

Education

Higher education in Serbia is part of the national educational system of the classical type: pre-primary, primary, secondary and higher education. The length of the primary school programme is eight, and secondary (grammar, vocational and art schools) is four years. From 2000, higher education institutions in Serbia became involved in the European trends of reforms and harmonization in the field of higher education – Bologna process. In September 2003, Serbia officially signed the Bologna Declaration and the main principles of it were incorporated in the Law on Higher Education¹ (LoHE) that came into the force two years later, in September 2005. By adopting the main principles of the Bologna process, Serbia committed itself to become a full member of the European Higher Education Area. A three-cycle education process, accreditation and external evaluation of higher education institutions and its programmes, mobility of students, professors and staff, as well as recognition of diplomas have been the main pillars of Serbian reform.

Degree structure

Higher education activities are carried out through academic and professional career courses based on accredited study programmes for acquiring higher education degrees. There are 3 levels of studies (degrees) in our HE system (presented in Figure 2.1.4.1):

- The first level includes: basic academic and professional courses.
- The second level includes: academic courses for a master's degree, specialist professional courses and specialist academic studies.
- The third level includes doctoral academic courses.

Each subject within a study programme receives a certain number of ECTS credits, whereas the scope of studies as a whole is expressed by aggregate ECTS credits. A total of 60 ECTS credits should correspond to an average of 40 h per student for the work done each week during an academic year. ECTS credits may be transferred between study programmes, but only within the same type of courses. Criteria and conditions for the transfer of ECTS credits are determined in the general act of an independent HEI or in an agreement reached between HEIs. LoHE offers the possibility of acquiring a joined diploma or degree organized and implemented by several HEIs.

¹ <http://www.mpn.gov.rs/dokumenta-i-propisi/zakoni/obrazovanje-i-vaspitanje/505-zakon-o-visokom-obrazovanju>

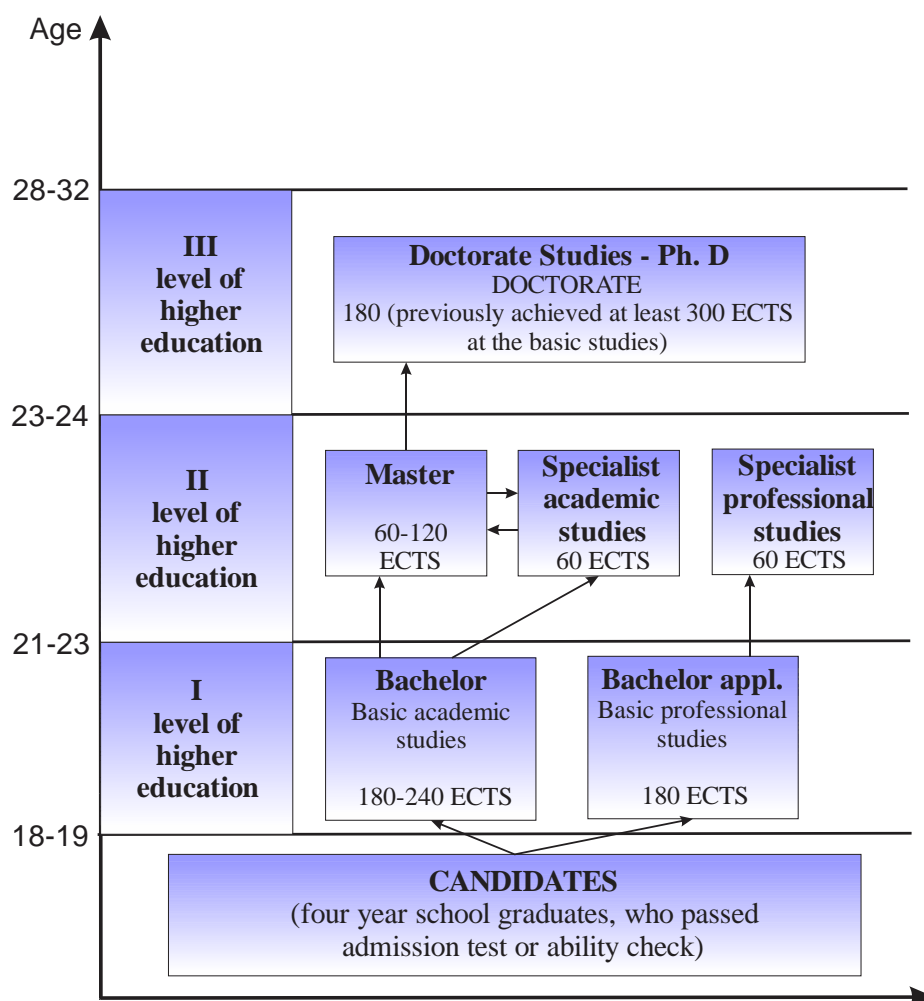


Figure 2.1.4.1. Degree structure of Serbian HE

Bachelor - Basic studies are organized by all HEIs defined by the LoHE and last three to four years. Total number of credits earned at this cycle could be 180 to 240 depending on the length of study programme (3 or 4 years). The degree for basic professional studies should be completed in three years. The study programme of basic studies can include a final paper. A person who finishes the basic academic studies and earns 180 credits acquires the professional title that includes the name of the profession of the first degree academic studies in the corresponding area - *bachelor*. If a person earns 240 credits, he or she acquires the title *bachelor with honors*. A person who finishes the basic professional studies acquires the professional title that includes the name of the profession of the first degree of the professional studies in the corresponding area - *bachelor appl.*

