QUALITY POLICY 2024

IT University of Copenhagen

Version 1

DECEMBER 7, 2023
IT UNIVERSITY OF COPENHAGEN
Rued Langgaards Vej 7, DK 2300 S

| | Preamble of the Quality Policy |
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| Summary | The Quality Policy defines the Quality Standards of the IT University of Copenhagen (ITU). Further, the document names ITU's (<i>Quality</i>) Work Processes (e.g., the work processes through which the Quality Standards are monitored); and describes the Improvement 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 upon with the Ministry. ITU reports on all development goals in its Annual Report and the reporting is audited by ITU's Auditor and the Auditor General. The Quality Policy is approved by Executive Management. |
| | At ITU, a study programme is said to be <i>ideal</i> , if 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 its BSc, MSc, and Master study |
| | programmes becoming ideal. Failure to reach overall development goals is a challenge that ITU must address, but it is not necessarily a sign of poor quality in existing study programmes. By contrast, ITU has defined a set of <i>quality standards</i> , 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. The Quality Policy has been designed in accordance with the European Standards and Guidelines (ESG) for internal quality assurance within higher education institutions and the guidelines for institutional accreditation by the Danish Accreditation Institution. |
| Purpose | Ideal study programmes arise primarily 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 situation, 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 improves 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. |
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| Scope of the Quality Policy | The Quality Policy defines ITU's Quality Standards and ITU's (<i>Quality</i>) Work Processes monitoring the Quality Standards; and defines the Improvement Processes following discovery of breach of quality standards. Mandatory improvement actions are described by "must" whereas recommended actions are described by "may" or "suggest" which may be replaced with other actions which the quality standards responsible find at least as effective. |
| | The Quality Policy applies to all Bachelor, MSc, and Master programmes at ITU. The procedures for starting new study programmes are described in a separate document. |
| Policy Areas | The Quality Policy has three <i>Quality Policy Areas</i> , corresponding to ITU's definition of an ideal study programme: 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 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. |
| Responsibility | For each standard, the Quality Policy states who is responsible for the standard. The Rector 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 Rector. For example, by law, the Board of Studies is responsible for the quality assurance of individual study programmes, whereas, by delegation from the Rector, the Heads of Department are responsible for hiring of faculty and the Dean of Education has the overall responsibility for all ITU educational activities. Throughout the Quality Policy, to be responsible for a quality standard means: • At regular intervals (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: |

| Primary Quality Data | 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 the responsible role or collegial body as defined in this Preamble (Quality) Work Process: 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 Improvement Process: description of process describing corrective steps in cases the standard is not met. Some standards and goals refer to or rely on the following Primary Quality |
|-----------------------|--|
| | Recruitment and Admission of Students a) Number of applications, number of applicants offered admission, number of admitted students and educational background of admitted students (BSc and MSc study programmes) Teaching and Learning b) For BSc and MSc study programmes: dropout after first year, average delay compared to Curriculum Document¹ schedule, and rate of students who complete within scheduled time plus one year c) Research-based teaching and contact between students and research base (VIP/DVIP-ratio) d) Course Evaluation Results e) Supervision Evaluation Results |
| | Graduates' Careers f) Gross unemployment rate of MSc graduates 4 to 7 quarters after graduation (study programme and ITU compared to national average) g) Rolling, weighted average unemployment rate of MSc graduates 4-7 quarters after graduation (study programme and ITU compared to national average) |
| | The definitions of the Primary Quality Data are found in <i>Appendix A Definitions</i> of <i>Primary Quality Data</i> . Data provided by the Ministry of Higher Education and Science is used, where available. |
| Reports and their Use | The reports of the Quality System consider a broader range of aspects of quality and therefore rely on other data than Primary Quality Data only. The Study Programme Report |

¹ In this document, "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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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, Dean of Education and Head of Department, cc the Programme-Specific Employers' Panel, following a template.

