QUALITY POLICY 2021

IT University of Copenhagen

Version 7

Preamble of the Quality Policy

Summary	The Quality Policy defines Quality Standards of the IT University of Copenhagen (ITU). Further, the document names ITU's (*Quality) Work Processes* (e.g., the work processes through which the Quality Standards are maintained and monitored); and describes the *Alarm Handling Processes*, i.e., processes following discovery of breach of quality standards.

Context for the Quality Policy	The Quality Policy is sub-ordinate to ITU's overall strategy and strategic framework contract, which contain development goals agreed with the Ministry. The university reports on all development goals in its Annual Report and the reporting is audited by the university's Auditor and the Auditor General.
	
	The Quality Policy is approved by Executive Management.
	
	At ITU, a study programme is said to be *ideal*, if [1]
	   1) it attracts a large number of well-qualified students; and
	   2) the academic contents and the teaching meet the highest international standards; and
	   3) the students acquire competences that are in high demand in the labour market.
	
	ITU systematically works towards all of its study programmes becoming ideal. This quality enhancement work is formalised through *development goals*, present in the university's strategic framework contract [2] and strategy [1].
	
	Any failure to reach development goals is obviously a challenge that the university must address, but it is not necessarily a sign of poor quality in existing study programmes.
	
	By contrast, the university has defined a set of *quality standards*, the breach of which is a sign of quality issues that need to be dealt with in a manner, which has been thought out in advance. That is the quality assurance part of the quality work.
	
	We use this distinction between *goals* and *standards* throughout the Quality Policy.
	
	The Quality Policy has been designed in accordance with the European Standards and Guidelines (ESG) for internal quality assurance within higher education institutions [3] and the guidelines for institutional accreditation by the Danish Accreditation Institution [4].

Purpose	Ideal study programmes arise not just (or even primarily) through reporting and monitoring but, more importantly, through the day-to-day work that faculty perform with other faculty, external stakeholders and students.

	To assure and continuously enhance quality, it is necessary to know the current state of affairs, to record the arguments for changes and to ensure that good ideas are tested and, if successful in test, adopted in practice. This requires appropriate organizational structures and coordination of efforts. The purpose of the Quality Policy is to describe the organisation and coordination of efforts through which ITU continuously and systematically assures and enhances educational quality. The day-to-day users of the Quality Policy include teachers; those with managerial responsibilities for teaching or research at ITU; all student and faculty representatives serving on Subject Area Teams and the Board of Studies; and administrative staff working with education.
Scope of the Quality Policy	The Quality Policy defines ITU's Quality Standards; names ITU's (*Quality*) *Work Processes* (e.g., the work processes through which the Quality Standards are maintained and monitored); and defines the *Alarm Handling Processes*, i.e., processes following discovery of breach of quality standards. Some alarm handling actions are *mandatory* (described using words like "must"); other actions (described using words like "may" or "suggest") are *recommendations*, which may be replaced with other ones which, in the eyes of those responsible for the quality standards, are at least as effective as the ones listed in this document. The Quality Policy applies to all Bachelor, MSc and part-time programmes at ITU. The procedures for starting new study programmes are described in a separate document [17].
Policy Areas	The Quality Policy has three *Quality Policy Areas*, corresponding to ITU's definition of what it means for a study programme to be ideal: 1) Recruitment and Admission of Students 2) Teaching and Learning 3) Graduates' Careers For each Quality Policy Area, we state in the Quality Policy: a) Relevant context in which the Quality Policy Area resides, e.g., relevant development goals; b) Definition of the quality standards for that area. Every quality standard is either decidable by itself or broken down into sub-ordinate standards, which are decidable; in the latter case, we say that the standard is met, if all the sub-ordinate standards are met. For each standard, the Quality Policy states who is responsible for the standard.
Responsibility	The Vice Chancellor is responsible for the Quality Policy; the implementation of the policy takes place through processes anchored in Executive Management. The implementation of the policy respects delegations given by law or by delegation from the Vice Chancellor. For example, by law, the Board of Studies is responsible for the quality assurance of individual study programmes, whereas, by delegation from the Vice Chancellor, the Heads of Department are responsible for hiring of faculty.

	Throughout the Quality Policy, to be responsible for a quality standard means: • At regular intervals (which are defined in the Quality Policy), one must find out whether the standard is met or not • One must record the documentation showing that the standard is met or not at the place indicated in the Quality Policy • If the standard is not met, one must initiate follow-up actions, as stated in the quality standard. The Quality Policy lists responsibilities by quality standards rather than by roles. Thus, the definition of a standard within a Quality Policy Area contains the following fields: • Summary (optional): A brief summary about what the quality standard says; • Terminology (optional): Introduction of concepts or notation used in this (and perhaps subsequent) quality standards; • Predicate: a decidable predicate defining when the standard is met; • Responsible: reference to role or collegial body which is responsible, in the sense defined in this Preamble; • (Quality) Work Process: reference to or description of a process which contains the monitoring and follow-up actions of the standard; • Place of record: where is documentation of the fulfilment or otherwise of standard to be stored; • Alarm-handling Process: description of process describing corrective steps in cases the standard is *not* met.

Primary Quality Data	Some standards and goals refer to or rely on *Primary Quality Data,* of which there are the following:
	• Recruitment and Admission of Students
	  a) Number of applications, number of applicants offered admission, number of admitted students and origin of admitted students (BSc and MSc study programmes)
	  b) Percentage of female students admitted to BSc SWU and BSc DS after early dropout
	• Teaching and Learning
	  c) For BSc and MSc study programmes: drop out after first year, average delay compared to Curriculum Document[1] schedule, and rate of students who complete within scheduled time plus one year
	  d) Research-based teaching (VIP/DVIP-ratio)
	  e) Course Evaluation Results
	  f) Supervision Evaluation Results
	  g) Uddannelseszoom, BSc and MSc students (selected questions)
	
	• Graduates' Careers
	  h) Gross unemployment rate of MSc graduates 4 to 7 quarters after graduation (study programme, ITU, national average)
	  i) Rolling, weighted average unemployment rate of MSc graduates 4-7 quarters after graduation (study programme, ITU, national average

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[1] In this document, we use the term "Curriculum Document" is used for what in Danish is called "studieordning". We use the term "curriculum" to refer collectively to all learning objectives and learning activities.

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j) Gross employment rate of BSc and MSc graduates (study programme, ITU)

k) Uddannelseszoom, graduates (MSc) (selected questions)

The definitions of the Primary Quality Data are found in *Appendix A Definitions of Primary Quality Data*.

The University Director is responsible for making Primary Quality Data available to all employees who partake in the (Quality) Work Processes in time for when the data is to be used in the process in question. ITU uses QlikSense (ITU's data warehouse) to achieve this.

Data provided by the Ministry of Higher Education and Science is used, where available.

Clearly, quality of education cannot be reduced to Primary Quality Data. Primary Quality Data can show obvious strengths or issues, but the reports of the Quality System consider a broader range of aspects of quality.

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<td>Reports and their Use</td>
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The Study Programme Report

At the level of individual study programmes, the key document is the annual *Study Programme Report*, in which the Head of Study Programme, after consulting the Subject Area Team (SAT), reports to the Education Group and Head of Department, cc the Programme-Specific Employers' Panel, following a template. See Figure 1. The Study Programme Report contains:

- Primary Quality Data for the study programme for the past three calendar years
- Follow-up on the action plan of the previous period
- Status of goals from the strategic framework contract pertaining to the study programme
- Status of quality standards pertaining to the study programme, including descriptions of follow-up actions initiated by standards that were not met;
- A description of changes made to the study programme as a results of recommendations made by the employers' panel
- A summative analysis of the study programme's strengths and challenges; and
- An action plan for the quality work for the coming period.