Master and Specialist studies - Master and specialist academic studies can be organized by the university, faculty or higher school of academic studies (college). Master degree academic studies last one or two years depending on the duration of the basic academic studies. Study programmes of master academic studies contain an obligation to create a master thesis. A person who finishes master academic studies acquires the academic title - *master*, with the name of the profession of the second degree of academic studies in a corresponding area. The number of ECTS that can be earned in this cycle is 60 to 120. Specialist academic studies last one year with 60 ECTS. Specialist

professional studies can be organised by the university, faculty, higher school of academic studies or higher school of professional studies. The number of ECTS that could be earned is 60.

Integrated studies (one cycle programme) - Academic study programmes can be organized and integrated within basic and master academic studies with 300 ECTS. One-cycle study programmes in the field of medicine can be organized with 360 ECTS.

PhD studies - PhD studies can be organized by universities and faculties. PhD studies are carried out for at least three years with previous basic and master academic studies. Serbia has adopted the ECTS system for PhD studies. The number of ECTS that should be earned is 180, if the candidate has at least 300 ECTS collected in previous levels of education. A PhD dissertation is the final part of the study programme of PhD studies, with the exception of a PhD in the Arts which is an artistic project.

Grading system

A student's achievement in a specific subject is continuously assessed during the teaching process as well as at the end of the course (final exam) and it is expressed in points. By fulfilling the duties preceding an exam and passing the exams, a student can achieve a maximum of 100 points. Every course establishes the proportion of points achieved during the pre-exam duties and in the exam, the pre-exam duties being worth a minimum of 30 and maximum of 70 points. A student's success is assessed by grades from 5 (failed) to 10 (excellent). An institution of higher education can establish a different, non-numeric method of grading, by establishing the relation between these grades and those of 5 to 10. A general act of an institution of higher education defines more closely the way in which exams are taken and grading.

Institutional structure

Relevant bodies in the system of Serbian higher education including their responsibilities are presented in Figure 2.1.4.2:

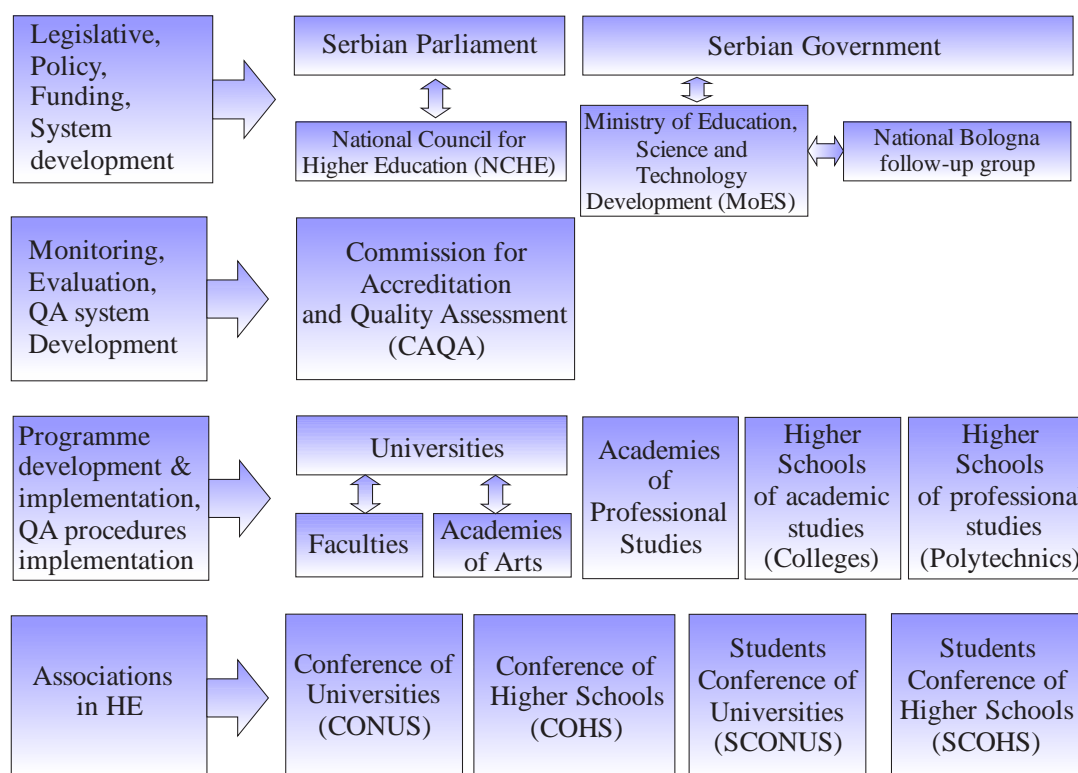


Figure 2.1.4.2. Relevant bodies in the system of Serbian HE

Higher Education Institutions (HEIs)

According to the LoHE, activities in the area of higher education are carried out by both: state and private higher education institutions that are equally treated. The total number of accredited HEIs in the Republic of Serbia is 206.