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 quality standards pertaining to the study programme, including descriptions of follow-up actions initiated by standards that were not met
- 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 the annual *Study Programme Quality Status Meeting* between the Head of Study Programme, the Education Group, including the Dean of Education, and relevant Head of Department.

The Education Portfolio Report

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

- Strengths and successes of study programmes
- Opportunities for ITU
- 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 the annual *Portfolio Quality Status Meeting* between the Education Group including the Dean of Education and Executive Management.

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.

The Education Portfolio Report and its action plan enter Executive Management's plan for the coming period. Executive Management can decide

To reduce or increase budget for admission numbers

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- 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.

The Programme-Specific Employers' Panel Report

The Programme-Specific Employers' panels 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. The Programme-Specific Employers' Panel Report is discussed by the Subject Area Team and serves as input to the Study Programme Report.

The Executive-Level Employers' Panel Report

The Executive-Level Employers panel 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 the follow-up meeting concerning the Education Portfolio Report. The report is also discussed at a Board of Directors meeting. Executive Management is responsible for implementing whatever changes the Board of Directors decide.

Programme Review Reports

ITU organizes regular reviews of its study programmes. Each review involves the formation of an external panel, who produces a *Programme Review Report, and* submits to the Dean of Education, 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 (appr. two study programmes are reviewed every year).

Study Environment Assessment (Danish: "undervisningsmiljøvurdering")

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 Danish Student Survey 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 https://itustudent.itu.dk/. Follow-up actions pertaining to the individual study programmes are recorded in the Study Programme Reports. Cycle time: Every other year (2021, 2023, 2025 ...)

Graduate report

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² The survey includes several elements: LÆRBAR, Uddannelseszoom, and a DCUM module (Danish Centre for Educational Environment), see e.g. www.ug.dk or www.ufm.dk for more information.

| (Quality) Work Processes | The biennial Graduate Report compiles available data on graduates from BSc and MSc study programmes from the past two years. Data include employment and unemployment data and survey results from the Ministry of Higher Education and Science's biennial graduate survey. The report is used by Heads of Study Programme in the Study Programme Report. It is also used by Subject Area Teams, Board of Studies, Dean of Education, Education Group, Heads of Department, and other stakeholders as relevant. Cycle time: Every other year (uneven years) 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. To support continuous improvement, (Quality) Work Processes are cyclical in nature. Since activities implementing the Quality Policy are embedded in processes which are also cyclical in nature (due to the yearly or half-yearly cycles that permeate all study programmes), (Quality) Work Processes are often described as cyclic processes (Danish: "årshjul"). The Quality Coordinator maintains the cyclic processes (årshjul) and keeps operators informed on deadlines, etc. |
| Decision Powers | The Work Processes are designed with the following principles in mind: Responsibility and Decision Powers must be aligned: those who have the responsibility must also have the decision powers needed to meet the responsibility. 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. 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, |

| Revision of Quality Policy | e. Executive Management recommends the creation and termination of study programmes to the Board of Directors, after consulting the Board of Studies, the Dean of Education, Education Group and, in the case of termination, the relevant Employers' Panel. The Quality Policy is updated every year by the Quality Coordinator. Suggestions for changes are discussed in the Education Group (including the Dead of Education) and with the Head of Departments. Board of Studies is consulted on the proposed changes to the Quality Policy. Executive Management approves the Quality Policy. All members of staff can suggest changes to the Quality Policy by sending their substantiated suggestions to the Quality Coordinator. |
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| References | ITU Strategy 2022-2025 Strategic Framework Contract for ITU 2022-2025 European Standards and Guidelines The Danish Accreditation Institution: Institutional Accreditation 2.0 Guidelines Terms of Reference for Programme-specific Employers' Panels Terms of Reference for Executive-level Employers' Panel Concept for Programme Review of ITU Study Programmes Template for Terms of Reference for Programme Reviews Role Description for Dean of Education Role Description for Head of Study Programme Role Description for Head of Department The role of the Rector is described in §11 of "Vedtægter for IT-Universitetet I København", signed June 20, 2012 Terms of Reference for Education Group The role of the Board of Studies is described in §15 of "Vedtægter for IT-Universitetet I København", signed June 20, 2012 Concept for development of new study programmes at ITU |
| Transparency | This document and the first four referenced documents are publicly available online. The remaining documents listed above are available online at the ITU Intranet or by contacting the Quality Coordinator. 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 by contacting the Quality Coordinator. |
| History | The 2024 edition of the Quality Policy is based on the 2023 edition. For historical changes during the years leading up to ITUs second Institutional Accreditation in 2022, see previous versions of this document. Due to the somewhat substantial changes to the Quality Policy in 2023, no changes were proposed to the Quality Policy for 2024. |