The Study Programme Report forms the basis of a recurring *Study Programme Quality Status Meeting* between the Head of Study Programme, the Education Group and relevant Head of Department.
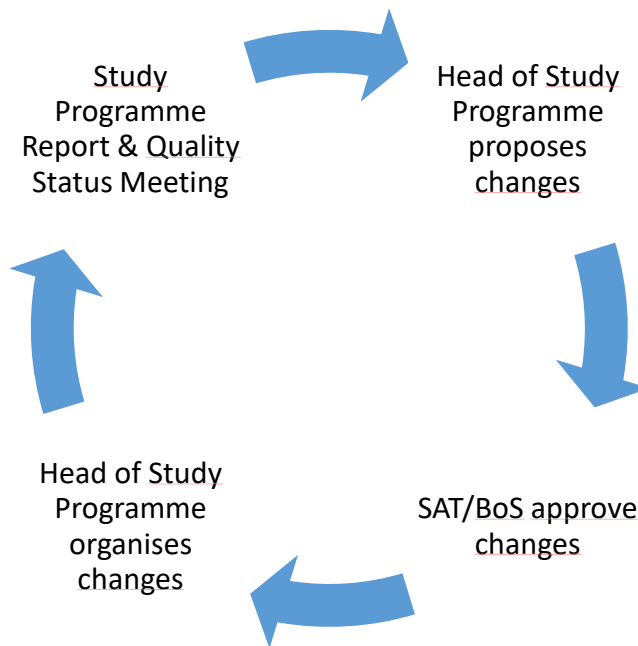
Cycle time: 1 year.

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Figure 1, Context of Process StudyProgrammeReport (simplified)

The Education Portfolio Report
Based on the Study Programme Reports, the Education Group prepares an *Education Portfolio Report* and, when the Board of Studies have made their statement, submits the report to Executive Management. See Figure 2. The report describes:

- Strengths and successes of study programmes, including contributions to reaching development goals
- Opportunities for the university
- Threats and Weaknesses
- A tabular summary of the extent to which ITU's study programmes has met the goals and standards (red/green)
- Recommendations to Executive Management concerning the future of study programmes with breaches of quality standards
- Recommendations to Executive Management concerning how the quality assurance system itself might be improved.
- An action plan for the quality work for the coming period.

The Education Portfolio Report forms the basis of a recurring *Portfolio Quality Status Meeting* between the Education Group, the Heads of Department and Executive Management.
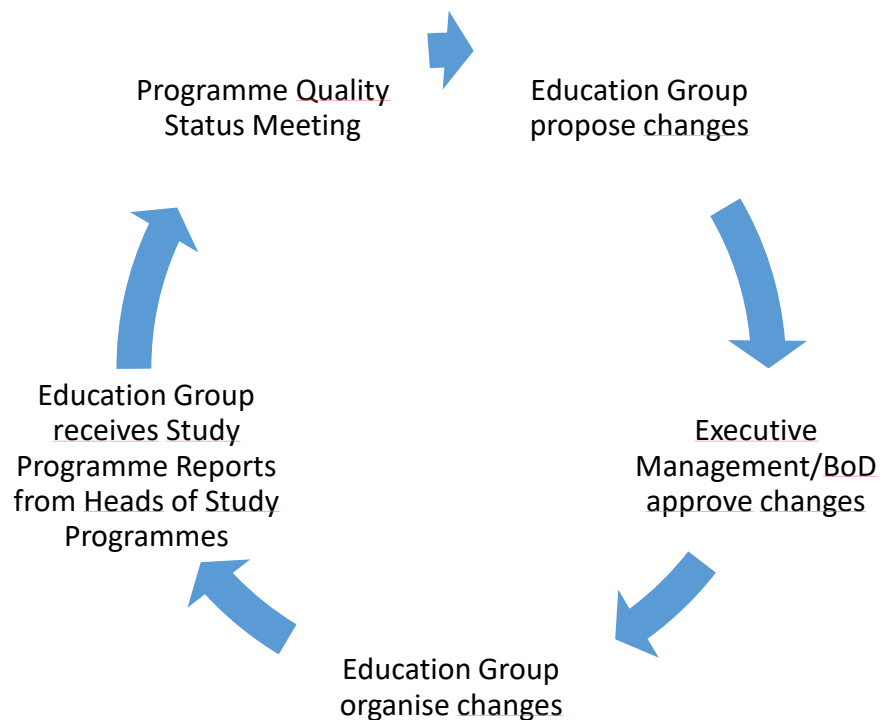
Cycle time: 1 year.

Programme Quality
Status Meeting

Education Group
propose changes

Education Group
receives Study
Programme Reports
from Heads of Study
Programmes

Executive
Management/BoD
approve changes

Education Group
organise changes

Figure 2 The Education Portfolio Report and its use in Portfolio Quality Status
Meetings (simplified)

Executive Management follow-up
The Education Group's action plan and recommendations for the coming period
are discussed and decided at the status meeting. The Education Portfolio
Report is adjusted accordingly.

Executive Management, Education Group and Heads of Department meet twice
during the next year to follow-up on the action plan.

The Education Portfolio Report and its action plan enter into Executive
Management's plan for the coming period. Executive Management can decide
- To reduce or increase admission numbers;
- To terminate a study programme
- To initiate the development of a new study programme
- To make changes to the organisation of the quality system;

The Executive-Level Employers' Panel read and discuss the Education Portfolio
Report and question Executive Management about their follow-up actions.

Cycle time: 1 year.

The Programme-Specific Employers' Panel Report
The Programme-Specific Employers panels [5] each write an annual
Programme-Specific Employers' Panel Report. The report is used by the
Executive-level Employers' Panel; the Heads of Study Programme of the

programmes in question; the Dean of Education; the Education Group, the Heads of Department and the Vice Chancellor. The Programme-Specific Employers' Panel Report is discussed by the Subject Area Team and serves as input to the Study Programme Report.
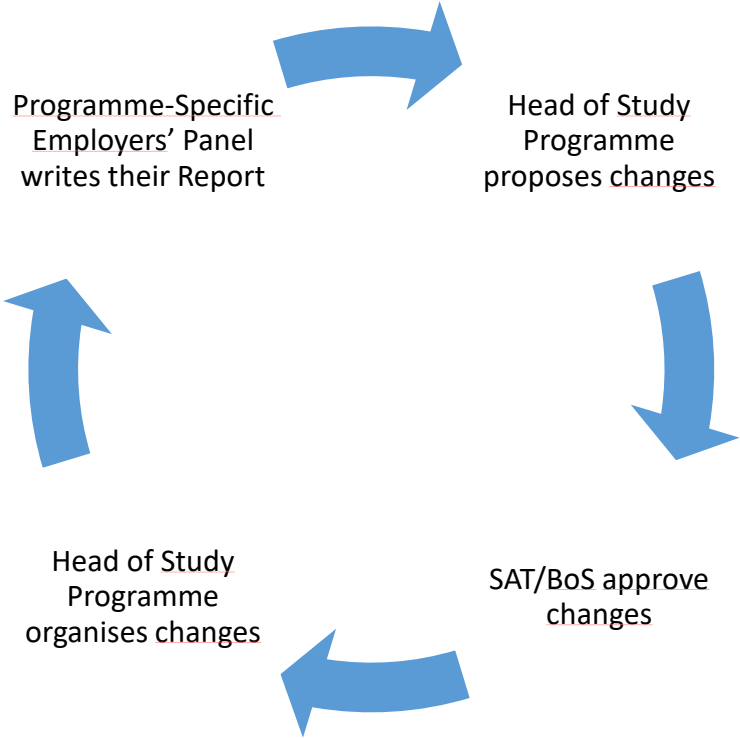
Cycle time: 1 year.

Figure 3 Programme-Specific Employers' Panel Report and its use (simplified)

The Executive-Level Employers' Panel Report
The Executive-Level Employers panel [6] writes an annual *Executive-Level Employers' Panel Report* and submits to the ITU Board of Directors through Executive Management, cc the Dean of Education and Heads of Department. The report is discussed at one of the follow-up meetings concerning the Education Portfolio Report. The report is also discussed at a meeting in the Board of Directors. Executive Management is responsible for implementing whatever changes the Board of Directors decide.

Cycle time: 1 year.

Programme Review Reports
ITU organizes regular reviews of its study programmes [7, 8]. Each review involves the formation of an external panel, who produces a *Programme Review Report,* which it submits to the Education Group, Head of Department and Head of Study Programme. The Programme Review Report serves as input to the writing of the Study Programme Report.

Cycle time: 4-5 years (two study programmes are reviewed every year).