Universities – are carrying out activities combining educational and scientific-research, professional and/or artistic work. According to the LoHE, a university has to have accredited academic study programmes in at least 3 scientific/artistic fields at all 3 levels. The LoHE gives certain integrative functions to the universities. There are 16 accredited universities in Serbia, of which 8 are founded by state and 8 are private universities. State universities enrol 85% of the student population.

Faculties or Academies of arts within universities - are higher education units within a university carrying out academic study programmes and developing scientific-research, professional and/or artistic work in one or more areas. The Law provides the possibility for individual faculties/academies to act as legal bodies if they have at least 3 accredited study programmes. All faculties and academies of arts are legal entities in our country – they count as HEIs and are subjects of institutional accreditation. The total number of accredited faculties is 118.

Academies of professional studies - are carrying out their activities combining educational, research, professional and artistic work. According to the LoHE, an academy has to have 5 accredited professional study programmes in at least 3 scientific/artistic fields. There are no such HEIs in Serbia, so far.

Higher schools of academic studies (Colleges) - have basic academic, specialist and master degree courses in one or more areas within scientific/artistic fields defined by the LoHE. There are 5 accredited colleges in Serbia.

Higher schools of professional studies (Polytechnics) – offer basic professional and specialist professional courses in one or more areas within scientific/artistic fields defined by the Law. There are 65 accredited polytechnics in Serbia.

National Council for Higher Education (NCHE) is established by the National Assembly to ensure the development and promotion of quality of higher education in Serbia, particularly in creation of strategy and policies concerning higher education and its correspondence with European and international standards (Articles 9-12, LoHE). The Council has 21 members who are elected by the National Assembly of the Republic of Serbia. The NCHE elects members of CAQA on the recommendation of CONUS. The NCHE approves QA standards, rules and regulations defined by CAQA.

Conference of Universities (CONUS) and Conference of higher schools (COHS) – are both established for the purpose of coordinating work, formulation of common policies, realization of shared interests and for carrying out of tasks defined by the LoHE. All rectors of Serbian universities are members of CONUS and all higher school principals are members of CSPS. CONUS recommends the members of CAQA to the NCHE.

Student Conference of Universities (SCONUS) and Student Conference of higher schools (SCOHS) – are established to pursue the common interests of students as partners in the process of developing higher education as defined by the LoHE. SCONUS and SCOHS provide lists of student evaluators taking part in the site visits of HEIs for the purpose of accreditation and external QA.

Ministry of Education, Science and Technology Development (MoES) is responsible for overseeing the development of higher education by recommending higher education policies to the Government, issuing operating licences, administrative supervision of higher education, keeping records on the register of professors. On the basis of the certificate for accreditation of an HEI given by CAQA, the Ministry automatically issues the operating licence and performs administrative supervision. The Ministry does not have the right to change accreditation decisions made by CAQA. The Ministry provides administrative and technical support to the CAQA.

National Assembly (Parliament) elects members of the NCHE and brings the document that defines the system of higher education-LoHE.

The structure of the QA system in Serbia involving all relevant parties is presented in Figure 2.1.4.3.

