Assessment report
Limited Framework Programme Assessment

Bachelor Molecular Science and Technology

Leiden University and Delft University of Technology

Contents of the report

1. Executive summary

In this executive summary, the panel presents the main considerations, which led to the assessment of the quality of the joint-degree Bachelor Molecular Science and Technology programme of Leiden University and Delft University of Technology. The programme was assessed according to the standards of the limited framework, as laid down in the NVAO Assessment framework for the higher education accreditation system of the Netherlands, published on 20 December 2016 (Staatscourant nr. 69458).

The panel considers the collaboration between both Faculties of Leiden University and Delft University of Technology to be well-organised and effective. The panel welcomes the Universities' initiatives to offer broad bachelor programmes, allowing students to acquire comprehensive and in-depth education in the chemical sciences domain and to select master programmes of Dutch universities to specialise in.

The programme objectives are sound. The panel appreciates the broadness of the programme, aiming strongly to educate students in both the chemistry and chemical engineering disciplines. The programme addresses very well both the molecular chemistry and process technology dimensions of the chemical sciences domain. The panel considers the programme profile to be well-delineated, but suggests to compare this profile more clearly to other Dutch and foreign programmes.

The objectives of the programme are within the boundaries of the domain-specific reference framework for academic chemical sciences programmes. The panel appreciates the efforts by the joint programmes in chemical sciences in the Netherlands to draft this framework and regards this to be a sound and up-to-date description of this domain. The profile of this Leiden University and Delft University of Technology programme may be clearly distinguished within the framework.

The panel understands and supports the programme position to educate students to continue their studies at master level rather than to enter the labour market.

The intended learning outcomes of the programme meet the objectives, are very up-to-date, correspond to international frameworks and conform to the bachelor level.

The panel is pleased to see the substantial number of incoming students in the programme and notes the number being within programme capacity limits.

The curriculum matches the intended learning outcomes. The panel appreciates very much the curriculum contents, the core courses offering a solid foundation in chemistry and chemical engineering and being up-to-date. The panel regards the curriculum to be well-thought-through and well-designed. The research projects allow students to engage in research from the first year onwards. The specialisations are well-chosen, the new materials specialisation adding to the transparency of the programme from the perspective of follow-up master programmes. The panel regards the academic and professional skills learning path to be clearly designed. The curriculum is coherent, structured well along the learning paths.

The lecturers in the programme are well-reputed researchers and very skilled teachers. The panel regards the lecturers to be motivated and considers their educational capabilities to be very good.

The entry requirements and admission procedures of the programme are appropriate. The panel advises to make study-choice check activities compulsory, in line with programme management intentions.

The panel regards the study methods of the programme to be appropriate, promoting students to engage actively in the learning processes. The panel suggests to pursue the introduction of new study methods more actively, among which the recording of more lectures. The number of lab courses is adequate. The students-to-staff ratio and the number of hours of face-to-face education in the programme meet the standards. In view of growing student numbers, the panel advises to monitor the lecturers' workload. The study guidance by the academic counsellor and the student mentors is appreciated by the panel. Although the programme is challenging, the panel regards the programme to be feasible and the study load to be evenly distributed. The panel supports the completion rate target figures.

The panel regards the examination and assessment regulations for the programme to be appropriate. The examination methods adopted in the programme are consistent with the course goals and contents. The panel is positive about measures being taken to counter free-riding in group assignments and to prevent fraud and plagiarism. The panel suggests to improve the feedback by examiners on students' examinations. The supervision and assessment processes for the Bachelor thesis projects are well-organised. The panel welcomes the rubrics scoring form and the academic skills being assessed in the project. Measures have been taken to ensure the validity, reliability and transparency of examinations and assessments. The panel observes, however, that these measures are not systematically followed by the examiners. Although both position and authority of the Board of Examiners are adequate, the panel proposes the Board to be more pro-active in enforcing the examination and assessment procedures.

The panel regards the course examinations to be up to standard. The panel generally supports the grades awarded to the Bachelor thesis projects by the programme examiners. The subjects are relevant and the projects have generally been well-elaborated, although the quality may vary to some extent.

The panel is convinced that students having completed the programme have reached the intended learning outcomes and regards the graduates of this programme to be well prepared to continue their studies at master level in this domain.

