# Register of Graduations; upper secondary and tertiary level

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# 0. Registration entry for subjects

#### 0.1 Name

Register of Graduations at the upper secondary and tertiary level

## 0.2 Subject area

Education

#### 0.3 Responsible authority, office, person, etc.

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#### **0.4 Purpose and history**

Statistics Iceland has collected data on graduations at the upper secondary and tertiary level since 1995. Data are collected in June and December every year. Schools which graduate students at other times of the year are requested to send information after each graduation. The purpose of this data collection is to provide an overview of the number of students who graduate at the upper secondary and tertiary level of education, provide time series, give data on the number of graduated students for comparison with student numbers, e.g. to indicate the student dropout and completion rate, and for international comparison.

# 0.5 Users and application

Data on graduated students are the basis for data published by Statistics Iceland and data sent to international organisations. The data are used by the

Ministry of Education, Science and Culture, municipalities, private and public organisations and researchers for analysis and planning, scientific investigations and public debate.

#### 0.6 Sources

The Register of Graduations is based on reports from the educational institutions and other institutions which graduate students. Information on the journeyman's examination is obtained from the Ministry of Education, Science and Culture. Information from the centralised database INNA, run by the Ministry of Education, Science and Culture, has been used for reference. The school reports contain the students' ID, school, line of study, degree, mode of teaching and date of graduation.

#### 0.7 Legal basis for official statistics

Act on Statistics Iceland and official statistics No. 163/2007. Act on Upper Secondary Schools No. 92/2008 and Act on Universities No. 63/2006. A clause in special agreements between the Ministry of Education, Science and Culture and schools about delivering data to Statistics Iceland. A clause in laws about the delivery of information for statistical purposes.

#### 0.8 Response burden

The response burden is usually small, since most schools make a list of graduates for each graduation for their own use or extract it from their student registration system. Most schools at the upper secondary level can send a list from the centralized database INNA, but schools which do not use this centralized database send in Excel documents with a list of graduates. Their response burden depends on how many students they have graduated.

#### 0.9 EEA and EU obligations

The data collection is in accordance with European standards and in collaboration with Eurostat. Data are delivered to Eurostat and other international organisations.

## 1 Contents

#### 1.1 Description of content

The Register of Graduations comprises the following variables which concern students at the upper secondary and tertiary level.

Students: Data are collected on an individual level about all students who graduate from formal programs of study and programs which have been approved by the Ministry of Education, Science and Culture. The basic identification code is the individual ID number as coded in the National Population Register. This in turn makes it possible to join the Register of

Graduations with the National Population Register in order to update the student data with information on sex, domicile and citizenship in December each year. Students who graduate with the journeyman's examination are included as are graduates from the State Police School, professional pilots from the Icelandic Flight Academy and air traffic controllers.

*Program of study*: Based on information from the schools, students' line or program of study is coded according to the official curriculum published by the Ministry of Education, Science and Culture and/or the school's own curriculum.

Degree: The degree that students have completed for graduation.

*Mode of teaching*: If the student graduated from day courses, evening/adult courses, from distance learning or as an external student.

*Date of graduation*: The date of the formal graduation. If a student has completed all requirements for graduation in December but formal graduation is not until the following spring the spring date is recorded.

#### 1.2 Statistical concepts

School/educational institution: A school is defined here as a separate entity or place where education is carried out. A school does not necessarily have to be confined to a building or a particular place. Thus a school can be an institution, administration or directorate such as the National Commissioner of Police where the education of police officers is carried out. Most often a school has the traditional meaning of an educational institution which is confined to a particular location or a place.

*Graduate:* A student who has completed all requirements in a particular program as defined by the curriculum and has graduated from a programme in the official school system, or from another programme covered by the Register of Graduations.

Graduation: Graduates are counted for each graduation. The number of graduations is usually higher than the number of graduates, since some students graduate from more than one programme during the year. For instance, many graduates in the certified trades complete both a school diploma and the journeyman's examination in the same year. Graduates who have completed the matriculation examination have sometimes also completed a shorter programme, or have completed two different lines of study within the matriculation exam, and as a result are counted as having two graduations.

*Graduation year:* Data on graduates refer to the graduation year, which covers the period from November 1<sup>st</sup> to October 31<sup>st</sup>. Data provided to the international organisations use the calendar year according to international recommendations.

Dropout rate: Ratio of students who are counted in the Student Register in a given year and who do not show up in the register a year later without having graduated or passed away.