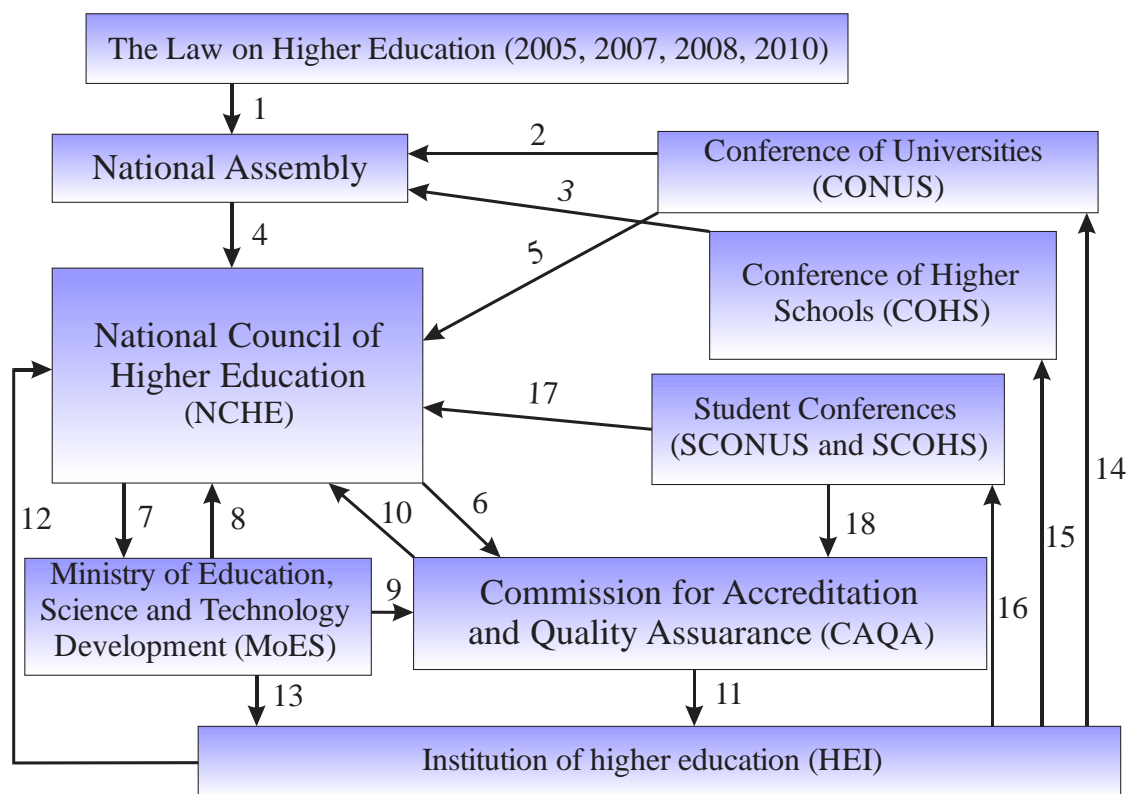


Figure 2.1.4.3.Links between the relevant parties in the QA system in Serbia

1 - passes, 2 and 3 - recommends NCHE members, 4 elects NCHE members, 5 – recommends CAQA members, 6 – elects CAQA members, 7- creates HE policies, 8 and 9 – provides administrative and technical support, 10 – reports, 11 – evaluates (accredits, warns, rejects), 12 – appeals, 13 – gives operating licence, 14 – delegates rector, 15 – delegates director, 16, 17 and 18 – delegates student representative

Accreditation in Higher Education

The Commission for Accreditation and Quality Assurance (CAQA), as it is now, was established by the LoHE (Act of parliament) adopted in 2005 (Official Gazette no 76/2005 and amendments in 2007 and 2010. CAQA members in the first mandate were elected in June 2006, and in the second mandate in March 2011.

The Mission of the Commission for Accreditation and Quality Assurance (CAQA) is to contribute to the maintenance and enhancement of the quality of Serbian HE, to comply with internationally-accepted quality standards, to create a pool of trained reviewers for the process of accreditation and external quality control and to act as the main driving force for the development of quality assurance in the HE of Western Balkan countries by fostering cooperation between agencies in the region.

CAQA became a full member of ENQA (European Association for Quality Assurance in Higher Education) on April 25th, 2013.

CAQA tasks

CAQA, since its establishment, actively participates in a whole variety of tasks aimed at implementing changes and reforms in the field of quality assurance in HE. By LoHE, tasks and competences of the CAQA in relation to its mission are:

1. Carries out the accreditation procedure for HE institutions and study programmes, decides on the application for accreditation and issues a certificate of accreditation
2. Recommends to the National Council
 - standards concerning initial accreditation;
 - standards and procedures for accreditation of higher education institutions;
 - standards and procedures for accreditation of study programmes;
 - standards for internal assessment and quality evaluation of higher education institutions;
 - standards and procedures for external quality assessment of HEIs
3. Assists and cooperates with higher education institutions in assuring and promoting quality assurance
4. Assists stakeholders (students, labour market and government representatives, etc) in understanding the importance of quality assurance and demonstrates their ability to foster changes.
5. Creates a pool of evaluators
6. Endeavours to ensure that accreditation standards and procedures conform to those of the European Higher Education Area;
7. Reports on initial accreditation in the process of licensing of new HEIs by the MoES
8. Cooperates with other national and international QA agencies

To accomplish its mission, CAQA cooperates with the NCHE, MoES and other state bodies and higher education institutions, educational and scientific research institutions, labour market and student organizations. The Commission endeavours to establish an active cooperation with similar institutions and organizations in other European countries aiming to implement fully the Bologna declaration guidelines and to establish the European Higher Education Area (EHEA).

At the beginning of the first mandate in 2006, CAQA developed the documents related to external quality assurance processes: Rules and regulations, standards, guidelines, instructions. During 2006 and 2007 a pool of reviewers was created by conducting training seminars together with briefings of HEIs on how to prepare accreditation documentation. At that time it was necessary to provide a legal basis for the operation of the existing state HEIs, as well as for the growing number of private HEIs by accreditation of both: institutions and their study programmes under the same criteria and procedures. Since then, the first accreditation round has been completed. Now the higher education system in Serbia is in the period between two accreditation rounds and most of the activities are external quality controls of HEIs with the aim to check whether their performances have changed since accreditation, to monitor the development of their quality system and to prepare them for the second accreditation round.

CAQA undertakes 3 types of external quality assurance methods:

- Accreditation of study programmes,

- Accreditation of HEIs and
- External quality control of HEIs.

After adoption of Standards, Rules and Regulation for QA of both HEIs and study programmes in 2006, during 2007 CAQA organised 20 seminars to train around 700 reviewers (10%) of the academic community. Since then, the process of accreditation (first round of accreditation) of all HEIs and their study programmes has been completed in 9 cycles according to the plan adopted by CAQA. At the same time, external evaluation of HEIs started in parallel in 2011.

CAQA has conducted since 2007 a total of 2233 quality assessments, of which 232 were accreditation requests of HEIs; 1947 accreditation requests of study programmes and 54 requests for external quality control of HEIs. Data on the annual number of the requests for the quality assessments in the period 2007-2011 are presented in Figure 2.1.4.4.