The panel which conducted the assessment of the joint-degree Bachelor Molecular Science and Technology programme of Leiden University and Delft University of Technology assesses this programme to meet the standards of the limited framework, as laid down in the NVAO Assessment framework for the higher education accreditation system of the Netherlands, judging the programme to be satisfactory. Therefore, the panel recommends NVAO to accredit this programme.

Rotterdam, 7 March 2019

Prof. dr. M.A. Cohen Stuart
(panel chair)

drs. W. Vercouteren
(panel secretary)

2. Assessment process

The evaluation agency Certiked VBI received the request by Leiden University and Delft University of Technology to support the limited framework programme assessment process for the joint-degree Bachelor Molecular Science and Technology programme of these Universities. The objective of the programme assessment process was to assess whether the programme would conform to the standards of the limited framework, as laid down in the NVAO Assessment framework for the higher education accreditation system of the Netherlands, published on 20 December 2016 (Staatscourant nr. 69458).

Management of the programmes in the assessment cluster WO Scheikunde convened to discuss the composition of the assessment panel and to draft the list of candidates.

Having conferred with management of the Bachelor Molecular Science and Technology programme of Leiden University and Delft University of Technology, Certiked invited candidate panel members to sit on the assessment panel. The panel members agreed to do so. The panel composition was as follows:

- Prof. dr. M.A. Cohen Stuart, professor emeritus, chair of Physical Chemistry & Colloid Chemistry, Wageningen University, professor emeritus of Physical Surface Chemistry, University of Twente, professor East China University of Science and Technology, Shanghai, China (panel chair);
- Prof. dr. A.H.T. Boyen, associate professor emeritus, Faculty of Sciences and Bio-engineering Sciences, Faculty of Medicine and Pharmacy, Vrije Universiteit Brussel (panel member);
- Prof. dr. ir. G.B. Marin, professor of Chemical Reaction Engineering, head Laboratory for Chemical Technology, Ghent University (panel member);
- Prof. dr. R.M.J. Liskamp, professor, chair Chemical Biology and Medicinal Chemistry, School of Chemistry, University of Glasgow, United Kingdom, professor of Molecular Medicinal Chemistry, Utrecht University (panel member);
- Drs. O. de Vreede, head Innovation and Human Capital, VNCI, Association of the Dutch Chemical Industry (panel member);
- A.E.M. Melcherts BSc, student Master in Nanomaterials Science, Utrecht University (student member).

On behalf of Certiked, drs. W. Vercouteren served as the process coordinator and secretary in the assessment process.

All panel members and the secretary confirmed in writing being impartial with regard to the programme to be assessed and observing the rules of confidentiality. Having obtained the authorisation by the University, Certiked requested the approval of NVAO of the proposed panel to conduct the assessment. NVAO have given their approval.

To prepare the assessment process, the process coordinator convened with management of the programme to discuss the outline of the self-assessment report, the subjects to be addressed in this report and the site visit schedule. In addition, the planning of the activities in preparation of the site visit were discussed. In the course of the process preparing for the site visit, programme management and the Certiked process coordinator regularly had contact to fine-tune the process. The activities prior to the site visit have been performed as planned. Programme management approved of the site visit schedule.

Well in advance of the site visit date, programme management sent the list of final projects of graduates of the programme of the most recent years. Acting on behalf of the assessment panel, the process coordinator selected the theses of 15 graduates from the last few years. The grade distribution in the selection was ensured to conform to the grade distribution in the list, sent by programme management.

The panel chair and the panel members were sent the self-assessment report of the programme, including appendices. In the self-assessment report, the student chapter was included. In addition, the expert panel members were forwarded a number of theses of the programme graduates, these theses being part of the selection made by the process coordinator.

Several weeks before the site visit date, the assessment panel chair and the process coordinator met to discuss the self-assessment report provided by programme management, the procedures regarding the assessment process and the site visit schedule. In this meeting, the profile of panel chairs of NVAO was discussed as well. The panel chair was informed about the competencies, listed in the profile. Documents pertaining to a number of these competencies were presented to the panel chair. The meeting between the panel chair and the process coordinator served as the briefing for panel chairs, as meant in the NVAO profile of panel chairs.

Prior to the date of the site visit, all panel members sent in their preliminary findings, based on the self-assessment report and the final projects studied, and a number of questions to be put to the programme representatives on the day of the site visit. The panel secretary summarised this information, compiling a list of questions, which served as a starting point for the discussions with the programme representatives during the site visit.

