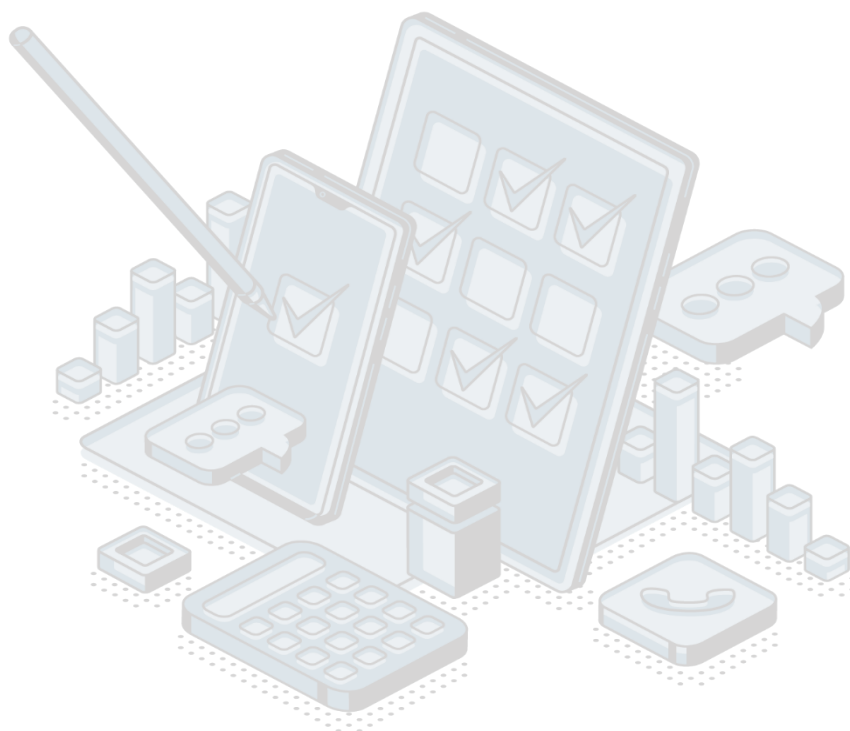


## QUALITY REPORT

### MASTERS OF SCIENCE AND SPECIALISTS 2022



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## **1. Introduction – Basic information on survey**

### **1.1 Purpose, goal, and subject of survey**

The purpose of the survey is to collect data on specialists and masters for the calendar 2022 year at public and private higher education institutions in Montenegro.

The aim of the survey is to calculate indicators on this type of study in Montenegro, in order to meet the needs of the users and obtain internationally comparable data.

Data on specialists and masters are the result of regular statistical surveys.

### **1.2 Legal basis**

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12 and 47/19) defines provisions for collection, processing, and dissemination of data. The Law provides to the Statistical Office legal powers to collect and access the data necessary for the implementation of Programme and Annual Plan. The Law gives a priority to the use of administrative data and right of access to individual data that are a result of survey of other official statistical producers. As a supplement to the legal provisions, the Directorate for Statistics has signed a Memorandum of Cooperation with the University of Montenegro as the owner of administrative data.

### **1.3 Statistical units**

Reporting units are all higher education institutions established or conducting classes in Montenegro, regardless of their status, established in accordance with the Law on Higher Education (Official Gazette of Montenegro No 044/14 of 21.10.2014, 052/14 of 16.12.2014, 047/15 of 18.08.2015, 040/16 of 30.06.2016, 042/17 of 30.06.2017, 071/17 of 31.10.2017, 055/18 of 01.08.2018, 003/19 of 15.01.2019, 017/19 of 19.03.2019, 047/19 of 12.08.2019, 072/19 of 26.12.2019, 074/20 of 23.07.2020, 104/21 of 30.09.2021, 086/22 of 03.08.2022, 086/22 of 03.08.2022 ).

### **1.4 Coverage and scope of survey**

#### **1.4.1 Sectors**

Education.

#### **1.4.2 Statistical population**

All students at higher education institutions who have completed postgraduate studies (specialist or master).

### **1.5 Reference geographical area**

Montenegro.

### **1.6 Concepts and definitions**

Higher education is provided by universities and higher education institutions that are licensed and accredited in accordance with the Law on Higher Education. Higher education is acquired in Montenegro at universities and other institutions, which can be established as public and private. The University realizes its activity through: faculties, art academies, institutes and colleges, as organizational units.

**The University** is an autonomous institution which, in carrying out its activities, unifies educational, scientific and research and artistic work, as part of a unique higher education process.