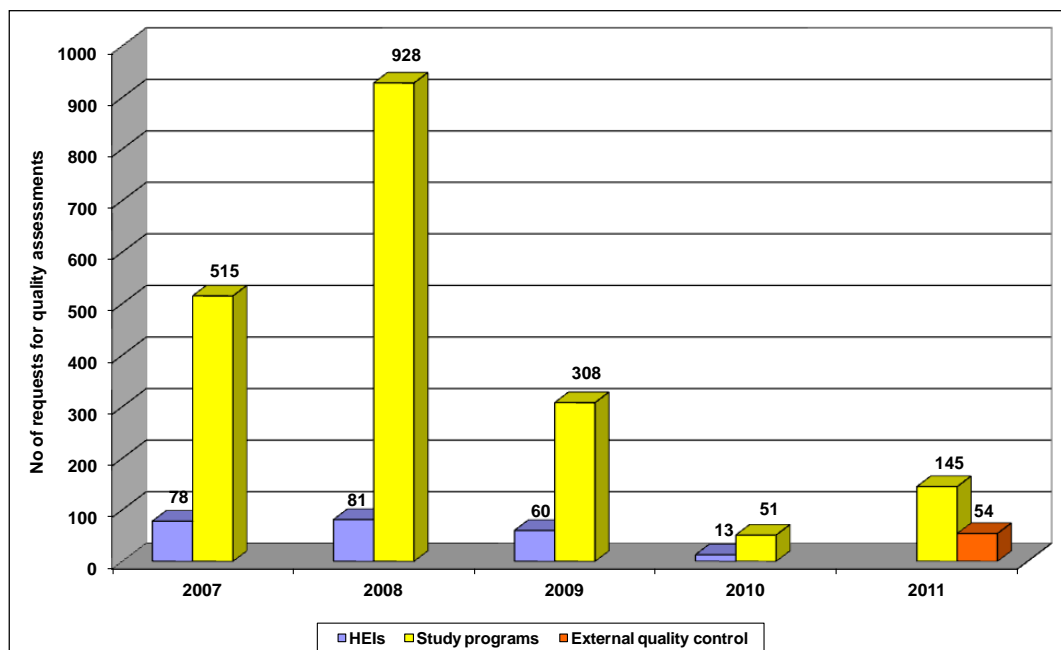


Figure 2.1.4.4. Number of requests for quality assessments in the period 2006-2011

Accreditation of HEIs

- 19 universities applied for accreditation (8 public and 11 private). Until December 2011, 8 public and 8 private universities were accredited and 3 were rejected. Accredited public universities cover 85% of the student population enrolling in the first year and 15% private
- 117 faculties within universities have been accredited (85 public and 32 private)
- 69 higher schools have been accredited (47 public and 22 private)

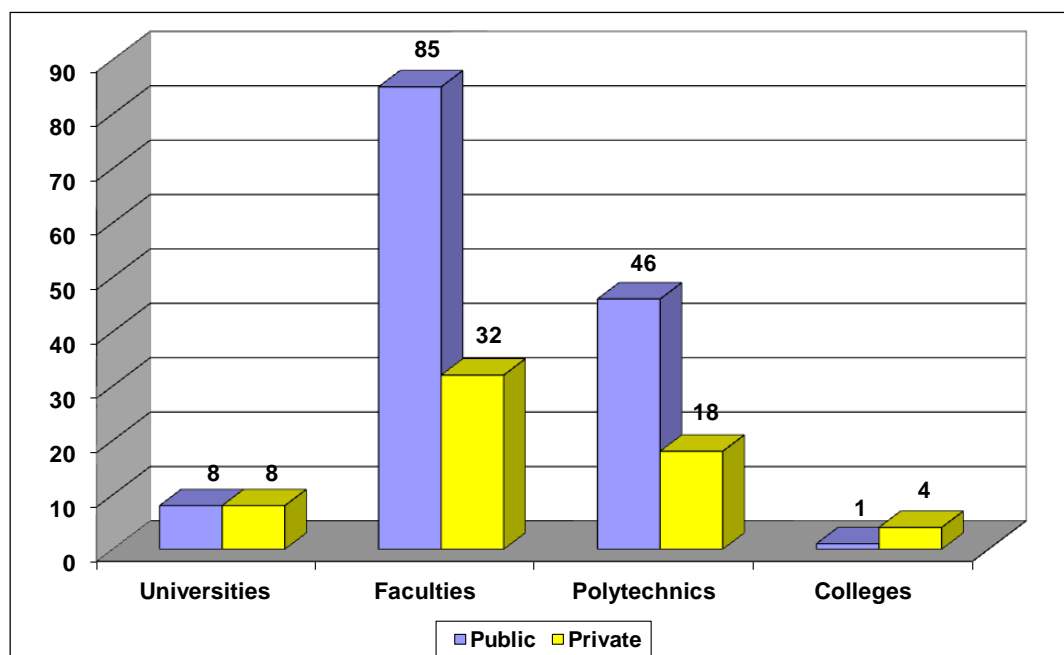


Figure 2.1.4.5.Number of accredited universities, polytechnics and colleges in the Republic of Serbia (2011)

