and educational technology resources are used to organise educational activities.
Students are periodically asked for feedback on learning and support processes (the organisation of studies, assessment, counselling, etc.); the results of surveys are taken into account in improvement activities.

The College supports students to complete their studies within the standard period, which the College considers to be within 4 years. Some students do not complete within this period but the College considers that this flexibility is an encouragement to allow students to finish, rather than leaving without a Diploma, given that many of its students are already working in some capacity. The representatives of the student body also mentioned that they found it useful to have the last semester for just working on the final paper.

The student representatives including those carrying out evening studies were in general happy with the times the rooms of the College were accessible to them. Distance students were happy with their options as well but would like to see even more e-courses to make it more

convenient for them to study alongside work and family commitments. It also appeared that the students in the evening studies perceived their workload to be higher when compared to that of other students.

The Assessment committee heard from the student representatives that they had good opportunities for internship training and that they received support in relation to this. The members of the alumni also brought out the possibility to count former work experience as internship and found this to be useful.

Counselling is available for the students. A College Counsellor provides support to students facing academic difficulties. The Assessment committee heard that a large proportion of the counselling is done via electronic means. One of the possible explanation given was that it is more comfortable for students in the IT field. The Assessment team also heard that students support one another in the College community, and that second and third year students act as 'tutors' to first year students. The Assessment committee found that the general atmosphere in the College was very open and the teachers' doors were literally always open for students to visit.

As far as mobility is concerned, the Assessment committee heard that the challenge seems to be how to encourage the students to participate in exchange programs. One barrier to participation was said to be the fact that many students are working. The Assessment committee found that one way the College tries to increase the student mobility in the College is to give the students a chance to get used to English language by teaching subjects in English, so giving students the opportunity to get used to professional English in the field of ICT. This also makes it possible for the College to accept students from abroad, like Erasmus students. During the visit the Assessment committee found that the College offers many ways to support those students who plan studies abroad. In the College there is person in the office of academic affairs who has specialized to support the student mobility.

However, the Assessment committee heard mixed views during the visit about the usefulness or necessity for student mobility. Employers were not particularly enthusiastic about the need. Representatives of students and alumni thought that it could be a good experience but that there were other, perhaps more appropriate ways for the College to encourage internationalisation. While figures for student mobility were quite low (SER), the College has put in place various initiatives to encourage students to take part in mobility activities such as events where former exchange students talk about their experiences to other. **The Assessment committee recommends that in drawing up its new Development Plan the College consult widely on the purposes of internationalisation and student mobility and provide strategies for encouraging internationalisation of the student body which are appropriate to its own mission and circumstances.**

The technical and educational technology resources used to organise educational activities in the College are excellent and well managed. The Assessment committee heard positive feedback about the availability of video recordings of lectures including the possibility to re-listen to lectures containing more advanced topics. Students' representatives and the members of the teaching staff agreed that the SIS is well suited for

their needs. The main features of the system were demonstrated to the Assessment committee. It is noteworthy that security of the SIS has been tested by students as part of their learning process. **The Assessment committee commends the College on the technical and educational technology resources available to students, in particular the Study Information System (SIS).**

Students told the Assessment committee that they are asked for optional feedback on every course. They can also participate in annual Learning Environment surveys. They felt that the results of surveys are taken into account in improvement activities and told the Assessment committee that they had noticed changes in the way that some teachers taught after the surveys. It was also stated that the participation in the feedback surveys is around 20%. The Assessment committee suggests that it would be useful to try to find methods to raise this percentage and therefore gain more representative feedback.

Students also provide feedback through the Students' Council which can represent opinion on the College's committees, such as APEL committee, Erasmus committee, Curriculum Council, etc. The students whom the team met considered that the student voice was listened to on these committees and action was taken.

