

**Documentation of statistics for  
Short-Cycle Higher Education 2020**

## 1 Introduction

The statistics about short-cycle higher education describe activity on short-cycle higher education in Denmark. Short-cycle higher education is defined from Statistics Denmark's education classification DISCED-15 as all education classified on level 40. The levels in DISCED-15 for higher education are classified according to the main fields regulated by law. Short-cycle higher educations are typically 1-2 years in duration. Short-cycle higher education statistics is in its current form comparable since 2005 and is part of the overall Student Register, which contains information on all students and students in ordinary education in Denmark.

## 2 Statistical presentation

These statistics contains yearly data about the activity on short-cycle higher education in Denmark. This includes the number of entrants, the number of completed and the number of active students. The statistics are divided by education and the students' age, sex, ancestry and national origin.

### 2.1 Data description

The statistics about short-cycle higher education shows the number of students on a short-cycle higher education in Denmark. The statistics are a part of the Student Register and is publicized yearly as a part of this. In StatBank Denmark, you can sort by students per 1 October, completed students and new students distributed by educational fields, age, ancestry, national origin and sex (see under "Begreber og definitioner").

### 2.2 Classification system

Statistics Denmark's education classification DISCED-15 is used to define short-cycle higher education. A description of it can be found at: [DISCED](#)

### 2.3 Sector coverage

Not relevant for these statistics.

## **2.4 Statistical concepts and definitions**

**Year:** In the education statistics a year is defined as the period from 1 October the previous year to 30 September the mentioned year. As an example, 2017 is defined as 1 October 2016 to 30 September 2017.

**Students per 1 October:** Persons enrolled on an education 1 October in the given year, for example 2017.

**Completed:** Persons completing an education in the period between 1 October the year before to 30 September in the given year, for example 1 October 2016 to 30 September 2017.

**Short-cycle higher education:** Short-cycle higher education typically has a duration of 1 to 2 years and builds upon an upper secondary education. Examples of short-cycle higher education is for instance Financial Management and Computer Science.

**Entrants:** Persons beginning their education in the period between 1 October the year before to 30 September in the given year, for example 1 October 2016 to 30 September 2017.

## **2.5 Statistical unit**

Persons.

## **2.6 Statistical population**

Persons who is enrolled on a short-cycle higher education in Denmark which is publicly regulated. In detail, this means that the Ministry of Higher Education and Science or another ministry has set the rules for the education through a law or an executive order. The population also contains persons enrolled on private short-cycle higher education giving access to public grants.

## **2.7 Reference area**

Denmark.

## **2.8 Time coverage**

The current time series in StatBank Denmark covers the time period from 2005 and onwards.

## **2.9 Base period**

Not relevant for these statistics.

## **2.10 Unit of measure**

The measuring unit is the number of persons.

### **2.11 Reference period**

The newest data collection was for the period of 1 October 2019-30 September 2020.

### **2.12 Frequency of dissemination**

Yearly.

### **2.13 Legal acts and other agreements**

Law on Statistics Denmark § 6 and § 8 stk. 3. Regulation (EC) No 452/2008 of the European Parliament and of the Council of 23 April 2008 concerning the production and development of statistics on education and lifelong learning.

### **2.14 Cost and burden**

The respondent burden is minimal. Data are collected from local school-based administrative registers although a few institutions report via spreadsheets.

### **2.15 Comment**

Further information can be found on Statistics Denmark's homepage: Fulltime education or by contacting Statistics Denmark directly. On the homepage, notes about historic revisions of the statistics can be found.

## **3 Statistical processing**

The data for these statistics are collected yearly in October from the administrative systems of the educational institutions. Statistics Denmark have drawn up standards for reporting formats, validation and error searching in cooperation with the system provider SIS, who is in charge of the administrative systems at most institutions who offer short-cycle higher education. This means that the data received by Statistics Denmark have already been controlled. In addition, a thorough error search and validation of data are done by Statistics Denmark, where data is controlled for fluctuations across time and irregularities at the individual level.