Shortly before the site visit date, the complete panel met to go over the preliminary findings concerning the quality of the programme. During this preliminary meeting, the preliminary findings of the panel members, including those about the theses were discussed. The procedures to be adopted during the site visit, including the questions to be put to the programme representatives on the basis of the list compiled, were discussed as well.

On 27 September 2018, the panel conducted the site visit on the Delft University of Technology campus. The site visit schedule was as planned. In a number of separate sessions, the panel was given the opportunity to meet with the representatives of the Faculties of both universities, programme management, Board of Examiners members, lecturers and final projects examiners, and students and alumni.

In a closed session at the end of the site visit, the panel considered every one of the findings, weighed the considerations and arrived at conclusions with regard to the quality of the programme. At the end of the site visit, the panel chair presented a broad outline of the considerations and conclusions to programme representatives.

The assessment draft report was finalised by the secretary, having taken into account the findings and considerations of the panel. The draft report was sent to the panel members, who studied it and made a number of changes. Thereupon, the secretary edited the final report. This report was presented to programme management to be corrected for factual inaccuracies. Programme management were given two weeks to respond. Having been corrected for these factual inaccuracies, the Certiked bureau sent the report to the Board of Leiden University, being the administrative host institution for this programme, to accompany their request for re-accreditation of this programme.

3. Programme administrative information

Name programme in CROHO:	B Molecular Science and Technology
Orientation, level programme:	Academic Bachelor
Grade:	BSc
Number of credits:	180 EC
Specialisations:	Materials Synthesis Technology
Location:	Leiden, Delft
Mode of study:	Full-time (language of instruction Dutch)
Registration in CROHO:	21PB-55009/21PF-55009
Name of institutions:	Leiden University (“penvoerder”) and Delft University of Technology
Status of institutions:	Government-funded Universities
Institutions’ quality assurance:	Approved

4. Findings, considerations and assessments per standard

4.1 Standard 1: Intended learning outcomes

The intended learning outcomes tie in with the level and orientation of the programme; they are geared to the expectations of the professional field, the discipline, and international requirements.

Findings
The joint-degree Bachelor Molecular Science and Technology programme is offered by the Faculty of Science of Leiden University and the Faculty of Applied Sciences of Delft University of Technology, Leiden University being the administrative host institution. The cooperation of the Universities is governed by the cooperation agreement, drafted by them. The Boards of the Faculties mentioned are jointly responsible for the programme quality. The director of studies of the programme is appointed by the deans of both Faculties. Being assisted by the programme coordinator and the academic counsellor, he takes care of programme management. For the programme, one set of Teaching and Examination Regulations applies. The Board of Studies, consisting of an equal number of lecturers and students, advises programme management on quality issues. The Board of Examiners has the authority to ensure the quality of examinations and assessments of the programme. Members of the Board of Studies and the Board of Examiners are appointed by the Faculty Boards of both Universities.

The joint-degree programmes Bachelor Molecular Science and Technology and Bachelor Life Science and Technology allow the two Universities to offer the full spectre of subjects in the chemical sciences disciplines at bachelor level. Having completed the bachelor programme, students may specialise in one of the master programmes offered by the Universities in these disciplines.

The Bachelor Molecular Science and Technology programme is a three-year, research-based, broad bachelor programme, covering both the chemistry and chemical engineering disciplines. The programme objectives are to educate students in scientific knowledge, understanding and skills in these disciplines, to train them to contribute to solve problems in these domains, and to prepare them for master programmes in chemistry, chemical engineering or related fields. Specialisations Materials, Synthesis and Technology are offered in the programme, allowing students to prepare for any of these fields.

The objectives of the programme conform to the domain-specific reference framework for the chemical sciences in the Netherlands, which has been drafted by the joint programmes of this assessment cluster in the Netherlands. In this domain-specific framework, reference has been made to international frameworks and benchmark statements. This Leiden University and Delft University of Technology programme may be regarded as being positioned in the chemistry and chemical engineering sub-domains of chemical sciences.

The programme aims primarily to prepare students for studies at master level in chemistry or chemical engineering disciplines. Students may proceed to other natural sciences master programmes, in some cases with maximum 30 EC of additional coursework done.