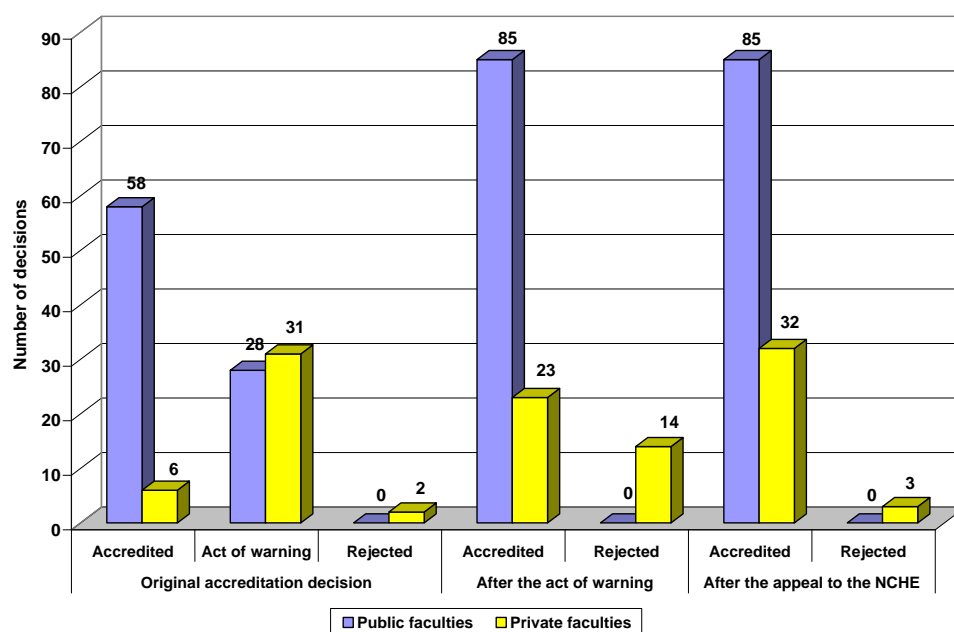


Figure 2.1.4.6. Outcomes of accreditation of faculties in the Republic of Serbia (2011)

Table 2.1.4.1.Number of accredited universities with legal status in the Republic of Serbia (2011)

Public universities	Number of faculties	Private universities*	Number of faculties
University of Belgrade	31	Singidunum University	5
University of Arts in Belgrade	4	Megatrend University	10
University of Novi Sad	14	Privredna Akademija University	4
University of Niš	13	Educons University	1
University of Kragujevac	11	Metropolitan	1
University of Priština	10	Union “Nikola Tesla” University	integrated
University of Defence	2	European University	3
University of Novi Pazar	integrated	Union University	4
Total	85		28

Accreditation of study programmes

Until December 2011, in all accredited universities 1.205 study programmes were accredited for the enrolment of 65,607 students, of which public universities had 1040 study programmes for 55,934 students and private universities had 165 study programmes for 9,673 students.

In accredited higher schools, 348 (299 in public and 49 in private schools) study programmes were accredited for 23,885 (19,976 in public and 3,909 in private schools) students.

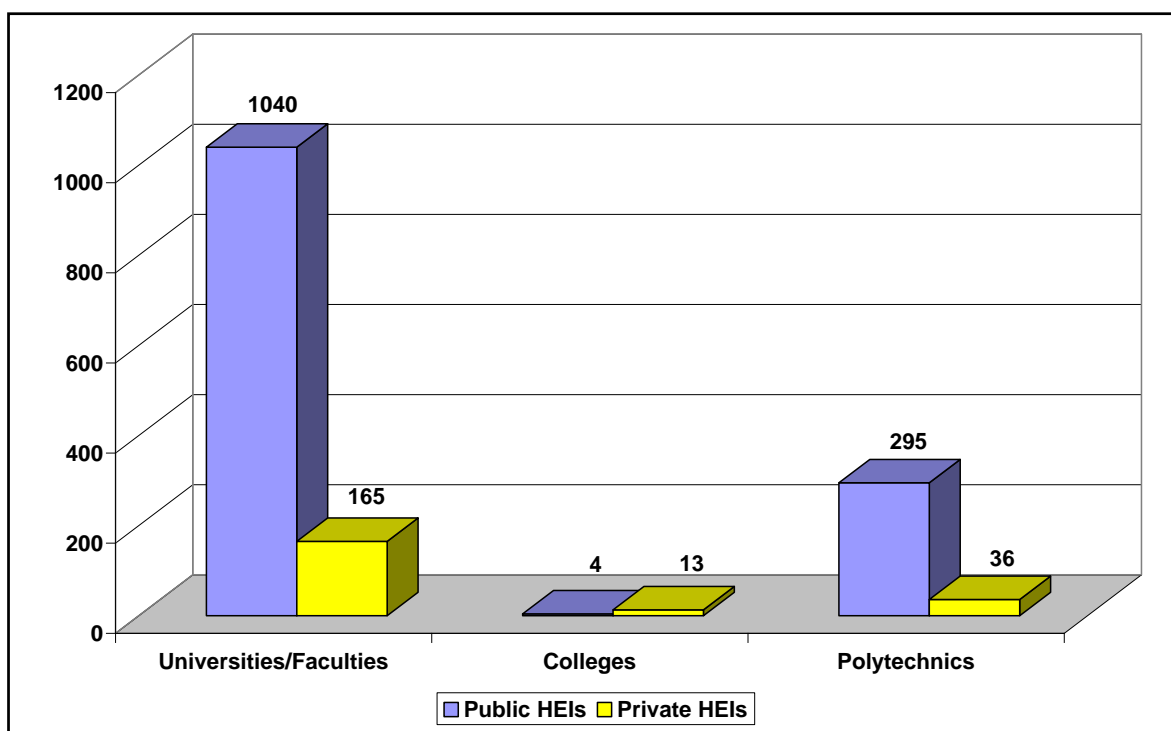


Figure 2.1.4.7.Number of accredited programmes at HEIs in the Republic of Serbia (2011)