| Below you will find a short description of the changes made to the Quality Policy for 2023, following the Institutional Accreditation in 2022: |
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| -General language upkeep to ensure the document is up to date and easily understood by all users. |
| -The responsibilities and roles of the Dean of Education have been specified and clarified throughout the document. |
| -Contact between students and research base have been elucidated and described more clearly. |
| -Removal of the previous Quality Standard 2.2: Diversity of Students on MSc Programmes, due to the fact that often, data is not good enough as a basis for generating actionable knowledge. This is of course no indication of ITU not taking the educational background of students seriously, but rather trusting the HoSPs and programmes to continue this important work within other existing standards (e.g. standard 2.5: Completion rate, 2.6 drop-out) based on the primary quality data that still includes data about student backgroundsRemoval of previous Quality Standard 2.6: Research Base, since it did not add value, nor improve the assurance of quality, since it is already part of the responsibilities of the Heads of Departments. |
| -Removal of previous Quality Standard 3.3: Employment Rate, since it did not add value, nor improve the assurance of quality related to the employment of graduates, since this is already in focus with Quality Standard 3.2: Unemployment. Furthermore, having two standards addressing the same issue from different angles, and with different computational methods, runs the risk of complicating quality assurance to the point that it is counterproductive. |

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 Quality Standard | | |
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| Number of Stud | Number of Students Admitted | |
| Summary | It is part of ITU's strategy to attract a large number of well-qualified students. | |
| Predicate | The Study Programme admits at least as many students as assumed in the admission budget. Study Programmes with restricted intake do not admit more students than allowed. | |
| Responsible | Head of Study Programme | |
| Place of record | Admission Memo (and Study Programme Report) | |
| Improvement | Recommendations: | |
| Process | Investigate whether there are changes in the competitive situation which can explain the insufficient admission. Revisit previous Study Programme Reports to see whether there are unresolved issues that could explain failing admission. | |

Investigate applications and whether changes to the admission process are necessary.

| 1.2 Quality Standard | |
|-------------------------------------|--|
| Qualifications of Admitted Students | |
| Summary | It is ITU's ambition to attract a large number of well-qualified students. |

| 1.2.1 Quality Standard | | | |
|------------------------|---|--|--|
| Well-qualified S | 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 found to have weak qualifications. | | |
| Responsible | Head of Study Programme | | |
| Place of | Admission Memo (and Study Programme Report) | | |
| record | | | |
| Improvement | 1) (Mandatory) Quantify the extent of the phenomenon, preferably with a description | | |
| Process | 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. | | |

| 1.2.2 Quality Standard | | |
|------------------------|--|--|
| Well-qualified S | 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 | Admission Memo (and Study Programme Report) | |
| record | | |
| Improvement | (Same as in 1.2.1) | |
| Process | | |

2 Teaching and Learning

Context for the Quality Policy Area (based on ITU Strategy [Error! Reference source not found.] and ITU's strategic framework contract [2])

ITU wants the academic contents and the teaching to meet the highest international standards and be research based. Research-based teaching requires that faculty (VIP) ensure the academic standards of the teaching, and that students work with and get feedback from research faculty (see 2.4). Students are in contact with ITU's research environments when they are taught and supervised by active researchers

from ITU.