3 RESEARCH, DEVELOPMENT AND/OR OTHER CREATIVE ACTIVITY (RDC)

General comments:

The Assessment committee found that all the requirements in this area are substantially met and the area **conforms to requirements**. The Assessment committee identified one recommendation in this area. Although the SER, Development Plan and Activity Plan were not as clear about RDC activities as they might be, nevertheless the Assessment committee found a coherent approach to RDC articulated by the College management. This approach was fully appropriate for the College's position as a private, teaching-oriented institution and reflected its Mission. The approach was backed up with good information about the labour market, and by resource input from the College's business partners. However, the approach was not fully understood within the College and the indicators for achievement in the Plans were not as helpful as they might be. The Assessment committee recommends that the College clearly defines which activities fall under the RDC category, sets explicit objectives in the Development Plan and Activity Plan correspondingly, defines adequate indicators and then regularly measures them. All information concerning RDC activities should be disseminated among all staff members and stakeholders.

3.1 RDC effectiveness	conforms to requirements		partially conforms to requirements	x	does not conform to requirements		worthy of recognition	
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Requirements:

A higher education institution has defined its RDC objectives and measures their implementation.

A higher education institution monitors the needs of society and the labour market, and considers them in planning its RDC activities.

In the SER the College states that it 'has defined its RDC objectives in its development plan as providing high-quality education and conducting applied research through R&D by students. Based on this, the development plan identifies the development of laboratories and publishing as key indicators.'

However, in the case of RDC activities the Assessment committee found the SER, the Development Plan and the Action Plan not as clear as they might have been. It was later explained that the College does have a coherent understanding of its RDC activities and carries out RDC activities under four headings, and evidence was given to this effect:

- research in the traditional academic sense is not an activity of the College as such, but its faculty staff members may participate on an individual basis in research projects carried out by Universities; they may contribute to the supervision of MS and PhD thesis and the outcome of their activities may be publishing papers. One of the two indicators appearing in the Action Plan (number of publications) refers to this activity, which is not deemed to be core business of the College;
- innovation: the College is involved in several innovation activities (e.g. in cooperation with the Computer Emergency Response Team of Estonia and with EAS);
- applied research: in particular at the Robotics Lab and during the Intensive Study weeks whose final results are often prototypes;
- development: in particular of new modules for the Study Information System used at the College and also at other Higher Education Institutions in Estonia.

The Assessment committee discovered a certain degree of uncertainty amongst various stakeholders about whether research was being carried out, and which College activities could count as research and/or development. For example, some considered the graduation thesis as research, others as development work and others as neither of these. According to some no research was being carried out in a structured way by the College, according to others the Robotics Club was the only example of research activities, some shared the opinion that research was primarily an individual activity of staff members.

The Assessment committee notes that RDC objectives are not explicitly defined in the Development Plan nor is there a widespread agreement within the College on what RDC activities are, even though RDC activities falling under the four headings given above are being carried out. As a consequence of the absence of clear objectives, the indicators chosen in the Development Plan or Activity Plan do not seem adequate to reflect

on-going RDC activities.

The Assessment committee recommends that the College clearly defines which activities fall under the RDC category, sets explicit objectives in the Development Plan and Activity Plan correspondingly, defines adequate indicators and then regularly measures them. All information concerning RDC activities should be disseminated among all staff members and stakeholders.

As is evident in the four categories of RDC activity, the College monitors the needs of society and the labour market. The College is a member of ITL and participates in surveys of the needs of society and the labour market.

3.2 RDC resources and support processes	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition	
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Requirements:
A higher education institution has an effective RDC support system.
A higher education institution has financial resources needed for RDC development and a strategy that supports their acquisition.
A higher education institution participates in different RDC networks.
RDC infrastructure is being updated and used effectively.

As a private institution, the College does not receive specific funding for research from the state and therefore the College’s RDC activities are carried out as part of the other activities of the College, such as Study Programmes or Management. Thus, also the resources and support structure for RDC activities are provided within the other activities of the College. As such, the RDC support system is currently effective for the kinds of activity carried out.

The College’s strategy for RDC development and resource acquisition involves its various partnerships with the business sector. These have led to donations for infrastructure and software which support the activities within which RDC is distributed, enabling resources to be updated.