Completion rate/cohort dropout rate. New entrants at the respective school level are counted, i.e. those who study at this level for the first time according to the Statistics Iceland Student Register, since its start in 1975. This group of new entrants is tracked for some years and the number of graduates counted who have completed at least a two year programme at the upper secondary level or a degree at the tertiary level during this time period, according to the Register of Graduations. The proportion of those who have graduated is called the completion rate. After that, those who are still in education in day programmes, evening programmes or distance learning in Iceland but have not graduated are examined. When they have been subtracted from the graduates the dropout rate is obtained.

Graduates with a matriculation examination as a ratio of 20 year olds: The ratio of graduates with a matriculation exam as a ratio of 20 year olds, that is of the number of 19 year olds on December 31<sup>st</sup>/January 1<sup>st</sup> in the first part of the graduation year.

Unduplicated count of graduates: International publications often use the unduplicated count of graduates, where each graduate is only counted the first time he/she graduates from the school level in question. Therefore a student who completes the two year retail certificate and then graduates with a matriculation exam two years later is only counted as an upper secondary graduate at the time of the first graduation in an unduplicated count of graduates. The unduplicated count of graduates gives an indication of the proportion of students who graduate from a level of education from a corresponding group, e.g. an age group.

Graduation rate: The graduation rate is computed using the unduplicated count of graduates divided by the population in a typical age group. In Iceland the typical age group when computing the graduation rate for the upper secondary level of education is 20 year olds and 23 year olds when computing the graduation rate for the first university degree.

*Diplomas and degrees:* Statistics Iceland has grouped diplomas and degrees according to a classification composed by Statistics Iceland. The diplomas and degrees are:

Basic examination. Basic examination from general programmes, such as general programmes at the start of upper secondary education.

Vocational basic examination. Basic examination from vocational programmes other than the certified trades.

Certified trade basic examination. Basic examination from the certified trades.

Upper secondary school leaving certificate. According to laws on upper secondary education.

Diploma of competence. Diplomas which do not give qualifications for a particular occupation. E.g. tourism programme, art programmes, music performance.

Vocational certificate. Certificates which give qualifications for a particular occupation, such as nurse's aids, marine engineering, music teachers, and air traffic controllers.

Certified trade school certificate. School certificate in the certified trades, when the school programme has been completed.

Journeyman's examination. Journeyman's examination in the certified trades.

Matriculation vocational exam. Matriculation exam after art or other vocational programmes, which gives admission to university.

Matriculation general exam. Matriculation exam after general programmes, which gives admission to university.

Master of certified trades. Examination to qualify as a master of the certified trades.

Diploma at the tertiary level, not university degree. Short programmes at the tertiary level, usually vocationally oriented.

Bachelor degree. First university degree at the tertiary level, e.g. B.A., B.S, B.Ed., B.M.

Diploma after Bachelor degree. An example is teaching qualifications, diploma for qualified teachers and diploma for specialization programmes for nurses.

Masters' degree. Second university degree, completed after a Bachelor degree. E.g. M.A., M.S. M.Ed., M.B.A.

Ph.D. Research degree.

ISCED97: Since October 2007 data has been published by Statistics Iceland according to the international classification ISCED97 (International Classification of Education. Information is classified according to level and field of study based on the content of the educational programme according to ISCED97. For more information on ISCED97 see the Statistics Iceland website. Before October 2007 data on graduations by level were published according to ISCED76 while data on graduations by programme of study were published according to a classification made by Statistics Iceland. Level: There are 7 levels of study according to ISCED97. Data on graduations on the Statistics Iceland website covers levels 3-6. Level 3 is the upper secondary level. It is unchanged in Iceland from the previous classification (ISCED76). Level 4 is called the post-secondary non-tertiary level, and covers programmes which follow programmes at the upper secondary level but are not at the tertiary level. Examples are programmes for a master of a certified trade, marine engineering and marine captain 4th grade, medical secretaries and tourist guides. Programmes classified at level 4 in Iceland were classified at the tertiary level according to ISCED76. Level 5 is the tertiary level (first part) which is completed with a Bachelor degree or a Master's degree. Level 6 is the doctorate level (second part of tertiary education) and is completed with a Ph.D.

Field of study: Graduations are classified by field of study according to ISCED97 instead of the classification of programmes of study made by Statistics Iceland. The fields of study classification is based on 9 broad fields

(1 digit classification), which are divided into 25 narrow fields (2 digit classification) and approximately 90 detailed fields (3 digit classification). Statistics Iceland has added a fourth digit to the international classification to classify programmes by lines of study.