The objectives have been translated into the intended learning outcomes of the programme. These intended learning outcomes specify, among others, knowledge and understanding of basic concepts and principles of the chemistry and chemical engineering disciplines, scientific research knowledge and skills in these domains, academic skills, such as reasoning, communication and collaboration skills, reflection on social, scientific and ethical issues and competences for continuing education.

Programme management showed the intended learning outcomes to meet international frameworks in this domain, such as the first cycle qualifications of the European Federation of Chemical Engineering and the Eurobachelor qualifications of European Chemistry Thematic Network Association. In addition, the intended learning outcomes correspond to the Dublin descriptors, showing these to match the bachelor level.

Considerations
The panel considers the collaboration between both Faculties of Leiden University and Delft University of Technology to be well-organised and effective. The panel welcomes the Universities' initiatives to offer broad bachelor programmes, allowing students to acquire comprehensive and in-depth education in the chemical sciences domain and allowing them to select master programmes of various Dutch universities to specialise in.

The panel considers the programme objectives to be sound. The panel appreciates the broadness of the programme, aiming strongly to educate students in both the chemistry and chemical engineering disciplines. The programme addresses very well both the molecular chemistry and process technology dimensions of the chemical sciences domain. The panel considers the programme profile to be well-delineated, but suggests to compare this profile more clearly to other Dutch and foreign programmes.

The objectives of the programme are within the boundaries of the domain-specific reference framework for academic chemical sciences programmes. The panel appreciates the efforts by the joint programmes in chemical sciences in the Netherlands to draft this framework and regards this to be a sound and up-to-date description of this domain. The profile of this Leiden University and Delft University of Technology programme may be clearly distinguished within the framework.

The panel understands and supports the programme position to educate students to continue their studies at master level and not so much to enter the labour market.

The objectives have been well-translated into the intended learning outcomes of the programme. The panel finds the intended learning outcomes to be very up-to-date. The intended learning outcomes meet international frameworks and conform to the bachelor level.

Assessment of this standard
These considerations have led the assessment panel to assess standard 1, Intended learning outcomes, to be good.

4.2 Standard 2: Teaching-learning environment

The curriculum, the teaching-learning environment and the quality of the teaching staff enable the incoming students to achieve the intended learning outcomes.

Findings
The number of incoming students in the programme grew steadily from 2013 to 2017 from 120 students to 177 students. The proportion of female students is about 30 %. No international students enrol. Programme management expects the inflow of students to increase moderately or stabilise the coming years. The maximum influx of students per year is about 200 students, this number being determined by the capacity of programme facilities.

The curriculum has a study load of 180 EC and takes three years to complete. Programme management presented a table, mapping the intended learning outcomes to the curriculum components. The curriculum was renewed in 2017, among others, to meet current trends in the field, to introduce a third specialisation and to allow students to select their specialisation later in the programme. As a result, the compulsory core courses (total of 105 EC) include, among others, mathematics, inorganic and organic chemistry, process technology, biochemistry, statistics and renewable energy and recycling. In these courses, students acquire practical laboratory skills and are introduced to safety issues. The three specialisations (45 EC each), including the final thesis project (15 EC), introduce students among others to transport phenomena and chemistry and physics of solid materials (materials specialisation), organic chemistry and biomolecular chemistry (synthesis specialisation) or chemical reactor engineering and biotechnology (technology specialisation). Throughout the curriculum, students do three research projects (Leren Onderzoeken) in which they engage in research within research groups, and one project in the field of chemical product design, guided by senior supervisors of the research groups. The last and fourth research project is the final Bachelor thesis project. In the third year, students take a set of coherent courses as a minor (30 EC), allowing them to broaden or deepen their studies. About 5 % to 10 % of the students spend the minor abroad. In the curriculum, learning paths have been outlined. These are supporting (mathematics and physics) courses, molecular science (chemistry courses), material and energy balances and industrial processes (thermodynamics and process technology courses), doing research (research projects or Leren Onderzoeken) and academic and professional skills (information literacy, presentation and writing skills, collaborative skills, laboratory skills).

About 70 lecturers are involved in the programme, coming from both Universities. All lecturers have PhDs and are actively engaged in research in their fields, doing research within one of the Leiden or Delft research groups. The proportion of lecturers being BKO-certified is about 90 %. In addition to the permanent staff, PhD students and student assistants act as teaching assistants in tutorials, lab courses and research projects.