	Study Environment Assessment (Danish: "undervisningsmiljøundersøgelse") A Study Environment Assessment must be carried out at least every three years. The assessment consists of data collection and analysis and making and implementing an action plan for improvement of the study environment. ITU uses data from the survey on studying & learning, well-being and study environment carried out by the Ministry of Higher Education and Science every other year.[2] Board of Studies and Dean of Education are responsible for making the Action Plan for study environment improvements and assigning responsibility for implementation of the individual action points. The Action Plan and progress on implementation is available on www.itu.dk and ITU Student. Follow-up actions pertaining to the individual study programmes are recorded in the Study Programme Reports and the Education Portfolio Report. Cycle time: every other year (2018, 2020, 2021[3], 2023, …) **Data on Graduates** ITU's Strategic Framework Contract 2018-2021 contains the following goals concerning graduates: 1. **Graduate unemployment rates** For each of ITU's MSc study programmes, the rolling weighted average for unemployment for the past three calculated years, measured four to seven months after graduation, is lower than or equal to the rolling weighted national average for unemployment for the past three calculated years, measured four to seven months after graduation from an MSc programme. 2. **Relevance (Uddannelseszoom, graduate survey)** The average score for IT University of Copenhagen must be at least 4.0 for the question "My education has prepared me for my current or previous job". 3. **Relevance (Employment Ticket)** All study programmes must have an Employment Ticket, which is approved and evaluated annually by the relevant Programme-Specific Employers' Panel. Cycle time: annually (1)/biennial (2, 3)
(Quality) Work Processes	By (Quality) Work Processes we mean documented work processes which play a role in the quality assurance and quality enhancement work. We put the word Quality in parentheses to emphasise that ITU does not have a separate kind of work process for "quality work" but view quality assurance and development as part of day-to-day work processes. In order to support continuous improvement, (Quality) Work Processes are cyclical in nature. Since activities implementing the Quality Policy are embedded in production processes which are also cyclical in nature (due to the

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[2] The survey includes four elements: LÆRBAR, Uddannelseszoom, TRIV and DCUM (Danish Centre for Educational Environment), see e.g. www.ug.dk or www.ufm.dk for more information.
[3] In 2021, execution changes from even to uneven years.

	yearly or half-yearly cycles that permeate all study programmes), (Quality) Work Processes are often described as cyclic processes (Danish: "årshjul").

Cyclic improvement processes follow the following pattern: collect data; suggest changes; approve changes; and organise changes. The phases are time boxed within the cyclic processes. Some changes take longer than one cycle to implement. That is why there is no time boxed "implement" phase in the cyclic processes. Rather, *organising* changes may mean *implementing* changes (if they can be made quickly) or *planning* larger changes, for example as PPG projects.

The Quality Coordinator maintains the cyclic processes (årshjul) and keep operators informed on deadlines etc. |
| Decision Powers | The Work Processes are designed with the following principles in mind:
1. Responsibility and Decision Powers must be aligned: those who have the responsibility must also have the decision powers needed to meet the responsibility.
2. Decisions must be made as close to the actual teaching as possible. For example, a course manager can make changes on a course which have no significant bearing on the intended learning outcomes of the course; other course-level changes must be approved at the appropriate level, for example a Subject Area Team or Board of Studies, depending on the scope of the consequences of the change.
3. Collective bodies (including Subject Area Teams, Board of Studies and Employers' Panels) must be involved in matters that, by law or by their terms of reference, they are supposed to discuss or approve. For example,
   a. Changes on a study programme proposed by a course manager which in some significant way impact the learning outcomes of the course or the study programme should be approved by the appropriate Subject Area Team.
   b. Changes on one study programme proposed by a Subject Area Team that impact more study programmes should be approved in the Board of Studies.
   c. While the university decides what is taught in its study programmes, the relevant Employers' Panel(s) should be heard about changes to study programmes that may impact the employability of graduates.
   d. Executive Management recommends the creation and termination of study programmes to the Board of Directors, after hearing of the Board of Studies, the Education Group and, in the case of termination, the relevant Employers' Panel. |
| Revision of Quality Policy | Executive Management review the Quality Policy Preamble when the policy is updated. In addition, Executive Management can at any time initiate revision of the Quality Policy or parts thereof and is obliged to consider doing so, if the Education Portfolio Report reveals systemic quality issues. The Board of Studies and the Education Group can submit requests for changes to the Quality Policy to the Executive Management. |

	The Development goals and quality standards of the Quality Policy are revised once a year, although the Development Goals are given by the Strategic Framework Contract, which has goals for four consecutive years. Executive Management formulate study programme-specific goals and standards once a year. It is the responsibility of the Executive Management to ensure that fulfilment of the study programme-specific goals and standards is sufficient for the achievement of the institutional goals and standards decided by the Board of Directors.
References	1. ITU Strategy 2017-2021 2. Strategic Framework Contract for the IT University of Copenhagen 2018-2021 3. European Standards and Guidelines 4. The Danish Accreditation Institution: Institutional Accreditation (guide) 5. Terms of Reference Programme-Specific Employers' Panels 6. Terms of Reference Executive-Level Employers' Panel 7. Concept for Review of ITU Study Programmes 8. Template for Terms of Reference for Programme Reviews 9. Role Description for Head of Studies[4] 10. Role Description for Head of Study Programme 11. Role Description for Head of Board of Studies 12. Role Description for Head of Department 13. Role Description for Vice Chancellor 14. Subject Area Team Meetings 15. Description of Education Group 16. The role of the Board of Studies is described in § 15 of "Vedtægter for IT-Universitetet i København", signed June 20, 2012 17. Concept for Development of New Study Programmes at the IT University of Copenhagen 18. PP Model
Transparency	This document and the documents listed under "References" items 1 through 4 are public documents, available through the Internet. The documents listed under "References" items 5 to 18 are available through the Intranet, F2 or SAP Files. Study Programme Reports, Education Portfolio Reports, Programme Review Reports and reports from the employers' panels produced as a result of the actions described by this Quality Policy are public information and can be provided upon request.
History	**Quality Policy 2021**: The 2021 edition of the Quality Policy is based on the 2020 edition. In the introduction to section 2 on Teaching and Learning, it has been made more visible how ITU works with Student Centered Learning, also concerning exams. In Quality Standard 2.1 the target figures have been taken out, as they are decided during spring. Measures concerning mapping and learning outcomes have been moved from Quality Standard 2.8 to 2.5 to where they fit better. Quality Standard 2.11 on Teacher Development has been aligned with the new ministerial order on classification of academic ranks and titles. There are

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[4] From 01-01-21, the Head of Studies was replaced by a Dean of Education. During 2021, the role description will be adjusted.

changes to predicate 1 (assistant professors), and 2 (associate professors) and a new predicate has been added to cover researchers in principal positions. Finally, the title Head of Studies has been replaced with the new title Dean of Education (Uddannelseschef).
A draft version was discussed in Education Group and Board of Studies in November 2020. Executive Management discussed the Quality Policy 2020 in December 2020 and approved it in January 2021.

Quality Policy 2020:
The 2020 edition of the Quality Policy is based on the 2019 edition. The description of the process after the status meeting on the Education Portfolio Report and its action plan has been updated. Quality Standard 2.1 (student evaluations) has been changed due to the implementation of a revised evaluation system for courses and supervision. For Quality Standard 2.7 it has been specified, that only ITU faculty can supervise final projects. For the same quality standard a third reason for hiring DVIP has been added (strategic considerations). Quality Standard 2.10 (contact and feedback) has been taken out as it has become redundant: All courses are scheduled to ensure the standard of at least 56 lessons to a 7.5 ECTS-points course is always met. Teaching Format Budget and Student Activity is now called Student Activity Budget (Quality Standard 2.10). A new quality standard on employment rates has been added (QS 3.3) as employment is a new measure monitored by the Ministry. BSc study programmes are no longer measured on unemployment rates for the corresponding MSc study Programme (QS 3.2).
Apart from these changes, only minor adjustments of e.g. wording has taken place. A draft version was discussed in Education Group in September 2019. Executive Management decided on the Quality Policy 2020 in November 2019.

Quality Policy 2019:
The 2019 edition of the Quality Policy is based on the 2018 edition. Develop-ment Goal 1.2 (admitted female students) has seen a change in the number of female students to be admitted in 2019. A new predicate on teaching formats and student activities has been added to Quality Standard 2.11 (constructive alignment). The new standard will be implemented on all study programmes during 2019. Apart from these changes, only minor adjustments of e.g. wording has taken place. A draft version was discussed in Education Group in September 2018. Executive Management then made the changes to Development Goal 1.2 and decided on the Quality Policy 2019 in December 2018.