The ITU understanding of good research is that it is motivated both by a quest for deep insight and by consideration of use. Some faculty are more motivated by a quest for deep insight than consideration of use and some part-time lecturers (DVIP) are more motivated by consideration of use, so it is important for students to work with both faculty and part-time lecturers (see 2.4).

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 2.4).

Legal requirements to Quality

1. Qualification Framework

The academic level of each programme is at least in correspondence with its Danish Qualification Framework level (see 2.3).

2. Research-based Teaching

The teaching is research-based (see 2.4).

3. Teacher Development Programme

All assistant professors must follow a University Pedagogical Programme (Danish: "Universitets-pædagogikum")³. This also applies to associate professors without a completed University Pedagogical Programme.

ITU's Additional Policy Statements

Research-Based Teaching and student contact with research environments

By an *active researcher* (VIP) we understand a member of ITU faculty who currently conducts research at ITU. Post docs and Ph.D. students are included.

Course staffing procedures ensure an optimal distribution of teachers between courses and study programmes. The procedures also serve as input to the departments' long-term hiring plans for faulty as they highlight shortages, vulnerabilities, and future needs.

ITU uses a numeric indicator, 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 2.3).

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 stand-in.
 - c. To serve as a strategic measure:

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³ Cirkulære om stillingsstruktur for videnskabeligt personale ved universiteter

- 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 teaches a course aimed at basic skills on the study programme (e.g., math)
- iii. DVIP supplements teaching on "robust" courses (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 approves or rejects 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. For example, an associate professor with no teaching deductions must deliver 867 ECTS points each year.

Part-time Lecturers (DVIP)

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 prolonged shortage in staffing by active researchers unless for strategic reasons agreed to by Executive Management (see 2.3).

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 chief principle is that descriptions and implementation of intended learning outcome (ILO), teaching and learning activities and exam forms must be aligned. Students are to be made aware of this correlation so that they may achieve the best possible progression and results.

Monitoring and quality assuring SCL ink 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 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 ITU'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 2.3), as described in the Curriculum Document.

Diversity in Educational Background of Student Population on MSc Programmes

ITU's MSc programmes attract students from a variety of bachelor programmes. ITU has the following practice:

- 1. ITU 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 2.2)
- 2. Admission procedures must ensure that admitted students have the skills required to start the programme (see 1.2)

| 2.1 Quality Sta | 2.1 Quality Standard | |
|------------------|---|--|
| Student Evaluati | Student Evaluation of Courses and project supervision | |
| Summary | Students at ITU participate in two different internal evaluations: Course evaluations and | |
| | Supervision evaluations (final and other projects). The evaluations include a few | |
| | quantitative questions 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 4.5 (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 4.5 (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 | |
| Improvement | Recommendations (if a score falls below the target) | |
| Process | 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 is structural 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. | |

| 2.2 Quality S | tandard |
|-----------------------------|---|
| 2.2 Quality S | and Qualification Framework |
| Summary | ITU must ensure that all its study programmes are at the right academic level and thus 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 objectives for learning output of the study programme, as defined in the Curriculum Document. The relevant Subject Area Team decides changes to courses and the course portfolio. The Subject Area Team must document why it considers the change to be consistent with the overall structure and objectives for learning output, as defined in the Curriculum Document (or else raise an alarm). Board of Studies decide changes to the Curriculum Document. |
| Responsible Place of record | For every study programme, there exists an updated Qualification Framework Mapping, and 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 output 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 output that the Curriculum Document associates with that path. Head of Study Programme Qualification Framework Mapping documents, which are stored in SAP Files. |
| Improvement | Mandatory: The Subject Area Team must change the study programme to eliminate the |
| Process | shortcoming. |