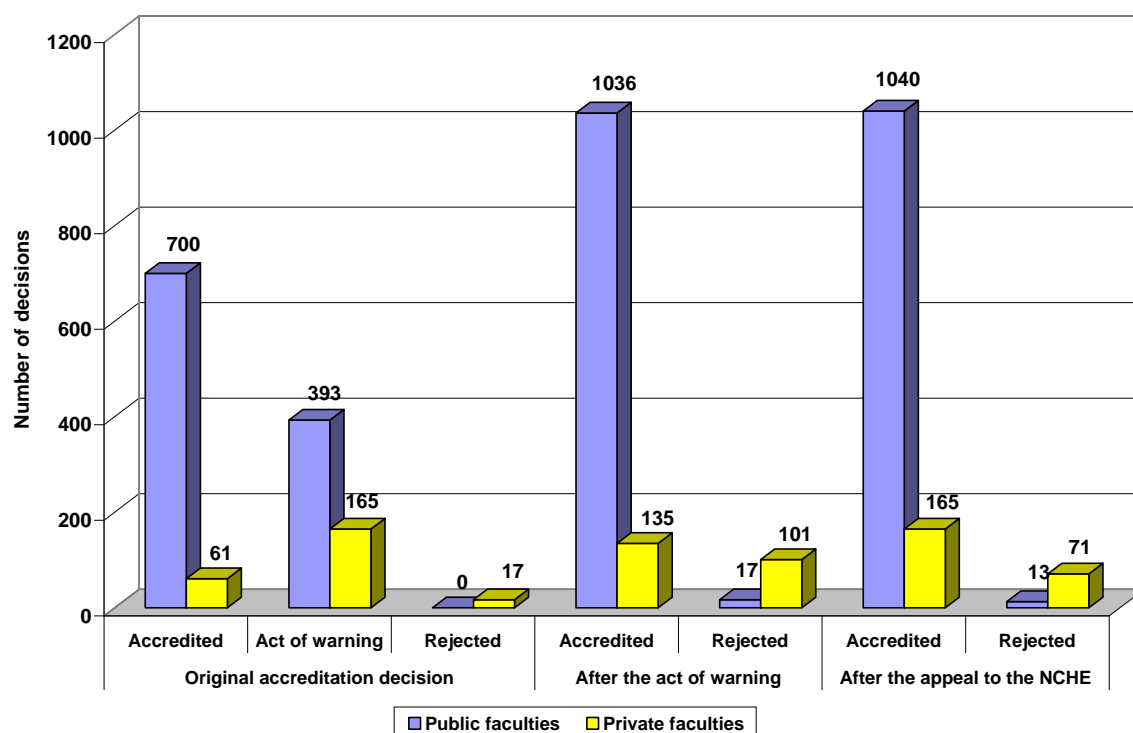


Figure 2.1.4.8.Outcomes of study programme accreditation at public and private faculties in the Republic of Serbia (2011)