The College is a member of the Estonian ICT Cluster and some faculty staff members are active in the definition of new professional standards in the ICT domain. Information gathered is fed into RDC activities, especially those concerning innovation, development and applied research. There is agreement between the College and Tallinn Technical University to share the library and its services, allowing College’s students and staff to access them.

3.3 Student research supervision	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition	
<p>Requirements: <i>A higher education institution includes students of all academic cycles in research, creative or project activity; and systematically surveys student satisfaction with their supervision.</i> <i>Professionalism, effectiveness and the workload of supervisors are reasonably balanced, which ensures the quality of research papers and positive graduation rates.</i> <i>Students are guided to recognize plagiarism and to avoid it.</i></p>								
<p>The College prepares undergraduate level students and has no Masters or PhD provision. An undergraduate Diploma is awarded. The College considers the Diploma thesis (final project work) as a relevant creative student activity. Final project works generally originate from real-world cases and consist in problem-setting, methodology assessment, comparative identification of possible solutions and, possibly, solution development. Accounts of two such projects were included in interviews with ‘the brightest graduates’ in ‘Computer World’ in 2013.</p> <p>Students’ work is independent and supervised and the vast majority of supervisors are from outside the College, mainly from companies and government bodies. Alumni are often in charge of supervising final project works. The workload for both internal and external supervisors seems well-balanced and compatible with their other duties. The students the Assessment committee met expressed satisfaction with the selection of topics and their supervision.</p> <p>As noted previously, only 50% of students who elect to carry out a final paper go on to present them for assessment without delays. The Assessment committee heard different views about why this might be, including issues with the supervision system and students overcommitting themselves. The College has carried out surveys to discover reasons for this and has put in place some solutions to help students, for example explanatory seminars and clearer explanation of the time and commitment required for the final project work.</p> <p>The College has an active approach to plagiarism at all levels, from course assessment to final project work. Rules on plagiarism are included in the College’s Student Code of Ethics and there is a flow chart to guide staff on dealing with violation of student academic integrity. The students attend seminars on how to recognize and avoid plagiarism and they are well aware of the penalties in place for those who infringe the rules. The recent increase in the number of cases of plagiarism detected seems to coincide with the introduction of this stricter approach to the issue, resulting in an increased sensitivity to the issue of both faculty staff and students.</p>								

4 SERVICE TO SOCIETY
<p>General comments:</p> <p>The Assessment committee found that all the requirements in this area are substantially met and the area conforms to requirements. There is a system for popularising the core activity of providing ICT-related professional higher education, and this is underpinned by a Marketing Plan. The activities are evaluated both by participant survey and by monitoring of the activities. There is a wealth of various and interesting activities carried out, including a national IT Night, Curiosity Day, appearances on TV, school visits. The monitoring of activities is being further systematized in order to ensure effectiveness of the programme of activities. Staff are members of professional associations and other social supervisory boards and decision-making bodies and they feed the information and expertise they gain from these activities into the work of the College.</p>

4.1 Popularization of its activities and involvement in social development	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition	
<p>Requirements:</p> <p><i>A higher education institution has a system for popularising its core activities.</i></p> <p><i>Employees of an institution of higher education participate in the activities of professional associations, and as experts, in other social supervisory boards and decision-making bodies.</i></p>								
<p>The College has a system for popularising its core activities, reflected in its Marketing Plan. Various activities are carried out, including school visits, IT Night, participation in international robotics contests, appearance on TV, public lectures. Participation in the IT Night initiative as one of the coordinators is a good example of involving youth centres from all over the country to introduce them to IT.</p> <p>The Assessment committee heard that the systematization of the information related to popularisation is being improved so that, for example, information relating to schools visited, the level of interest expressed, who comes to Curiosity Day, etc. is kept. The Assessment committee heard that potential applicants who attended public-oriented activities would sometimes be recognised when they joined the College and could be given a personal welcome.</p>								

The SER indicates that 6 members of the College staff are actively taking part in other associations outside the College, such as the Quality Assessment Council of the Estonian Higher Education Quality Agency, Estonian Informatics Council, Open Estonia Foundation, and Lisbon Council Advisory Board. The Assessment committee heard that several staff members of the Curriculum Council were members of relevant professional associations and could input that knowledge to the curriculum. Other staff are members of the working groups which draw up professional standards and this is also useful background for ensuring the curriculum remains current.