| 2.3 Quality St | andard | |
|---|---|--|
| Research-based teaching and contact between students and research base (VIP/DVIP) | | |
| 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. By making sure most teaching (incl. supervision of projects) is carried out by VIP, ITU ensures close contact between students and researchers thereby connecting students and research base. | |
| 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 students registered for the activity. We then define the VIP/DVIP ratio for the programme in that period relative to S as follows: the total volume of student activities taught or $ VIP/DVIP \text{ ratio}(S) = \sum_{s \text{ in S}} (s_e \times s_v \times s_n) / \sum_{s \text{ in S}} (s_e \times s_d \times s_n) $ supervised by active researchers divided by the total volume of student activities taught or supervised by DVIP. | |
| Predicate | At ITU-level the VIP/DVIP ratio is at least 3.00. Each study programme 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 | |
| Improvement | Mandatory: | |
| Process | Breachesmust 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 plan how to prevent the issues from arising again. | |

| 2.4 Quality Standard | | |
|----------------------|------|---|
| Research-base | d Co | urse Design and Supervision |
| Predicate | | 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 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 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 contain active researchers from ITU only. | | |
| | The student project registration system 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 checks | | |
| | 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. | | |
| Place of | 1. Head of Department's updated overview, breaches are recorded in the Study | | |
| record | Programme Report and Education Portfolio Report | | |
| | 2. Comments in the updated overview, breaches are recorded in the Study Programme | | |
| | Report and Education Portfolio Report | | |
| | 3. Breaches are recorded in the Study Programme Report and Education Portfolio | | |
| | Report. | | |
| Improvement | Mandatory: | | |
| Process | 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 Study | | |
| | Programme Report and 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. | | |

| 2.5 Quality Standard | | |
|---|--|--|
| Completion Rates for BSc and MSc students | | |
| Terminology | ITU monitors completion time on full-time programmes. Completion time is linked to ensuring study programmes are designed and structured optimally to ensure progression and completion. | |
| Predicate | 2. | Completion within scheduled time plus one year is at least 70 % at ITU-level for students on full-time programmes. Completion within scheduled time plus one year is at least 70 % on every full-time programme. |
| Responsible | | Dean of Education Head of Study Programme |
| Place of | 1. | Education Portfolio Report |
| record | 2. | Study Programme Report |
| Improvement Process | | 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: |
| | | 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. |
| | | Mandatory (individual programme): Problems must be analysed, and a proposal must be developed. |

| 2.6 Quality Standard | | | |
|----------------------|---|--|--|
| Drop Out (Bach | 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 | Heads of Study Programme (Bachelor programmes) | | |
| | 2. Heads of Study Programme (MSc programmes) | | |
| Place of | Study Programme Report | | |
| record | | | |
| Improvement | The Head of the Study Programme must investigate the reasons including analysis of | | |
| Process | data available in the Business Intelligence system Qlik. | | |
| | | | |
| | | | |

| 2.7 Quality Standard | | |
|------------------------|--|--|
| Constructive Alig | Constructive Alignment | |
| Summary | All courses are designed according to the principles of Constructive Alignment (see | |
| | Teaching Guide on the intranet). | |
| Predicate | Course descriptions have been approved by Learning Support. Learning Support have | |
| | checked and approved the following: | |
| | 1. Intended Learning Outcome (ILO) description adheres to the SOLO taxonomy | |
| | ILOs, planned Learning Activities and Exam Forms are aligned and sufficiently described. | |
| | 3. | |
| Responsible | Learning Support | |
| Place of record | Study Programme Report and Learning Support's records. | |
| | Before each semester starts, Learning Support checks all course descriptions (for new courses and courses that have been changed). 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 course description is not sufficiently detailed, Learning Support communicates 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. | |
| Improvement Process | Mandatory: Cases of unapproved course descriptions are recorded in the Study Programme Report, for the consideration of the Dean of Education and 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. | |