Quality Policy 2018:
The 2018 edition of the Quality Policy is based on the 2017 edition. Four new development goals have been introduced. One concerns the share of female students on selected study programmes (1.2). The rest concern ITU scores on selected questions from Uddannelseszoom (2.2 and 3.3). Quality Standard 3.2 has had a third predicate added concerning the rolling weighted average for unemployment measured four to seven quarters after graduation. Quality Standard 1.3 on the relation between unemployment rates and admission on individual study programmes has been removed (the Heads of Study Programme are still asked to reflect on it in their annual report).

| | Due to the changes, a renumbering of all standards and goals has taken place. A draft version of the 2018 edition was discussed in the Education Group, Board of Studies and Executive Management in October 2017. Negotiations with the Ministry on the strategic framework contract were then awaited. The final draft was discussed in the Education Group and Executive Management in March 2018.

Quality Policy 2017:
The 2017 edition of the Quality Policy is based on the 2016 edition. Only minor adjustments have taken place (update of references, changes to wordings etc.). A draft version of the 2017 edition was discussed in the Education Group and Board of Studies in November 2016. The agreed version was then sent to Executive Management for decision. Executive Management, having asked for minor additional changes, decided on the Quality Policy 2017 on 21 March 2017.

Development of the Quality Policy 2016:
Executive Management, the Head of Studies and the Head of Department drafted and edited this document. The document was repeatedly discussed by the Extended Group of Managers (which included the Education Group; the Heads of Section and the four Heads of MSc Study Programmes), before it was sent for hearing among faculty and student representatives in the Subject Area Teams and the Board of Studies and the Board of Directors. |

1 Recruitment and Admission of Students

Context for the Quality Policy Area (based on ITU strategy and ITU's strategic framework contract)

ITU wants to attract a large number of well-qualified students [1].

1.1 Quality Standard
Number of Students Admitted

Summary	It is part of ITU's strategy to attract a large number of well-qualified students. This Quality Standard makes precise what "large number" means.
Predicate	The Study Programme admits at least as many students as assumed in the admission budget.
Responsible	Head of Study Programme
Place of record	Admission Memo (and Study Programme Report)
Alarm Handling Process	Recommendations: 1) Investigate whether there are changes in the competitive situation which can explain the insufficient admission; 2) Revisit red lights from previous Study Programme Report to see whether there are unresolved issues that could explain failing admission; 3) Investigate whether the number of applicants is much larger than the number of admitted students and if so, whether changes to the admission process are necessary.

1.2 Development Goal
Share of Female Students Admitted

Summary	It is part of ITU's strategic framework contract to increase the share of female students on selected study programmes.
Predicate	1. The percentage of women admitted on BSc SWU after early dropout meet the target set by Executive Management. 2. The percentage of women admitted to BSc DS after early dropout meet the target set by Executive Management.
Responsible	Head of Study Programme
Place of record	Admission Memo (and Study Programme Report)
Alarm Handling Process	Recommendations: 1) Investigate whether there are changes in the competitive situation which can explain the insufficient admission of female students; 2) Revisit red lights from previous Study Programme Report to see whether there are unresolved issues that could explain failing admission of female students; 3) Investigate whether the number of female applicants is much larger than the number of female applicants offered admission and if so, whether changes to the admission process are necessary.

1.3 Quality Standard	
Qualifications of Admitted Students	
Summary	It is part of ITU's strategy to attract a large number of well-qualified students. This Quality Standard makes precise what "well-qualified" means.

1.3.1 Quality Standard	
Well-qualified Students (MSc and Master programmes)	
Predicate	At the time the Head of Study Programme assessed the applicants, (s)he did not recommend admission of any applicant whom, in the opinion of the Head of Study Programme, had weak qualifications.
Responsible	Head of Study Programme
Place of record	Admission Memo (and Study Programme Report)
Alarm Handling Process	1) (Mandatory) Quantify the extent of the phenomenon, preferably with a description of what weaknesses are observed; 2) (Mandatory) Consider what changes to the admission process would be necessary to eliminate the problem; 3) (Mandatory) Consider whether there are aspects of the programme itself that could be changed in order to attract more well-qualified students; 4) Discuss with the Communications Department whether the marketing of the programme needs to be changed to reach more well-qualified students.

1.3.2 Quality Standard	
Well-qualified Students (Bachelor programmes)	
Terminology	Under the Danish coordinated application system (KOT), there are two types of applicants. Quota 1 applicants are offered admission based on grades; quota 2 applicants are offered admission based on other criteria as well.
Predicate	No Quota 1 applicant with a grade point average below 7.0 was offered admission.
Responsible	Head of Study Programme
Place of record	Admission Memo (and Study Programme Report)
Alarm Handling Process	(same as in 1.2.1)

2 Teaching and Learning

ITU wants the academic contents and the teaching to meet the highest international standards and be research based [1]. To ensure that the teaching is research based, it is important that research faculty (VIP) ensure the academic standards of the teaching, and that students work with and get feedback from research faculty (see 2.6, 2.7).

Part-time lecturers (DVIP) can play a role in ensuring that the students meet the ITU understanding of what good research is, namely that good research is motivated both by a quest for deep insight and by consideration of use. Some research faculty are more motivated by a quest for deep insight than consideration of use and some part-time lecturers are more motivated by consideration of use than by the quest for deep insight, so it is important for students to work with both research faculty and part-time lecturers (see 2.6, 2.7).

The extent of teaching by part-time lecturers on part-time programmes should not differ from the extent of teaching by part-time lecturers on full-time programmes (see 2.6).

From ITU's strategic framework contract [2]:
1. **Research based education (VIP/DVIP-ratio)**
   ITU's VIP/DVIP-ratio (overall and by study programme) meet the standard determined in the Quality Policy.
2. **Quality and benefit from a student perspective (Uddannelseszoom, student survey)**
   The average score for each study programme at IT University of Copenhagen must be at least 4.0 for the questions "The quality of my programme is generally high" and "I benefit from the programme" respectively.

Legal requirements to Quality
3. **Qualification Framework**
   The academic level of each programme is at least in correspondence with its Danish Qualification Framework level (see 2.5).
4. **Research-based Teaching**
   The teaching is research-based (see 2.6, 2.7).
5. **Teacher Development Programme**
   All assistant professors must follow a University Pedagogical Programme (Danish: "Universitets-pædagogikum")[5]

From the ITU Strategy [1]
6. **Ensuring the research base** (see 2.6, 2.7 and 2.8)
7. **Ensuring pedagogic skills** of faculty (see 2.1, 2.4 and 2.11)

Research-Based Teaching
By an *active researcher* we understand a person who currently conducts research (at ITU or elsewhere). Post docs are included.

At all times, at least two faculty members must be qualified to teach a mandatory course for it to be

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[5] Cirkulære om stillingsstruktur for videnskabeligt personale ved universiteter

considered robust (in rare cases, exceptions can be made for strategic reasons, see item 2 below) (see 2.8).

ITU uses a numeric indicator, called the VIP/DVIP ratio, to measure the ratio of student learning activities that had researchers as responsible over the number of student learning activities that had part-time lecturers as responsible. ITU has a quality standard for the VIP/DVIP ratio, which applies to all study programmes (see 2.6).

Concerning teaching on courses, it is the policy of ITU that
1. Curriculum development responsibility lays with active researchers employed at ITU. Part-time lecturers who are course managers collaborate with active researchers employed at ITU (Course academic Responsible) on course design; including planning of intended learning outcomes; learning activities and exam form.
2. The employment of DVIP for teaching on courses must have one of the following three purposes:
    a. To bring an industry perspective and/or practical expertise to courses where it is relevant.
    b. To ensure stability of study programmes. In cases where researchers become unavailable for planned teaching with short notice before a semester starts, DVIP can be stand-ins.
    c. To serve as a strategic measure.
        i. DVIP is an active researcher at another university and provides research-based teaching within an area where ITU is less/has chosen not to be as strong
        ii. DVIP teach a course aimed at basic skills on the study programme (e.g. math)
        iii. DVIP supplements teaching on courses that are robust (two faculty can teach it) when faculty cannot cover all teaching.