Applicants with the Dutch pre-university secondary school diploma in the natural sciences & technology subject cluster or in the natural sciences & health subject cluster with mathematics B and physics are unconditionally admitted to the programme. Other students are admitted, if they have taken mathematics at the required level. The admission of students with different backgrounds is decided upon by the Board of Admissions in line with admission requirements set. Before entering, applicants may fill out study-choice check on-line questionnaires. Individual interviews by programme staff are conducted with students having lower grades than 7.0 for mathematics and physics. Programme management has the intention to make the study-choice check activities compulsory.

The educational concept of the programme may be said to be research-based learning. Most theoretical courses are taught in the sequence of lectures, tutorials, homework assignments and self-study. In the research projects, the teaching methods are practical work and group assignments. Lecturers are supported in adopting ICT-based teaching methods. The average number of hours of face-to-face education in the curriculum is about 30 hours to 36 hours per week in the first year and about 20 hours to 24 hours per week in the second and third year. The overall students-to-staff ratio is 20 : 1. Both in Delft and Leiden, new buildings and laboratory facilities are available for the programme. The programme academic counsellor interviews all students, monitors their study pace and advises them in case of study problems. In the first year, students are assigned to mentor groups and are guided by student mentors, being senior students. The two study associations are active to schedule activities for students in the programme. Students experience the programme to be challenging. In the first year, students have to report 45 EC (Binding Study Advice). If they do not succeed, they have to leave the programme. About 30 % of the students leave the programme in the first year. The student success rates after three years are on average about 30 % and after four years they are on average 70 % (figures for last three to four cohorts, proportions of students re-enrolling in second year). The target completion rate figures of programme management are 50 % after three years and 80 % after four years.

Considerations
The panel is pleased to see the substantial number of incoming students in the programme and notes the number being within programme capacity limits.

The curriculum matches the intended learning outcomes of the programme. The panel appreciates very much the contents of the curriculum, the core courses offering a solid foundation in chemistry and chemical engineering and being up-to-date. The panel regards the curriculum to be well-thought-through and well-designed. The research projects are welcomed by the panel, as they allow students to engage in research from the first year onwards. The specialisations are well-chosen, the new materials specialisation add to the transparency of the programme from the perspective of follow-up master programmes. The panel regards the academic and professional skills learning path to be clearly designed, thereby allowing students in effect to acquire the required skills. The curriculum is considered by the panel to be coherent, well-structured along the learning paths.

The lecturers in the programme are well-reputed researchers and very skilled teachers. The panel regards the lecturers to be motivated and considers their educational capabilities to be very good. The panel is impressed by the proportion of BKO-certified lecturers in the programme.

The entry requirements and admission procedures of the programme are appropriate. The panel advises to make study-choice check activities compulsory, in line with programme management intentions, in order to admit more students having the motivation and capacities to complete the programme.

The panel regards the study methods of the programme to be appropriate, promoting students to engage actively in the learning processes. The panel suggests to pursue the introduction of new study methods more actively, among which recording more lectures. The number of lab courses is adequate. The students-to-staff ratio and the number of hours of face-to-face education in the programme meet the standards. In the face of growing student numbers, the panel advises to monitor the lecturers' workload. The transparent way to calculate workload is appreciated. The study guidance by the academic counsellor and the student mentors is appreciated by the panel. Although the programme is challenging, the panel regards the programme to be feasible and the study load to be evenly distributed. The panel supports the completion rate target figures, set by programme management.

Assessment of this standard
These considerations have led the assessment panel to assess standard 2, Teaching-learning environment, to be good.

4.3 Standard 3: Student assessment

The programme has an adequate system of student assessment in place.

Findings
The examinations and assessments in the programme are governed by the Teaching and Examination Regulations for the programme and the assessment policy document, drafted by the Board of Examiners. As has been indicated, the Board of Examiners has the authority to ensure the quality of examinations and assessments of the programme.

The examination methods in the courses are mainly written examinations and homework assignments. The assignments are maximum 15 % of the grade, since it is impossible to establish these being the student's own work. In some courses, examinations are group reports and presentations. In the research projects, the practical work is assessed. In the first-year courses, partial, interim examinations are scheduled to foster students' study pace. The number of these examinations is gradually lowered in the second and third year. Academic and professional skills' assessments, such as presentation and writing skills, are included in the course and in the research project assessments. Rubrics have been adopted to assess the research project results. In case of group work, free-riding is countered by peer review among students. All written assignments are checked for fraud and plagiarism.