4.2 In-service training and other educational activities for the general public	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition	
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Requirements:
A higher education institution has defined the objectives regarding in-service training and measures their implementation. In-service training is planned in accordance with the needs of target groups as well as with the potentials and purposes of an institution of higher education. Participant satisfaction with the quality of in-service training is regularly surveyed and the results are used in planning improvement activities.

In its discussion with various members of the College the Assessment committee found different definitions of what was meant by ‘in-service training’ and it seemed to be generally understood in the College to mean ‘specialised continuing education’. The College states in the SER that it has defined its objectives related to in-service training in its development plan for 2011–2014. These are not specific objectives but included under the heading of Further Education, where there is an aim to ‘link academic studies with further education based on the requirements of different target groups’; and an aim to ‘increase the volume of specialized training’. In-service training offers professional training for those who already have basic knowledge in information technology, administration, programming and software development; it includes cybersecurity training for the public sector and trainings funded by *Töötukassa* (the Estonian Unemployment Insurance Fund).

The Assessment committee heard that the goal of in-service training is to improve the level of knowledge of those who participate in it. It is aimed to increase the number of participants year on year, which provides an extra source of finance for the College. The Development Plan Consolidated indicators include targets for turnover in connection with further education, and number of further education students. There is already a positive trend in the number of participants at in-service training events and in the turnover. In 2011 the College provided 33 in-service training courses, increasing the number to 36 in 2012 after reviewing the needs of target groups.

The SER states that information about in-service training is disseminated by means of the College website, email lists, by involving various

organizations and by a series of special events (such as Partner Day, Intensive Learning Weeks, etc.). For example, a development project for the period 2010–2015 entitled "Practical Cybersecurity for IT Systems Administrators" provides an opportunity to advertise in-service training. The training developed under this project are publicised to IT managers in the Estonian public sector who then refer employees of their own organizations to the training events.

Participant satisfaction with the quality of in-service training is surveyed by feedback questionnaire and the results are used by lecturers in planning improvement activities.

4.3 Other public-oriented activities	conforms to requirements	x	partially conforms to requirements		does not conform to requirements		worthy of recognition	
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Requirements:
Public-oriented activities are purposeful, the results of the activities are periodically evaluated, and improvements are introduced based on those evaluations.
A higher education institution contributes to the enhancement of community welfare by sharing its resources (library, museums, sports facilities, etc.) and/or by organising concerts, exhibitions, performances, conferences, fairs and other events.

Public-oriented activities are related to popularisation of IT, especially with school students. The College considers that public-oriented activities are an important part of the its image building process and a series of public lectures serves as the most important focus in this area. In 2012 the 30th lecture was delivered in the series of lectures by recognized IT specialists on important topics in the IT field. Most of these public lectures can be watched on the web in real time and on YouTube.

The SER states that since 2009 the College has had a partnership with the Estonian Unemployment Insurance Fund (EUIF) to provide training under the "training vouchers" programme. The objective of the programme is to help the unemployed get back to work and to promote in-service training. In 2009–2010 the College was the project partner of Enterprise Estonia participating in the training voucher scheme.

The College evaluates past public events as part of the evaluation of its Development Plan. The amount of media coverage and views on public lectures are the indicators evaluated. The Assessment committee heard that a priority was to provide public-oriented activities in regions so far not reached.

The Assessment committee heard that partners are allowed use of the facilities of the College for free or for a special rate. The Assessment committee also learned that the library is shared with the Tallinn University of Technology making it the largest technical library in the country. The specialised nature of the accommodation at the College means that the type of general public events which can be held is understandably limited.