# 2 Time

## 2.1 Reference period

The reference period for the Register of Graduations is the graduation year, November 1<sup>st</sup> to October 31<sup>st</sup> the following year.

#### 2.2 Process time

The processing time for graduates in 2018 was approximately 15 months after the end of the graduation year. The plan is to publish data earlier in the future.

#### 2.3 Punctuality

Data for publication are placed on Statistics Iceland's advance release calendar at least 10 days before the data will be published on the website. So far no publication has been postponed since this rule was adopted.

# 2.4 Frequency of releases

Statistics are published annually on the website. Data are also published in publications and on the websites of foreign organizations.

# 3 Reliability and security

#### 3.1 Accuracy and reliability

All upper secondary schools and universities and other schools within the framework of the data collection are requested to hand in data. The response rate has been 100%.

#### 3.2 Sources of errors

In order to minimise inaccuracy several measures are taken. Datasets are compared with data from previous years, enquiries are made to individual schools and data are compared with related data collected by Statistics Iceland, such as the Student Register and data from the National Population Register. Reports from the central database INNA have been used for reference and newspaper articles about graduations have been used for comparison with school reports. Inaccuracy in data can most often be traced to the school level, where for instance graduates are either missing or

counted more than once. Students are sometimes reported as graduates even though they have not completed all requirements for graduation. These students often reappear in school reports at a later date when they have completed all requirements and have graduated. When that occurs their graduation date is changed in the Register of Graduations. Occasionally students are reported as graduates of the same programme from more than one school. Then the schools are contacted and information obtained on the correct school and time when graduation took place. When the number of graduates is underreported schools have not reported all graduates to Statistics Iceland. Not all schools graduate students from short programmes, some of which are a part of longer programmes of study. Examples are general programmes at the start of upper secondary education, and introductory programmes to the certified trades. The identification used by the school for the line of study is sometimes not according to the official curriculum, which can result in errors in the allocation of graduates to their line of study.

# 3.3 Measures on confidence limits/accuracy

Since the data are population statistics rather than statistics from a sample measures on confidence limits or accuracy are not relevant. Therefore they are not done.

# 4 Comparison

# 4.1 Comparison between periods

This data collection has existed since 1995 with few changes. The data are comparable from 1995 to the present, but the coverage of the data collection has been expanded in correspondence with the increased coverage of the Student Register.

In October 2007 data were published for the first time according to ISCED97 (International Classification of Education). Data from 1995 have been updated according to ISCED97. However, a few tables with older data according to the previous classification are still be available on the web, under Upper secondary schools – Earlier tables and Universities – Earlier tables.

## **4.2** Comparison with other statistics

Data from the Register of Graduations are compared with other data sets such as the Student Register and data in the National Population Register. The results are also compared to information on the educational attainment of the population from the labour force survey. Comparable data from other countries are used for comparison. The statistics are mostly processed in accordance with international definitions. In Iceland data are published by graduation year but the international organisations use the calendar year. When reporting data to the international organisations graduates from

programmes that are a part of a longer programme are not reported, but all graduates are counted in data published in Iceland.

# 4.3 Coherence between preliminary and final statistics

Preliminary data are not published. Changes are sometimes made to the data after they have been published because of updated information on individual students, e.g. when students were reported as graduated when they had not completed all requirements for graduation. As a result older data are updated when new data are published.

# **5** Access to information

#### 5.1 Forms of dissemination

- 1. News, published on the Statistics Iceland website.
- 2. Statistics; classified and sorted tables published on the Statistics Iceland website.
- 3. Landshagir, Statistical Yearbook of Statistics Iceland (latest version in 2015).
- 4. Hagtíðindi, statistical series.
- 5. Data from Statistics Iceland published by international organisations, such as 'Key data on Education in Europe' (published by Eurydice), 'Education at a Glance' (annual publication by OECD) and 'Global Education Digest' (annual publication by UNESCO).

#### 5.2 Basic data; storage and usability

The data are preserved in a computer format by Statistics Iceland. All data which concern individuals are treated as confidential. Access to individual data is restricted and normally not allowed. When responding to enquiries data can not be traced to individuals. Scientists can apply for access to individual data if they meet certain requirements.

#### **5.3 Reports**

See item 5.1 above for further documentation.

#### 5.4 Other information

More information can be obtained from the individual responsible for the Register of Graduations and from other staff in the Department of Wages, Income and Education.