| 2.8 Quality Standard | | |
|----------------------|---|--|
| | tence Development Programme | |
| Summary | All teachers take part in the Teacher Development Programme. | |
| Terminology | The Teacher Development 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 Teaching at ITU Seminar is mandatory for all new teachers. | |
| Predicate | All assistant professors must complete the Teacher Development Programme (Danish: "Universitetspædagogikum") no later than four months before the termination of the contract, unless they can document having completed a similar programme; and All associate professors hired during the year must complet the Teacher Development Programme within 20 months of their employment at ITU, unless they can document having completed a similar programme; and 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 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 All teachers have completed the Teaching at ITU Seminar 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 (MS Office and F2 case maintained by Learning Support, containing work documents concerning items 1 – 5). Every semester, Learning Support identifies teachers who have not completed the required Teacher Development Programme activity or are not progressing, and informs the relevant personnel managers. Breaches must be recorded by department. | |
| Improvement | Mandatory: In case assistant professors, associate professors, Ph.D. students and other | |
| Process | 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. | |

3 Relevance and Employability

Context for the Quality Policy Area (based on ITU Strategy)

From ITU's Strategy:

• ITU programmes must give its students competences that are in high demand in the labour market.

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.

Relevance (Employability Profile)

All study programmes must have an Employability Profile which is approved and evaluated annually by the relevant Programme-Specific Employers' Panel.

| 3.1 Quality Standard | | | |
|----------------------|--|--|--|
| Design for Em | Design for Employability (BSc, MSc, and Master) | | |
| Terminology | An <i>employability profile</i> for a study programme lists specific and generic skills for graduates from the study programme based on five areas of generic competencies in demand across industries, including green competencies. (Green competencies will be gradually introduced in the Employability Profiles, starting with study programmes from Department of Business IT in 2023) | | |
| Predicate | For every study programme, there exists an Employability Profile, approved by the relevant Programme-Specific Employers' Panel no more than two years ago. | | |
| Responsible | Head of Study Programme | | |
| Place of record | The Employability Profile is stored in the archive of the Employers' Panel. The approval (or rejection) is recorded in the annual report from the Employers' Panel. | | |
| Improvemen | Mandatory: | | |
| t Process | If the Employability Profile does not exist, the Head of Study Programme is responsible for developing one; similarly, if the profile is no longer up to date, the Head of Study Programme is responsible for updating it. If an Employability Profile 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 profile 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 | ITU: The overall unemployment rate for MSc programmes does not exceed the national university graduate unemployment rate. | |
| | MSc: The study programme's unemployment rate does not exceed the national university graduate unemployment rate. | |

| 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 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, to ensure that the employability profile is 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. The analysis, findings, and a possible action plan are submitted to the Dean of Education and 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, findings and a possible action plan must be submitted to the Dean of | Г | |
|--|-------------|--|
| Improvement 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, to ensure that the employability profile is 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. The analysis, findings, and a possible action plan are submitted to the Dean of Education and 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, findings and a possible action plan must be submitted to the Dean of | | rolling weighted national average for unemployment measured four to seven |
| Improvement 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, to ensure that the employability profile is 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. The analysis, findings, and a possible action plan are submitted to the Dean of Education and 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, findings and a possible action plan must be submitted to the Dean of | Responsible | Head of Study Programme |
| 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, to ensure that the employability profile is 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. The analysis, findings, and a possible action plan are submitted to the Dean of Education and 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, findings and a possible action plan must be submitted to the Dean of | | Study Programme 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 | Improvement | 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, to ensure that the employability profile is 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. The analysis, findings, and a possible action plan are submitted to the Dean of Education and 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, findings and a possible action plan must be submitted to the Dean of Education and 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 |

| 3.3 Quality St | andard |
|------------------|--|
| 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. Chairpersons of the Employers' Panels |
| Place of | Study Programme Report and Education Portfolio Report, respectively |
| record | 2. Programme-Specific Employers' Panel Reports from the Executive-Level Employers' |
| | Panel Reports, respectively. |
| Improvement | Mandatory: |
| Process | 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 Rector develops an |
| | action plan for the approval of the chairman of the Board of Directors. |

| 3.4 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. | | | |
| Improvement 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 | The Quality Policy was approved by Executive Management on |
|--------------|--|
| Signatures | Per Bruun Brockhoff |
| | Rector |
| | |
| | Jens Christian Godskesen |
| | Pro-Rector |
| | |
| | Georg Dam Steffensen |
| | University Director |
| | |
| | |