Concerning supervision of MSc theses BSc projects and Master final projects, it is the policy of ITU that
3. Every final project and thesis is supervised by an active researcher from ITU.
4. The supervisor must supervise and help the student reach the appropriate academic level and provide necessary support for the thesis/project to meet academic standards.
5. On professional master and BSc programmes, the supervisor should allocate at least 15 hours for supervision per project. On MSc programmes, the supervisor should allocate at least 30 hours for supervision per project. The number of hours is an average, including administration and examination.
6. It is possible to split the supervisor task among several active researchers, for example in case of interdisciplinary projects, but there must always be exactly one main supervisor.
7. In rare cases, the supervisor may not be an active researcher from ITU. The Head of Study Programme must recommend the exemption in writing to the Dean of Education, who approve or reject the exemption in writing and store the approval in the records of Student Affairs and Programmes.

Finally, ITU has a model for how much faculty should teach, the so-called 2019 PP Model [19]. For example, an associate professor with no teaching deductions must deliver 867 ECTS points each year.

Part-time Lecturers
Part-time Lecturers should be highly regarded professionals whose professional experience can benefit the students greatly. Part-time Lecturers should not be recruited as a means of covering persistent holes in staffing by active researchers unless for strategic reasons agreed to by Executive Management (see 2.7).

Student-centered Learning (SCL) and Constructive Alignment
SCL is integrated in ITU's pedagogical principles. The pedagogical principles constitute the framework for – and highly influence – all competence development of teachers. The principles systematically reflect all aspects of student-centered learning.

The implementation and continuous systematic work with constructive alignment, constitute our approach and well-established implementation of SCL. All planning and implementation of teaching and exams at ITU is based on John Biggs' principles of Constructive Alignment. The overall and most important principle is that descriptions and implementation of intended learning outcome (ILO), teaching and learning activities and exam forms must be aligned. Students should be made aware of this correlation so that they may achieve the best possible progression and results.
Monitoring and quality assuring SCL is linked to several of the Quality Standards in Section 2. E.g. student evaluations of teaching and supervision.

Student Involvement
Students participate in the (quality) work processes in the following ways:
- By providing input to and participating actively in course and supervision evaluations as well as Study Environment Assessments and other evaluations concerning student life, teaching & learning and exams.
- By providing input to Programme Reviews, and, when they have graduated, to data concerning graduates.
- As members of Subject Area Teams and Board of Studies, which approve changes to study programmes originating from student evaluations, Employers' Panels, Quality Status Meetings or other sources, and decide the course portfolio.
- As members of the ITU Board of Directors, students participate in discussing the Executive Employers' Panels' report and supervising Executive Management concerning follow-up; the approval of the University's budget; and in deciding the creation of new or termination of existing study programmes.

Qualification Framework (Programme Learning Outcomes)
Courses must be designed to fit the rest of the study programme. Changes to a course must not bring the study programme out of alignment with the learning objectives of the entire study programme (see 2.5), as described in the Curriculum Document, nor must it restrict the number of persons who can teach any mandatory course to just one active researcher (see 2.8).

Strategy Concerning Diversity in Origin of Student Population on MSc Programmes
ITU's MSc programmes attract students from a variety of bachelor programmes. ITU has the following policy for diversity of MSc students:
1) The university must maintain a mapping of the learning objectives described in the Curriculum Document to the Qualification Framework, to ensure that, for all admission tracks or specialisations, the level is MSc level (see 2.5);
2) Admission procedures must ensure that the admitted students have the skills required to start the programme (see 1.2);
3) In first semester activities with students of diverse backgrounds, the university must ensure that the teachers are aware of and have the right knowledge and didactic tools to address the diversity (see 2.4);
4) Systematic follow-up is performed on how the diversity of backgrounds influence Primary Quality Data (see 2.4).

2.1 Quality Standard	
Student Evaluation of Courses; Projects and Final Projects	
Terminology	Students at IT University of Copenhagen participate in two different evaluations: Course evaluations and Supervision evaluations (final and other projects). The evaluations include a few quantitative questions centered on learning outcomes. An average score is calculated for each course, teacher/supervisor, study programme and ITU. In the predicates below, 'average' means 'average for the entire calendar year'.
Predicate	1. The average score of the student answers to the course evaluation survey is greater than or equal to 4.75 (on a scale from 1 to 6) on all programmes and at ITU level. 2. The average score of the student answers to supervision evaluation is greater than or equal to 4.75 (on a scale from 1 to 6) on all programmes and at ITU level.
Responsible	Head of Study Programme
Place of record	Study Programme Report and (quality) work processes for each of the evaluations for follow up on all data collected
Alarm Handling Process	Recommendations (if a score falls below the target) 1. Identify where the issues are located, e.g. single course, single teacher/supervisor, single cohort, or prevalent across the programme. 2. Identify whether the issue lies in structural issues or in the teaching/supervision. 3. Develop an action plan for how to handle issues. The Course Manager or the Subject Area Team follows up on all issues not concerning personnel management. The relevant Head of Department follows up on issues concerning personnel management.

2.2 Development Goal	
Student Evaluation of educational quality and personal benefit	
Summary	Students at IT University of Copenhagen participate in the Ministry's survey Uddannelseszoom. Data is collected every other year at the end of the year and a score is calculated for each study programme. The Ministry forwards survey results and the scores to ITU by the end of the calendar year. The score applies the following two calendar years. Data was collected in 2016, 2018 and 2020. Then execution changes to uneven years: 2021, 2023 etc.
Predicate	1. The score for the individual study programme for the question "The quality of my programme is generally high" must be at least 4.0 (on a scale from 1-5) 2. The score for the individual study programme for the question "I benefit from the programme" must be at least 4.0 (on a scale from 1-5)
Responsible	Dean of Education
Place of record	Study Programme Report
Alarm Handling Process	Recommendations (if a score falls below the target) 1. Develop a plan for how to handle issues. The Dean of Education and relevant Heads of Study Programme cooperate on this.

2.3 Development Goal
Completion Times for BSc and MSc students

Predicate	IT University of Copenhagen will reduce the average graduate delay compared to scheduled completion time for its BSc and MSc graduates to be at most 8.2 months in 2019, 2020 and 2021.
Responsible	1. Dean of Education 2. Head of Study Programme
Place of record	1. Education Portfolio Report 2. Study Programme Report

Actions in case the goal is not met	1. Follow up on the action plans of Heads of Study Programme (see 2c below) and document findings in the Education Portfolio Report.
	2. Individual programme:
	   a. Identify where the issues are located, e.g. single course, single cohort, or prevalent across the program.
	   b. Identify if the issue lies in the learning objectives or in the teaching.
	   c. Develop an action plan for how to handle issues. The Subject Area Team follows up on issues concerning learning objectives. The relevant Head of Department follows up on issues concerning personnel management.

2.4 Quality Standard
Diversity of Students on MSc Programmes (origin)

Terminology	To enable measurements and follow-up on diversity, we distinguish between the following origin categories of students: – ITU (a BSc from ITU) – Danish University (not a BSc from ITU, not a Danish Professional Bachelor's degree) – Foreign University – Danish Professional Bachelor's degree – Others (including some degrees under the Ministry of Culture and educations within the police and armed forces) – Unknown (degrees that fall outside the other categories)
Predicate 1	None of the origin categories differ significantly from the study programme average concerning progress (PQD = average graduate delay).
Predicate 2	Twice a year, a workshop is held for the teachers on each study programme. The workshop addresses coordination and pedagogics as well as diversity and background of new cohorts and, for MSc programmes, is attended by both the Head of the MSc programme and the Head of the associated BSc programme.
Responsible	Head of Study Programme
Place of record	1. (ad Predicate 1) Study Programme Report 2. (ad Predicate 2) Minutes from semester workshops
Alarm Handling Process	1. (ad Predicate 1) Problems must be analysed and a proposal must be developed to remedy either the curriculum or the admission procedure (mandatory) 2. (ad Predicate 2) The Education Group tasks the relevant Head of Department with follow-up (mandatory).