### **3.1 Source data**

The sources for the statistics are data from the educational institutions' administrative systems.

### **3.2 Frequency of data collection**

The statistics are based on information collected once a year.

### **3.3 Data collection**

The majority of data is collected by system to-system reporting through the administrative system SIS. Some institutions report manually through spreadsheets.

### **3.4 Data validation**

The data validation mainly consists of two types of error searching: macro error searching and micro error searching.

Macro error searching consists in searching after fluctuations on four parameters: Population (the number of students per 1 October), Entrants, Completions, and Discontinuations. The numbers are compared with the numbers from last year for every education on the institution. If bigger and relatively unlikely fluctuations are found, the institution have to either correct the numbers or tell Statistics Denmark that the numbers are correct and shows the factual development.

Micro error searching focuses on errors in the data received by Statistics Denmark about specific persons. Examples of micro errors could be an invalid education code or the student's start date being after the end date. A check for overlaps are also made, since there is not always agreement between the dates provided when the students change institutions. Statistics Denmark corrects the dates so the student does not seem to be enrolled on two institutions at the same time.

### **3.5 Data compilation**

Data from the institutions are aggregated to a total data set. Data are not processed much by Statistics Denmark, since the quality of the data is very good.

### **3.6 Adjustment**

No corrections of data are made except what has already been described under Datavalidering and Databehandling.

## **4 Relevance**

The statistics are relevant for public administrators, scientists and other analysts, journalists and citizens etc. as basis for prognoses, analyses and planning purposes in the educational field, but also for example in the labour market field and the integration field. The basic data for the statistics are used as background data for most of the personal statistics at Statistics Denmark, and it is the basis for the tables in StatBank Denmark about education.

#### **4.1 User Needs**

The users are many and varied. The statistics are often used for external tasks ordered at Statistics Denmark by ministries, municipalities, research institutions, non-governmental organizations, private companies, individuals and the press.

The basic data is used in more than 2000 research projects every year where scientists and researchers gain access to the data via Research Services at Statistics Denmark.

The Ministry of Education and the Ministry of Higher Education and Science receives the basic data, which is used for planning purposes, analyses and prognoses etc.

#### **4.2 User Satisfaction**

The users are involved as much as possible. Some users can help by securing data from the educational institutions of a high quality is reported to Statistics Denmark on time and other users can give inspiration for new statistics and analyses. Through user involvement, Statistics Denmark get inspiration to the development of methods and models that can contribute to the continued development and improvement of the statistics. Statistics Denmark also has a contact group for education statistics which meet once a year.

#### **4.3 Data completeness rate**

The statistics fulfill the demands of the resolution as put forward by the EU.

### **5 Accuracy and reliability**

The administrative systems that are the basis for the statistics are used by the institutions for their own daily administration of the students and also for the payment of different economic grants. Correct registers are therefore necessary for the economy of the institutions and contributes to an expected high quality of the data source. However, occasional errors will almost always occur. These are almost always fixed before next year's publication of data.

#### **5.1 Overall accuracy**

The precision of the statistics is high, because data is taken directly from the administrative systems of the educational institutions. Uncertainty arises when the institutions register certain students or educations wrong. When this is discovered, the error is fixed before next year's publication of data. In more specific groups and educations the uncertainty might be higher.

#### **5.2 Sampling error**

Not relevant for these statistics, since it is a total counting.

#### **5.3 Non-sampling error**

Coverage errors can be persons not registered in the statistics. Measurement errors and missing records can occur due to wrong registrations from the institutions. When dates overlap for a student, the student usually is registered as finished on the first education on the date where he is registered to begin on the next education.

#### **5.4 Quality management**

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

#### **5.5 Quality assurance**

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

#### **5.6 Quality assessment**

The strength of the statistics is that data are collected from the institutions' administrative registers, which the institutions use for the administration of their students. Errors in the administrative registers are however unavoidable.