The final Bachelor thesis project is an individual research project, to be completed in ten weeks time. The project is supervised by supervisors of one of the research groups. Day-to-day supervisors may be PhD students, acting under the responsibility of supervisors. At completion of the project, students are to submit the written report and are to present and defend the results. The project is assessed by at least two staff members. They use an extensive rubrics scoring form for their assessment, which includes as assessment criteria, among others, theoretical knowledge and understanding, scientific approach, research work, report, presentation and defence and academic skills.

In the programme, measures have been taken to ensure the validity, reliability and transparency of examinations and assessments. Examinations drafts are to be peer-reviewed by fellow examiners. Examinations are to include test matrices. In case of deviant grade distributions, examinations may be analysed. The Board of Examiners inspects on a regular basis samples of examinations and Bachelor thesis projects.

Considerations
The panel regards the examination and assessment regulations for the programme to be appropriate.

The panel approves of the examination methods adopted in the programme, noting these to be consistent with the goals and the contents of the courses. The panel is pleased to see academic and professional skills being assessed. The panel is positive about measures being taken to counter free-riding and to prevent fraud and plagiarism. The panel suggests to improve the feedback by examiners on students' examinations.

The supervision and assessment processes for the Bachelor thesis projects are well-organised. Students are offered appropriate supervision and the assessment procedures are up to standard. The panel welcomes the rubrics scoring form and the academic skills being assessed in the project.

Measures have been taken in the programme to ensure the validity, reliability and transparency of examinations and assessments. The panel observes, however, these measures not being systematically followed through by examiners. Although the position and authority of the Board of Examiners are adequate, the panel proposes the Board to be more pro-active in enforcing the examination and assessment procedures.

Assessment of this standard
The considerations have led the assessment panel to assess standard 3, Student assessment, to be satisfactory.

4.4 Standard 4: Achieved learning outcomes

The programme demonstrates that the intended learning outcomes are achieved.

Findings
The panel studied the examinations of a number of courses of the programme.

The panel also reviewed the Bachelor thesis projects of fifteen graduates of the programme with different grades. In the projects, students have to demonstrate to be able to conduct an individual research project within the domain of the programme. The average grade of the Bachelor projects of the last four years is 7.8.

As has been indicated, programme graduates may enter master programmes in chemistry or chemical engineering or related fields. The majority of the graduates (about 70 %) continue their studies in the Master Chemical Engineering programme of Delft University of Technology or the Master Chemistry programme of Leiden University. The former attracts about 2/3 of these students. Some 30 % of the graduates proceed to other master programmes, such as the Master Sustainable Energy Technology or, although not often, the Master Life Science and Technology programmes.

Figures have been collected on the results of graduates in the Master Chemical Engineering and Master Chemistry programmes. Graduates perform well, nearly all of them completing these programmes.

Considerations
The panel regards the course examinations, which were reviewed by panel members, to be up to standard.

The panel in general terms supports the grades awarded to the Bachelor thesis projects by the programme examiners. The subjects of the projects are relevant and the projects have generally been well-elaborated, although the quality may vary to some extent.

The panel is convinced that students having completed the programme reached the intended learning outcomes and regards the graduates of this programme to be well prepared to continue their studies at master level in this domain.

Assessment of this standard
The considerations have led the assessment panel to assess standard 4, Achieved learning outcomes, to be satisfactory.

5. Overview of assessments

Standard	Assessment
Standard 1. Intended learning outcomes	Good
Standard 2: Teaching-learning environment	Good
Standard 3: Student assessment	Satisfactory
Standard 4: Achieved learning outcomes	Satisfactory
Programme	Satisfactory

6. Recommendations

In this report, a number of recommendations by the panel have been listed. For the sake of clarity, these have been brought together below.

- To compare the programme profile to other Dutch and foreign programmes in more clear terms.
- To make study-choice check activities compulsory, in line with programme management plans, in order to admit more students having the motivation and capacities to complete the programme.
- To consider introducing new study methods more actively, among which recording more lectures.
- To monitor the lecturers' workload, given the growing number of students.
- To achieve the completion rate target figures, set by programme management.
- To improve the feedback by examiners on students' examinations.
- For the Board of Examiners to be more pro-active in enforcing the examination and assessment procedures.