2.5 Quality Standard
Qualification Framework and Progression

Summary	The university must ensure that all its study programmes meet the requirements of the Danish Qualification Framework.
Terminology	The Qualification Framework has different requirements for different levels of study programmes (BSc, MSc, and Master). A *Qualification Framework Mapping* shows the relationship between the paths of study activities through the study programme permitted by the Curriculum Document and the level-specific Qualification Framework requirements of the study programme. For study programmes with no specialisations and only one admission track (typically BSc programmes), a Qualification Framework Mapping consists of two maps, namely 1. a map of the objectives for learning output (as described in the Curriculum Document) against the Qualification Framework requirements of the level of the study programme; and 2. a map of the objectives for the learning output of the programme against the non-elective study activities of the study programme, each course activity listed with the relevant part of its intended learning outcomes. For MSc study programmes with more than one admission track and more than one specialisation, the Qualification Framework Mapping considers every path of non-elective study activities from admission to a specialisation permitted by the Curriculum Document. Every change of a course (or introduction of a new course) is checked for consistency with the overall structure and learning outputs of the study programme, as defined in the Curriculum Document. The relevant Subject Area Team must approve changes to the course portfolio, which have any bearing on other courses or on compliance with the overall learning objectives of the programme. The Subject Area Team must document why it considers the change to be consistent with the overall structure and learning objectives of the study programme, as defined in the Curriculum Document (or else raise an alarm).
Predicate	1) For every study programme, there exists an updated Qualification Framework Mapping, and 2) For every study programme and for every path through the study programme which the Curriculum Document permits, the Qualification Framework Mapping shows that a. The objectives for learning outputs which the Curriculum Document associates with that path cover the (Danish) Qualification Framework requirements; and b. The intended learning outcomes of the study activities that constitute the path cover the objectives for learning outputs that the Curriculum Document associates with that path.
Responsible	Head of Study Programme
Place of record	Qualification Framework Mappings, which are stored in SAP Files.
Alarm Handling Process	Mandatory: The Subject Area Team must change the study programme to eliminate the shortcoming.

2.6 Quality Standard
Balance between VIP and DVIP in teaching

Summary	ITU monitors the ratio of teaching carried out by researchers (VIP) to teaching carried out by part-time lecturers (DVIP) making sure at least 75 % of the teaching is delivered by ITU researchers, while up to 25 % of the teaching should be delivered by part-time lecturers.
Terminology	Let S be a set of study activities on a programme in a given period. For each study activity s in S, let s_e be the ECTS point size of the activity. Further, let s_v be the percentage of s taught by VIP and similarly, let s_d be the percentage of the activity taught by DVIP (note that $s_v + s_d$ =100%). Finally, let s_n be the number of student registered on the activity. We then define the VIP/DVIP ratio for the programme in that period relative to S as follows: $$\text{VIP/DVIP ratio}(S) = \sum_{s \text{ in } S} (s_e \times s_v \times s_n) \quad / \quad \sum_{s \text{ in } S} (s_e \times s_d \times s_n)$$ that is, the total volume of student activities taught or supervised by active researchers divided by the total volume of student activities taught or supervised by DVIP.
Predicate	For ITU as a whole, the VIP/DVIP ratio is at least 3.00. All study programmes must have a VIP/DVIP-ratio of at least 2.4 (80 % of the ITU standard).
Responsible	Heads of Department (the rolling four-semester planning of course staffing and the Long-Term Hiring Plan are key to meeting the predicate)
Place of record	Study Programme Report
Alarm Handling Process	Mandatory: 1. Alarms must be recorded in the Study Programme Report. After every semester, the Heads of Department and Dean of Education discuss the staffing of study programmes that are in breach of the quality standard and produce a plan for how to prevent the issues from arising again.

2.7 Quality Standard
Research-based Course Design and Supervision

Predicate	1. Every part-time lecturer who holds the role of course manager is associated with an active researcher employed at ITU (Course Academic Responsible, CAR), who can assist the part-time lecturer with course design; including planning of intended learning outcomes; learning activities and exam form (cf. item 1 listed under the Policy Statements concerning Research-Based Teaching); AND 2. For every employment of a part-time lecturer as course manager, there exists a documented reason for this allocation of role which adheres to item 2 listed under Policy Statements concerning Research-Based Teaching; AND 3. Every final project and thesis are supervised by an active researcher from ITU, but for certain rare cases (exemptions must be approved by the Dean of Education). This applies to Master, BSc and MSc-level.
Responsible	1. Heads of Department are responsible for appointing an active researcher (CAR) for each course which has a part-time lecturer as course manager; AND 2. Heads of Department are responsible for ensuring that reasons for assigning part-time lecturers course manager responsibility adhere to the policy statement and are documented; AND 3. Heads of Study Programme are responsible for checking that lists of supervisors whom the students can choose between contains active researchers from ITU only.

	4. Moreover, Heads of Study Programme report on the fulfilment or otherwise of all three parts of the predicate in the Study Programme Reports.
Place of record	1. Head of Department's updated overview 2. Comments in the updated overview 3. Study Programme Report. The student project registration software distinguishes between whether a person is approved to supervise at BSc, Master or MSc level. Moreover, as part of the process of project agreement approval, Student Affairs and Programmes manually check whether proposed supervisors are already approved to supervise projects at the level in question and present proposals for changing the supervision rights of teachers for the approval of the Head of Study Programme.
Alarm Handling Process	Mandatory: To ensure feedback into the hiring system, and to allow follow-up on the research base of our programmes, all deviations from the predicate must be logged in the Education Portfolio Report. The Heads of Department are responsible for finding better solutions for the following semesters as well as taking the feedback into the hiring system.

2.8 Quality Standard
Research base

Terminology	The Heads of Department maintain an updated overview of who among faculty can teach a given course.
Predicate	1. Every course and part of a course (first-coming semester) which is mandatory for some students can be taught by at least two VIP. a. In rare cases, exceptions can be made for strategic reasons, see item 2 listed under Policy Statements concerning Research-Based Teaching.
Responsible	Heads of Department and Dean of Education
Place of record	Twice a year (January and September), when the course staffing map is locked for changes concerning the first-coming semester, Heads of Department and Head of Study Programme check whether the predicate is met for the first-coming semester. They inform the Course Staffing Coordinator, who marks courses where the predicate is not met in the Course Staffing Map. Once a year, the Course Staffing Coordinator sends a list of the courses (concerning one calendar year) to the Quality Coordinator to be recorded in the next Education Portfolio Report and Study Programme Report. Staffing issues are handled via the Long-term hiring plan.
Alarm Handling Process	Mandatory: Either a co-teacher from faculty must be assigned to the course to eliminate the weakness, a part-time lecturer hired (short-term solution) or the course portfolio changed.

2.9 Quality Standard
Completion Rates for BSc and MSc students

Terminology	Completion of bachelor and MSc studies within scheduled time plus one year is defined in the statistical framework ("statistisk beredskab") of Universities Denmark, indicators G1.2 and G2.2, respectively.
Predicate	1. Completion within scheduled time plus one year is at least 70 % at ITU-level for students on full-time programmes. 2. Completion within scheduled time plus one year is at least 70 % on every full-time programme.
Responsible	1. Dean of Education

	2. Head of Study Programme
Place of record	1. Education Portfolio Report 2. Study Programme Report

Alarm Handling Process	1. Follow up on the action plans of Heads of Study Programme (see 2c below) and document findings in the Education Portfolio Report. (Mandatory)
	 2. Mandatory: Individual programme:
	    a. Identify where the issues are located, e.g. single course, single cohort, or prevalent across the programme.
	    b. Identify whether the issue lies in learning objectives or in the teaching.
	    c. Develop an action plan for how to handle issues. The Subject Area Team follows up on issues concerning contents. The relevant Head of Department follows up on issues concerning personnel management.

2.10 Quality Standard
Constructive Alignment

Summary	All courses are designed according to the Constructive Alignment principles.
Predicate	Course descriptions have been approved by Learning Support. Learning Support have checked and approved the following: 1. Intendend Learning Outcome (ILO) description adhere to the SOLO taxonomy 2. ILOs, planned Learning Activities and Exam Forms are aligned and described in sufficient detail 3. Student Activity budget has been selected and aligned to ILOs.
Responsible	Learning Support
Place of record	Study Programme Report and Learning Support's records. Before the beginning of each semester, Learning Support check all course descriptions. In cases where − the ILOs are not consistent with the SOLO taxonomy, or − ILOs, Teaching and Learning Activities, Exam Forms and ECTS-credits are not in alignment, or − The student activity budget is not presented, or − the course description is not sufficiently detailed, Learning Support correspond or meet with the Course Manager, who then modifies the course description for the approval of Learning Support. If Learning Support cannot approve a course description, they inform the relevant Head of Study Programme in writing.
Alarm Handling Process	Mandatory: The Head of Study Programme records cases of unapproved course descriptions in the Study Programme Report, for the consideration of the Education Group. The Head of Study Programme, in cooperation with the Course Manager and Learning support, makes sure breaches of the predicates are rectified before the course is offered again.