#### **5.7 Data revision - policy**

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](#). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

#### **5.8 Data revision practice**

The institutions have the possibility of updating backwards in time when reporting data. When that happens, data from previous years are revised.

### **6 Timeliness and punctuality**

The statistics are published about 4 months after the reference time which is 1 October.

#### **6.1 Timeliness and time lag - final results**

The statistics are published approximately 4 months after the reference time which is 1 October.

#### **6.2 Punctuality**

The statistics are usually published without delay in accordance with the scheduled date. In 2019 the statistics were published a month late due to delays on other areas of the Student Register.

## **7 Comparability**

The current time series of these statistics goes back to 2005, but statistics on short-cycle higher education have been made further back than this. It may be difficult to compare the figures internationally, as short-cycle higher education is defined differently from country to country.

### **7.1 Comparability - geographical**

The statistics form part of the basis of data in the OECD publication [Education at a Glance](#) with international comparisons of entrance to and graduations from the education system.

The education system varies a lot between different countries. When comparing across countries one should therefore take into account that short-cycle higher education can be understood differently. An education which is a short-cycle higher education in one country might not be a short-cycle higher education in another country.

### **7.2 Comparability over time**

The current time series of these statistics goes back to 2005.

#### **Archived tables in the StatBank**

The earliest figures on short-cycle higher education in the StatBank are from 1991. The archived tables are not directly comparable with the active tables. Firstly, the archived tables are based on the old educational classification, which is no longer used. Second, the archived tables are based on an older version of the Student Register.

It should be noted that an education which changes educational level is placed on the new level in the education classification. This can affect comparisons with figures published in earlier years.

#### **Historical data**

The term short-cycle higher education was used for the first time in a statistical yearbook in 1980.

### **7.3 Coherence - cross domain**

Since the statistic is publicized together with the statistic about other educational levels in the Student Register, it is possible to compare with statistics for other educational levels.

### **7.4 Coherence - internal**

All data sources are considered to have the same high quality.

## **8 Accessibility and clarity**

Statistics are released yearly in a Danish press release, at the same time as the tables are updated in the StatBank. In the StatBank, these statistics can be found under the subject [Short-cycle higher education](#). For further information, see the [homepage of education statistics](#).



### **8.1 Release calendar**

The publication date appears in the release calendar. The date is confirmed in the weeks before.

### **8.2 Release calendar access**

The Release Calendar can be accessed on our English website: [Release Calendar](#).

### **8.3 User access**

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

### **8.4 News release**

These statistics are published yearly in a Danish press release.

### **8.5 Publications**

Publications only in Danish.

### **8.6 On-line database**

The statistics are published in the StatBank under [Short-cycle higher education](#) in the following tables:

- [UDDAKT40](#): Educational activity at short cycle higher educations by education, age, ancestry, national origin, sex and status

### **8.7 Micro-data access**

The different versions of The Student Register are stored in Statistics Denmark's Database PSD. Researchers and other analysts from authorized research institutions, can be granted access to the underlying micro-data by contacting [Research Services](#).

### **8.8 Other**

The Student Register forms the basis of data in the publication [Education at a Glance](#) with international comparisons of entrance to and graduations from the education system.

### **8.9 Confidentiality - policy**

[Data Confidentiality Policy](#) for Statistics Denmark.

### **8.10 Confidentiality - data treatment**

In the tables in StatBank Denmark, the numbers of variables are limited, which eliminates the possibility of identifying individual persons.

## 8.11 Documentation on methodology

For further information see:

- [Documentation of the variables in the Student Register](#)
- [The manual for education statistics](#)

## 8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

## 9 Contact

The administrative placement of this statistic is in the Division of Population and Education. The person responsible is Mikkel Jonasson Pedersen, tel. +45 23 60 42 07, e-mail: mps@dst.dk

### 9.1 Contact organisation

Statistics Denmark

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Population and Education, Social Statistics

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