| Name | Definition | Notes |
|--------------------------------------|--|---|
| Educational | A classification of the institution which | |
| background | granted the degree based on which the | |
| 6 11 1 | MSc applicant seeks admission: | |
| | 1. ITU | |
| | 2. Other Danish University | |
| | 3. Foreign University | |
| | 4. Danish Professional Bachelor's | |
| | degree | |
| | 5. Other | |
| | 6. Unknown | |
| | Professional bachelor's degree from a | |
| | Danish university is counted under item | |
| | 4. | |
| Number of | Number of applicants for start on Sep. 1st | Appears as Primary Quality Data in |
| applications, year N | year N | reports produced year N+1. |
| | | Calculated by Analysis Unit. |
| Number of applicants | Number of applicants offered admission | Appears as Primary Quality Data in |
| offered admission, | for start on Sep. 1 st year N | reports produced year N+1. |
| year <i>N</i> | | Calculated by Analysis Unit. |
| Number of students | Number of students admitted after early | Appears as Primary Quality Data in |
| admitted after early | dropout, enrolled as of Sep. 1 st year N | reports produced year N+1. |
| dropout, year N | | Calculated by Analysis Unit. |
| Dropout after first | (Number of students who were admitted | Appears as Primary Quality Data in |
| year, year N | on Feb 1 ^{st,} year <i>N</i> -1, were still enrolled on | reports produced year N+1. |
| | March 1 st year <i>N</i> -1 but were not still | Calculated by Analysis Unit. |
| | enrolled on March 1 st year N) + | The definition is taken from |
| | (Number of students who were admitted | Universities Denmark, who use the |
| | on Sept. 1 ^{st,} year <i>N</i> -1, were still enrolled | concept in their benchmarking of |
| | on Oct 1 st year <i>N</i> -1 but were not still | the universities (Danish: "statistisk |
| | enrolled on Oct 1 st year N) | beredskab"). |
| Average graduate | Average study time minus curriculum | Appears as Primary Quality Data in |
| delay, compared to | scheduled study time for those who | reports produced year N+1. |
| curriculum schedule, | graduated between Oct 1 st year <i>N</i> -1 and | Calculated by Analysis Unit |
| year N | Sep 30 th year <i>N</i> | Appears as Primary Quality Data in |
| Completion rate within schedule plus | Bachelor Programmes The large penulation for year N consists of | Appears as Primary Quality Data in reports produced year N+1. |
| | The base population for year N consists of | 1 |
| one year, year N (%) | the students who were enrolled Sep 1 st year <i>N</i> -4 and were still enrolled on Oct 1 st | Calculated by Analysis Unit |
| | year <i>N</i> -4. The completion rate within | The definition is taken from |
| | schedule plus one year, year N, is the | Universities Denmark, who use the |
| | ratio of the base population for year N | concept in their benchmarking of |
| | that has passed a bachelor's degree from | the universities (Danish: "statistisk |
| | ITU when measured on Oct 1 st year <i>N</i> . | beredskab"). |
| | MSc Programmes | Jereuskub j. |
| | The base population for year N consists of | |
| | the students who were enrolled on Feb | |