2.11 Quality Standard
Teacher Competence Development Programme

Summary	All teachers take part in the Teacher Development Programme.
Terminology	The University Pedagogical Programme is mandatory for all assistant professors at ITU. Part of the programme – the one-day Exam Seminar on qualitative aspects of exams and

	exam regulations – is mandatory for all new teachers (including part-time lecturers) at ITU. The Introductory Teacher Development Programme for PhDs is mandatory for all PhD students. The Introduction to Teaching day is mandatory for all new teachers.
Predicate	As of 31 December (of the year which the next Study Programme Reports and Education Portfolio Report cover), 1. All assistant professors whose contract terminated during the year, completed the University Pedagogical Programme (Danish: "universitetspædagogikum") no later than four months before the termination of the contract, unless they had documented an already completed a similar programme; and 2. All associate professors hired during the year have completed the Teacher Development Programme (or started it with a commitment to finish within 20 months of their employment at ITU), unless they can document to have already completed a similar programme; and 3. All teachers have completed the Exam Seminar before the exams the first semester they teach, unless they are exempted by the relevant Head of Department; and 4. All PhD students have completed the Introductory Teacher Development Programme for PhDs the first semester they teach, unless they can document to have completed a similar programme elsewhere or are exempted by the relevant Head of Department; and 5. All teachers have completed the Introduction to Teaching day during their first year of employment at ITU, unless they are exempted by the relevant Head of Department.
Responsible	Heads of Department
Place of record	Competence Development Plan (F2 case maintained by Learning Support, containing work documents concerning items 1 – 5). Every semester, Learning Support identify assistant professors, associate professors, teachers and PhD students who have not completed the required Teacher Development Programme activity and informs the relevant personnel managers and the Dean of Education. Breaches must be recorded by study programme and department.
Alarm Handling Process	Mandatory: In case assistant professors, associate professors, ph.d. students and other kinds of teachers hired during the year are in breach of (one or more of) the above predicates, Learning Support record the breach of the quality standard in the Teacher Development Programme Plan and pass on to the relevant Head of Department the task to investigate the case and take measures to get the teacher through the required development activities. In case new teachers fail to complete the Introduction to Teaching day, Personnel record the breach of the quality standard and informs Learning Support, who records the breach in the Teacher Development Programme Plan and pass on to the relevant Head of Department the task to investigate the case and take measures to get the teacher through the required development activities.

2.12 Quality Standard	
Drop Out (Bachelor and MSc)	
Terminology	The dropout rate is defined as the rate of the admitted students (counted after early drop-out) who dropped out within the first 12 months of their studies. Dropout rates are calculated at both ITU-level and by study programme.
Predicate	1. The drop-out rate of BSc students is at most 20 %

	2. The drop-out rate of MSc students is at most 20 %
	3. The dropout rate at ITU-level is at most 20 %
Responsible	1. Heads of Study Programme (Bachelor programmes)
	2. Heads of Study Programme (MSc programmes)
Place of record	Study Programme Report
Alarm Handling Process	Mandatory: Whenever a study programme breaches the standard, Student Affairs and Programmes contacts all students who dropped out of the programme and asks them why they dropped out. Student Affairs and Programmes informs the Education Group and the Head of Study Programme of the result, upon which the Education Group decides the further follow-up actions.

3 Relevance and Employability

Context for the Quality Policy Area (based on ITU Strategy and ITU's Development Contract)

From ITU's Strategy [1]:

- ITU wants its programmes to give its students competences that are in high demand in the labour market.

From the Strategic Framework Contract:

4. **Graduate unemployment rates**
For each of ITU's MSc study programmes, it is the case that the rolling weighted average for unemployment for the past three calculated years, measured four to seven months after graduation, is lower than or equal to the rolling weighted national average for unemployment for the past three calculated years, measured four to seven months after graduation from an MSc programme.
5. **Relevance (Uddannelseszoom, graduate survey)**
The average score for IT University of Copenhagen must be at least 4.0 for the question "My education has prepared me for my current or previous job".
6. **Relevance (Employment Ticket)**
All study programmes must have an Employment Ticket which is approved and evaluated annually by the relevant Programme-Specific Employers' Panel.

3.1 Quality Standard

Design for Employability (Bachelor, MSc and Master)

Terminology	An *employment ticket* for a study programme is something difficult and in demand in the labour market that all graduates of that study programme master (in the case of part-time programmes, the students are often already employed, but the definition still makes sense).
Predicate	For every study programme, there exists a description, approved by the relevant Programme-Specific Employers' Panel no more than two years ago, of at least one "employment ticket".
Responsible	Head of Study Programme
Place of record	The Employment Ticket description is stored in the archive of the Employers' Panel. The approval (or rejection) is recorded in the annual report from the Employers' Panel.
Alarm Handling Process	Mandatory: 1) If the description does not exist, the Head of Study Programme is responsible for developing one; similarly, if the description is no longer up-to-date, the Head of Study Programme is responsible for updating it; 2) If a description exists but has not been approved by the Programme-Specific Employers' Panel, the Head of Study Programme is responsible for negotiating any changes with the Employers' Panel and presenting the description for the approval of the Employers' Panel within six months.

3.2 Quality Standard
Employability – unemployment rate (MSc)

Terminology	ITU wants its study programmes to give their students competences that are in high demand in the labour market. Consequently, unemployment rates are followed closely and compared to the national average. Below, the term unemployment rate refers to the average unemployment rate four to seven quarters after graduation. The Ministry for Higher Education and Science calculate unemployment rates for every master study programme offered by some Danish university. It also calculates the average unemployment rate (four to seven quarters after graduation) of all who graduated with some degree from some Danish university. The latter we refer to as the national university graduate unemployment rate.
Predicate	1. ITU: The overall unemployment rate for MSc programmes does not exceed the national university graduate unemployment rate. 2. MSc: The study programme's unemployment rate does not exceed the national university graduate unemployment rate. 3. MSc: The study programme's rolling weighted average for unemployment measured four to seven quarters after graduation is lower than or equal to the rolling weighted national average for unemployment measured four to seven quarters after graduation from an MSc programme (see Appendix).
Responsible	Head of Study Programme
Place of record	Study Programme Report

Alarm Handling Process	Mandatory:
	The procedure is to examine whether the Study Programme has become misaligned with the labour market.
	    1. Put the issue on the agenda for the next Employers' Panel meeting for this programme, in particular to ensure that the employment tickets are still valid and that the job market for the graduates in question is not too small to justify the number of students admitted.
	In addition, some of the following action can be taken (recommendations):
	    A. Conduct a focus group interview with a handful of new alumnae
	    B. Draw a deeper statistic splitting the unemployment on the bachelor background of graduates
	    C. Study the latest graduate report paying attention to issues that might be related to unemployment
	    D. Conduct focus group interview with relevant part-time lecturers within the programme
	    E. Raise the issue at a student meeting to get student input to the issue.
	
	This analysis, the findings, and a possible action plan are submitted to the Education Group in the next Study Programme Report. The report must address the alignment of the Study Programme to the labour market.
	
	In case of repeated failure, it is suggested to do some of the following:
	    a) Perform a graduate survey to uncover details of the issue
	    b) In collaboration with faculty, management, the Programme-Specific Employers' Panel and the Executive-Level Employers' Panel, to review whether the study programme needs to be changed to increase the segment of the job market it addresses.

	c) Conduct a focus group interview with the unions mostly representing the unemployed graduates. An analysis, the findings and a possible action plan must be submitted to the Education Group in the next Study Programme Report. In the report, it must be addressed whether there is a need for downsizing the program, or for major changes to the Study Programme (major for example being the need for new research areas to cover new elements of the study programme).