**The Faculty** is a scientific-teaching higher education institution that develops scientific-research work as the basis of teaching activity.

**Faculty of Arts and Academy** is a teaching and art institution of higher education that develops artistic creativity, scientific research work and performs teaching in appropriate fields.

**The study program** is the basic unit for classification of higher education with defined structure and number of ECTS credits which provide the individual with the learning outcomes necessary for gaining knowledge, skills and competences for the field of work from the level of higher education defined in the national framework of qualifications and issuing a diploma.

The status of the student is obtained by enrolling in the appropriate study program. A student can have a status of a budget funded or self-financing student. Primary and postgraduate study programs can be accredited as academic and applied. Doctoral study programs can be accredited as academic.

Postgraduate studies are considered as any study program which entitles them to acquire a degree after completing basic studies, a degree in specialist studies, a master's degree or a diploma of the academic title of the Master of Science or Art, in accordance with the Law.

Postgraduate specialist studies are organized after completion of basic studies of 180 ECTS credits and last one academic year (two semesters), ie the scope of the study program of these studies is 60 ECTS credits.

Postgraduate master's studies (academic and applied) last for 1 year (60 ECTS credits) after specialist studies, and two years (120 ECTS credits) after basic studies.

**A diploma** is a public document proving that the acquired qualification is the result of a successfully completed higher education program. The diplomas obtained at this level of study are:

- **Diploma in specialist studies** - after completing a one-year study program in postgraduate studies,
- **Diploma of applied master studies**, after completing the applied study program for a period of one or two years at the applied master's postgraduate studies and defence of the master's thesis (one year after completing postgraduate specialist studies and basic studies for the duration of four years, and two years after the basic studies for a period of three years),
- **Academic Master's Degree in Master of Science**, after completing a one-year or two-year study program in academic master's postgraduate studies and defence of master's thesis (one year after completing postgraduate specialist studies and basic studies for a period of four years, and two years after the basic studies for a period of three years).
- **diploma of applied master's studies**, after completing the applied master's program, in total 120 ECTS, and after obtaining the diploma of applied basic studies and defence of the master's thesis, **academic master's degree**, after completing the academic master's program, includes 120 ECTS after obtaining the academic basic studies diploma and defending the master's thesis.

### **1.7 Classifications**

National Classification of Education (harmonized with the International Standard Classification of Education - ISCED 2011).

### **1.8 Frequency of data collection**

Annual frequency of data collection.

### **1.9 Dynamics of data collection**

Annual dynamics - final data.

### **1.10 Methodology**

Methodological guide for higher education is available at the website of Statistical Office, link:

<https://www.monstat.org/eng/page.php?id=190&pageid=75>

### **1.11 Base period**

Not relevant.

### **1.12 Unit of measure**

Number of students who have completed postgraduate studies.

### **1.13 Data source**

All higher education institutions in the territory of Montenegro that have a license and accreditation for their classes, regardless of their status.

### **1.14 Method of data collection**

Data is collected in a combination. From a number of reporting units, data is collected through a statistical questionnaire by a reporting method and partly by administrative means.

## **2. Relevance – data users**

### **2.1 User needs**

International users:

- ✚ Eurostat;
- ✚ World Bank;
- ✚ UN organisations;
- ✚ International Monetary Fund (IMF)

National users:

- ✚ Ministries and other public administration bodies;
- ✚ Local governments and other local government bodies;
- ✚ Central Bank
- ✚ Non-governmental organizations
- ✚ Students;
- ✚ Researchers;
- ✚ Media.

### **2.2 User satisfaction**

The Statistical Office has adopted the Quality Management Strategy, the Guide for the Implementation of the Quality Management Strategy, as well as the Implementation Plan for the Implementation of the Quality Policy. In order to measure the degree to which it fulfils its obligations towards users and as part of the new quality policy, the Directorate for Statistics conducted a survey on user satisfaction.

The results of the research are available on the website of the Statistical Office, link:

<https://www.monstat.org/eng/page.php?id=1502&pageid=1>

## **3. Accuracy and reliability**

### **3.1 Accuracy – overall**

The survey is conducted on the full scope of the reporting units. Reporting units are higher education institutions in Montenegro that have the data needed for this survey. This method provides a high accuracy rating.

## 3.2 Sampling error

Since this statistical survey is conducted on a full coverage basis, sampling errors are not relevant.

### *Sampling error indicators*

Not relevant.

## 3.3 Non-sampling error

Non-sampling errors: over-coverage, under-coverage, measurement and processing errors, data editing and imputation errors, non-response.