| | 1 st year <i>N</i> -3 or Sep 1 st year <i>N</i> -3 and we | re | |
|--|--|--|--|
| | still enrolled on Oct 1 st year <i>N</i> -3. The | | |
| | completion rate within schedule plus of | 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., | | |
| | March or 1 st October, year N) after the | eir | |
| | admission. | | |
| VIP/DVIP ratio in year "VIP" (Danish: "videnskabeligt personale") stands for active research | | | |
| N | DVIP (Danish: "deltidsansat videnskabeligt personale") stands for lecturers that | | |
| | do not have research obligations, inclu | iding part-time lecturers. | |
| | | | |
| | Let S be a set of study activities on a programme in a given period. For each | | |
| | | point size of the activity. Further, let s _v be | |
| | | similarly, let s _d be the percentage of the | |
| | , , , , | $s_d = 100\%$). Finally, let s_n be the number of | |
| | , | e then define the VIP/DVIP ratio for the | |
| | programme in that period relative to S | as follows: | |
| | VIP/DVIP ratio(S) = $\sum_{s \text{ in S}} (S_e \mathbf{x} S_v \mathbf{x} S_v)$ | S _n) / Σ _{s in S} (S _e x S _d x S _n) | |
| | that is, the total volume of student act | ivities taught or supervised by active | |
| | researchers divided by the total volum | | |
| | 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 | IT University of Copenhagen has in | The Analysis Unit calculates the | |
| questions, course | its course evaluation a number of | averages for each teacher and study | |
| evaluation, in year N | quantitative questions concerning | programme and for ITU as a whole, | |
| | learning outcome. | based on data in the evaluation system. | |
| | The questions are scored on a scale | The averages for evaluations conducted | |
| | from 1 to 6, 6 being the highest | in year N appear as Primary Quality | |
| | score. | Data in reports produced in year N+1. | |
| Average score, survey | IT University of Copenhagen has in | The Analysis Unit calculates the average | |
| questions, evaluation | its evaluation of theses/final projects | score for each course, supervisor, and | |
| of theses/final | and other projects a number of | study programme and for ITU as a | |
| projects and other | quantitative questions. | whole. | |
| projects in year N | The questions are scored on a scale | The averages for evaluations conducted | |
| | from 1 to 6, 6 being the highest | in year N appear as Primary Quality | |
| | score. | Data in reports produced in year N+1. | |
| Numbers of | Number of students who graduated | Calculated by the Analysis Unit for each | |
| graduates, year N | between Oct. 1 st year <i>N</i> -1 and Sept. | study programme and ITU as a whole. | |
| , | 30 th year <i>N</i> . | Appears as Primary Quality Data in | |
| | | reports produced year N+1. | |
| Unemployment rate | Unemployment rate is measured as | The definition is taken from the | |
| during the second | the proportion of hours a person is | Ministry for Higher Education and | |
| year after graduation | unemployed in a quarter with a | Science, who in year N compute the | |
| in year N (per cent) | normal expected working period of | , , | |
| during the second year after graduation | the proportion of hours a person is unemployed in a quarter with a | Ministry for Higher Education and | |
| iii year iv (per cent) | Hormal expected working period of | | |

IT UNIVERSITY OF COPENHAGEN

| | - | , | | |
|------------------------|--|-------------------------------------|--|--|
| | 37 hours per week. An unemploy- | unemployment rate during the second | | |
| | ment rate of 0.010 is equivalent to | year after graduation in year N-3. | | |
| | 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. 1 st year N-1 and Sept. | | | |
| | 30 th year N. | | | |
| Rolling weighted | For any year, i, let N _i be the number of graduates from all Danish split master's | | | |
| average | degree programmes in year i , and let L_i be the share who, measured after four | | | |
| unemployment rate | to seven quarters after graduation in year i , were unemployed. L_i and N_i are | | | |
| four to seven quarters | calculated annually by the Danish Agency for Institutions and Educational | | | |
| after graduation in | Grants who publish the figures during year <i>i</i> +3. | | | |
| year N (per cent) | Then, let n_i be the number of graduates from ITU's MSc study programmes in | | | |
| | year <i>i</i> and let <i>l_i</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>i</i> +3. | | | |
| | For example: The standard is met in 2021 if, and only if: | | | |
| | $(l_{2016}n_{2016}+l_{2017}n_{2017}+l_{2018}n_{2018})/(n_{2016}+n_{2017}+n_{2018}) \le$ | | | |
| | $(L_{2016}N_{2016}+L_{2017}N_{2017}+L_{2018}N_{2018})/(N_{2016}+N_{2017}+N_{2018}).$ | | | |