3.3 Quality Standard
Employability – employment rate (BSc and MSc)

Terminology	ITU wants its study programmes to give their students competences that are in high demand in the labour market. Consequently, employment rates are followed closely. The Ministry for Higher Education and Science calculate employment rates for every study programme offered by some Danish university. It also sets a standard for the individual university: *Dimittendernes beskæftigelse (opgjort i 12.-23. måned), skal mindst være på niveau med den generelle beskæftigelse for befolkningen i den erhvervsaktive alder.* For 2020 the employment rate for ITU graduates must be at least 94,9 %.
Predicate	1. ITU: The overall employment rate for MSc programmes does not fall below the overall national employment rate. 2. MSc: The study programme's employment rate does not fall below the overall national employment rate. 3. BSc: The study programme's employment rate does not fall below the overall national employment rate.
Responsible	Head of Study Programme
Place of record	Study Programme Report
Alarm Handling Process	Same as Quality Standard 3.2

3.4 Development Goal
Employability – graduate evaluation

Summary	Students at ITU participate in the Ministry's survey Uddannelseszoom. Data is collected every other year and a score is calculated for each study programme. The Ministry forwards survey results and the score to ITU the following Spring. The score applies the following two calendar years. Data was collected in 2016, 2018 and 2020. Then execution changes to uneven years: 2021, 2023 etc.
Predicate	The score for the individual study programme for the question "My education has prepared me for my current or previous job" must be at least 4.0 (on a scale from 1-5)
Responsible	Dean of Education
Place of record	Study Programme Report
Alarm Handling Process	Recommendations (if the score falls below the target) 1. Develop a plan for how to handle issues. The Dean of Education and relevant Heads of Study Programme cooperate on this.

3.5 Quality Standard

Interaction with Employers' Panels (BSc, MSc and Master)

Terminology	ITU has a number of Programme-Specific and one Executive-Level Employers' Panel. Together they cover all the study programmes (BSc, MSc and master programmes).
Predicate	1. ITU follows up on the recommendations of the Employers' Panels; AND 2. The Employers' Panels find that ITU follows up on their recommendations
Responsible	1. Head of Study Programme (for Programme-Specific Employers' Panels) and Dean of Education (for Executive-Level Employers' Panel) 2. Chairmen of the Employers' Panels
Place of record	1. Study Programme Report and Education Portfolio Report, respectively 2. Programme-Specific Employers' Panel Reports from the Executive-Level Employers' Panel Reports, respectively.
Alarm Handling Process	Mandatory: a) If the breach is in a Programme-Specific Employers' Panel: The Head of Study Programme develops an action plan for the approval of the Dean of Education. b) If the breach is in the Executive-Level Employers' Panel: The Vice Chancellor develops an action plan for the approval of the chairman of the Board of Directors.

3.6 Quality Standard

Global Competence Profile (MSc and BSc)

Predicate	The Global Competence Profile and related activities of the BSc and MSc programmes are evaluated and updated each year. Planned actions are part of the Action Plan in the Study Programme Report.
Responsible	Head of Study Programme
Place of record	Study Programme Report. The approval by the Dean of Education of the action plan is part of the Education Group's approval process for the Study Programme Report.
Alarm Handling Process	Recommendation: If the Dean of Education cannot approve the action plan or the follow-up on previous plans, the Head of Study Programme appears before the Education Group with a revised plan.

Approval and Signatures	The Quality Policy was approved by Executive Management on 21 January, 2021 **Martin Tvede Zachariasen** **Jens Christian Godskesen** Vice Chancellor Pro-rector **Georg Dam Steffensen** University Director

	ITU when measured on Oct 1st year *N*. **MSc Programmes** The *base population* for year *N* consists of the students who were enrolled on Feb 1st year *N-3* or Sep 1st year *N-3* and were still enrolled on Oct 1st year *N-3*. The completion rate within schedule plus one year, year *N*, is the ratio of the base population for year *N* that has passed some cand.it. degree from ITU when measured 3 years and one month (i.e., 1st March or 1st October, year *N*) after their admission.	the universities (Danish: "statistisk beredskab").
VIP/DVIP ratio in year *N*	"VIP" (Danish: "videnskabeligt personale") stands for active researchers while DVIP (Danish: "deltidsansat videnskabeligt personale") stands for lecturers that do not have research obligations, including part-time lecturers. Let S be a set of study activities on a programme in a given period. For each study activity s in S, let s_e be the ECTS point size of the activity. Further, let s_v be the percentage of s taught by VIP and similarly, let s_d be the percentage of the activity taught by DVIP (note that $s_v + s_d = 100\%$). Finally, let s_n be the number of student registered on the activity. We then define the VIP/DVIP ratio for the programme in that period relative to S as follows: $$\text{VIP/DVIP ratio(S)} = \sum_{s \text{ in } S} (s_e \times s_v \times s_n) \Big/ \sum_{s \text{ in } S} (s_e \times s_d \times s_n)$$ that is, the total volume of student activities taught or supervised by active researchers divided by the total volume of student activities taught or supervised by DVIP. The VIP/DVIP ratio in year *N* is calculated by the Analysis Unit and occurs in reports that are produced in year *N+1*.	
Average score, survey questions, course evaluation, in year *N*	IT University of Copenhagen has in its course evaluation a number of *quantitative questions* concerning learning outcome. The questions are scored on a scale from 1 to 6, 6 being the highest score.	The Analysis Unit calculates the averages for each teacher and study programme and for ITU as a whole, based on data in the evaluation system. The averages for evaluations conducted in year N appear as Primary Quality Data in reports produced in year *N+1*.
Average score, survey questions, evaluation of theses/final projects and other projects in year *N*	IT University of Copenhagen has in its evaluation of theses/final projects and other projects a number of *quantitative questions.* The questions are scored on a scale from 1 to 6, 6 being the highest score.	The Analysis Unit calculates the average score for each course, supervisor and study programme and for ITU as a whole. The averages for evaluations conducted in year *N* appear as Primary Quality Data in reports produced in year *N+1*.
ITU-score, Uddannelseszoom, year *N*	ITU has selected three questions (two from the student survey and one from the graduate survey).	The Ministry of Higher Education and Science provides ITU with the score from the survey carried out every other year.

	The scale is from 1 to 5, 5 being the highest score.	
Numbers of graduates, year *N*	Number of students who graduated between Oct. 1st year *N*-1 and Sept. 30th year *N*.	Calculated by the Analysis Unit for each study programme and ITU as a whole. Appears as Primary Quality Data in reports produced year *N*+1.
Unemployment rate during the second year after graduation in year N (per cent)	Unemployment rate is measured as the proportion of hours a person is unemployed in a quarter with a normal expected working period of 37 hours per week. An unemploy-ment rate of 0.010 is equivalent to 10 per cent of the graduates have been unemployed in a quarter. Unemployment rate second year after graduation in year N is the average unemployment rate four to seven quarters after graduation, among students who graduated between Oct. 1st year N-1 and Sept. 30th year N.	The definition is taken from the Ministry for Higher Education and Science, who in year N compute the unemployment rate during the second year after graduation in year N-3.
Rolling weighted average unemployment rate four to seven quarters after graduation in year N (per cent)	For any year, i, let N_i be the number of graduates from all Danish split master's degree programmes in year i, and let L_i be the share who, measured after four to seven quarters after graduation in year i, were unemployed. L_i and N_i are calculated annually by the Danish Agency for Institutions and Educational Grants who publish the figures during year i+3[6]. Then, let n_i be the number of graduates from ITU's MSc study programmes in year i and let l_i be the share who, measured after four to seven quarters after graduation in year i, were unemployed. L_i is also calculated annually by the Danish Agency for Institutions and Educational Grants and published during year i+3. For example: The standard is met in 2021 if, and only if: $(l_{2016}n_{2016}+l_{2017}n_{2017}+l_{2018}n_{2018})/(n_{2016}+n_{2017}+n_{2018}) \leq$ $(L_{2016}N_{2016}+L_{2017}N_{2017}+L_{2018}N_{2018})/(N_{2016}+N_{2017}+N_{2018})$.	
Employment rate in year N (per cent)	Dage beskæftiget i procent af dage i arbejdsstyrken, opgjort for fuldførte 12-23 måneder efter fuldførelsestidspunkt. Dage i arbejdsstyrken er summen af dage, hvor personen er beskæftiget (dage_besk_sum) eller ledig (dage_ledig_sum). Dvs dage_beskGrad=dage_besk_sum/(dage_besk_sum+dage_ledig_sum)*100 (enheden er dage i primær tilstand). Dimittender, der er i gang med en uddannelse, regnes ikke som beskæftigede, men som uden for arbejdsstyrken - og dimittender uden for arbejdsstyrken indgår ikke i udregningen af beskæftigelsesgraden. Published 4 years after the graduation year.	

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[6] For eksempel lagdes dimittendledighed for delte kandidatuddannelser for dimittendår op til og med 2014 på nettet i 2017, se ledighed, organiseret efter uddannelser (excel)