### 3.3.1 Coverage error

Since survey in the field of higher education is conducted on the basis of full coverage, coverage errors have not been determined.

#### *Error indicator coverage*

Not relevant.

### 3.3.2 Measurement error

Measurement errors are errors that occur during data collection and cause differences between the recorded and actual values of the variable. By indirect analysis, based on the input results, a correction is made. Every year, the reporting units are asked for the same variables, which makes it easier to fill out the questionnaire.

### 3.3.3 Non-response error

Not relevant.

#### *Unit nonresponse rate*

In the calendar year 2022 there were no unresponsive reporting units.

#### *Item nonresponse rate*

Not relevant.

## 3.4 Data processing error

Not relevant.

### *Imputation rate*

Not relevant.

## 3.5 Data revision

### 3.5.1 Data revision policy

The Statistical Office has adopted the 'Revision policy' and it is available on the website:

<https://www.monstat.org/eng/page.php?id=1411&pageid=3>

### 3.5.2 Data revision practice

There was no data revision. Not applicable.

### 3.5.3 Data revision-average size

Not relevant.

## 4. Timeliness and punctuality

### 4.1 Timeliness

The data are published in accordance with the Annual Plan of Official Statistics for 2023 and the Calendar of Publication of Statistical Data of the Administration for Statistics for 2023. The data is published on the date determined by the Statistical Data Publication Calendar. For the calendar year 2022 data were published on May 18, 2023.

#### *Time lag of preliminary results*

Not relevant.

#### *Time lag of final data*

The data is published as final. The final data are published T+135, there was no deviation between the announced date in the annual Statistical Data Publication Calendar and the actual publication date.

### 4.2 Punctuality

There was no deviation between the announced date in the annual Statistical Data Publication Calendar and the actual publication date.

The data are published on the date provided for in the Annual Plan and the Statistical Data Publication Calendar. The TP3 indicator is 0, i.e. there is no difference between the planned and actual announcement.

## 5. Availability and clarity

### 5.1 Statistical Release Calendar

The Law on Official Statistics and the System of Official Statistics (Official Gazette of Montenegro No 18/12 and 47/19) prescribes that the producers of official statistics prepare, update and publish the Calendar of publication of statistical data.

It is published on the website of the Administration for Statistics no later than December 20 for the following year, for all producers of official statistics, which includes the dates of publication of statistical data.

Any change in the publication date in the Calendar is announced in advance in accordance with the Procedure on unplanned revisions.

### 5.2 Access to Statistical Release Calendar




The calendar of publication of statistical data is available at the following link: [Release Calendar](#)

### 5.3 Releases

For this statistical survey realise is published once a year and is available on the website at the following link: <https://www.monstat.org/eng/page.php?id=295&pageid=1>

### 5.4 Publications

The Statistical Office publishes data on specialists and masters in the following publications:

-  Statistical Yearbook,
-  Montenegro in figures,
-  Women and men in Montenegro.

All publications published by the Statistical Office are available at the following link:

<https://www.monstat.org/eng/publikacije.php?id=100>

### **5.5 Online database**

Not available.

### **5.6 Access to microdata**

The Law on Official Statistics and the System of Official Statistics (Official Gazette of Montenegro No 18/12 and 47/19) regulates the rules under which external users can gain access to individual data for research purposes. Article 58 defines the types of scientific and research organizations that can receive such data. The provision of individual data without identifiers is possible only at the written request of scientific and research institutions, for the purpose of carrying out scientific and research activities, as well as international statistical organizations and producers of statistics from other countries. The research subject signs the Agreement with the Statistical Office, as well as the Declaration on respect for the principle of confidentiality. Producers of official statistics keep special records on the users and on the purpose for which the statistical data are made available.

### **5.7 Metadata occupancy**

Metadata completion rate represents the ratio of the number of completed metadata data in relation to the total number of acceptable metadata fields. For this research, the metadata data completion rate is 100%.

## **6. Comparability**

### **6.1 Spatial comparability**

Data publication is in accordance with the International Standard Classification of Education (ISCED-2011) and national requirements. Comparability with all countries using the same methodology is ensured.

### **6.2 Time comparability**

Data on students who have completed postgraduate studies in Montenegro have been collected since the calendar year 2002 for master's degrees and since 2007 for specialists. The data are comparable over time. There have been no interruptions in the series since the beginning of data collection for this statistical survey.

#### *Time comparability indicator*

Indicator CC2 is 21 for masters and 16 for specialists.