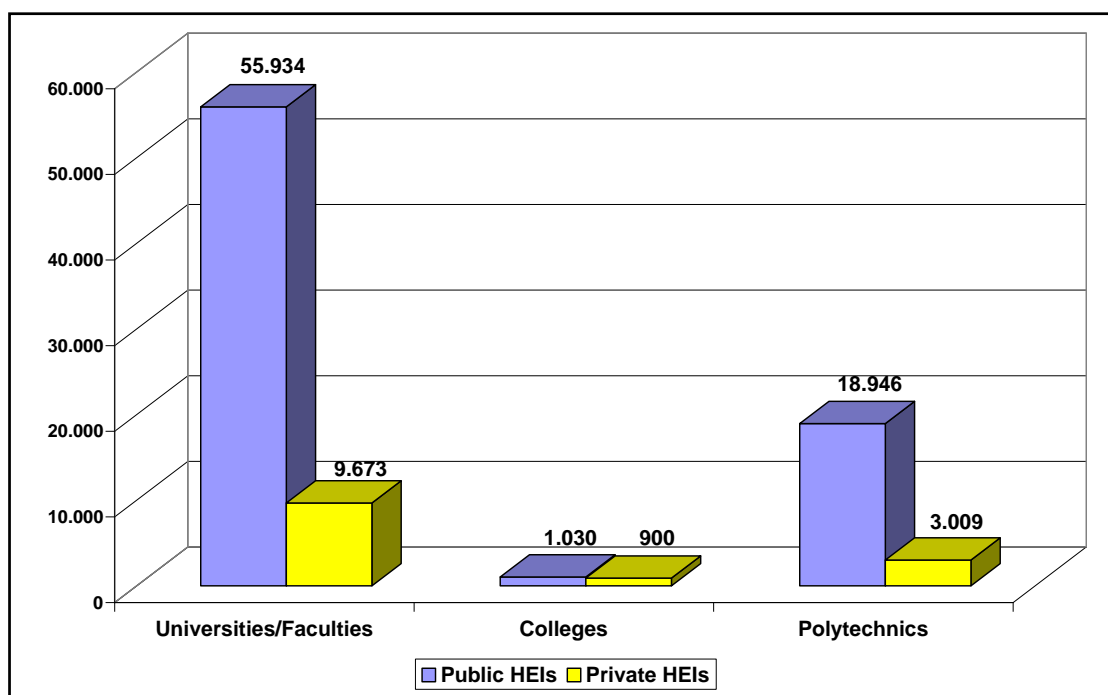


Figure 2.1.4.9.Number of students in accredited HEIs in the Republic of Serbia (2011)

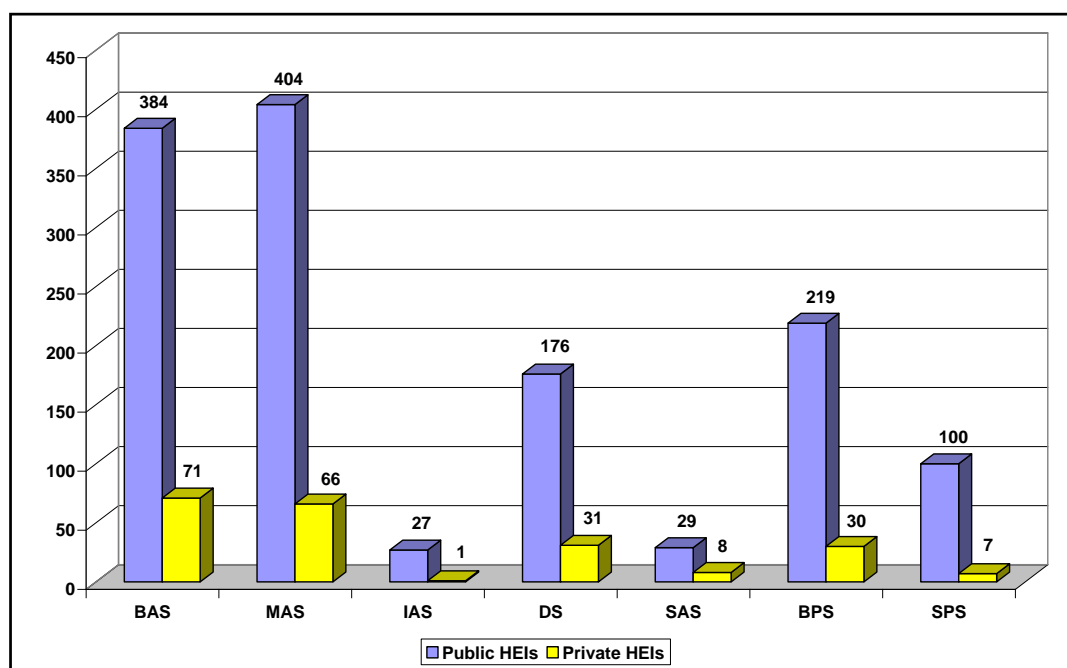


Figure 2.1.4.10.Number of accredited study programmes of different level and HEI type in the Republic of Serbia (2011)

BAS – Basic academic studies, MAS – Master academic studies, IAS – Integrated academic studies, DS – Doctorate studies, SAS – Specialist academic studies, BPS – Basic professional studies, SPS – Specialist professional studies

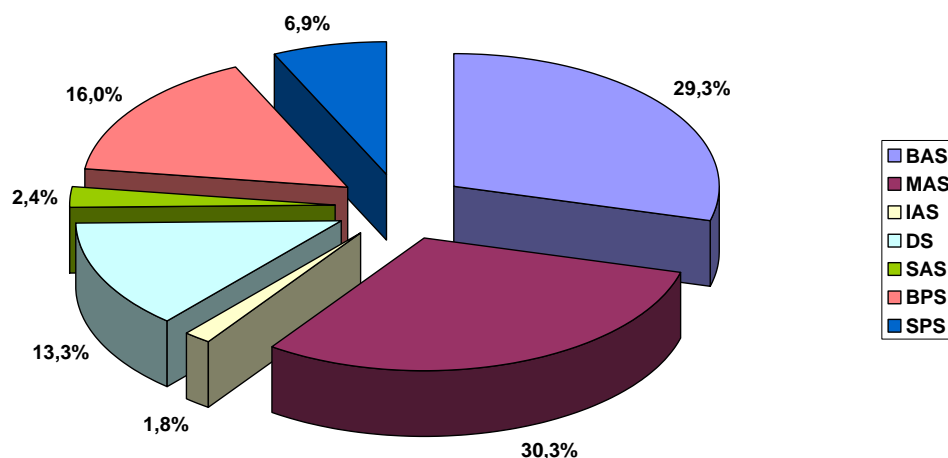


Figure 2.1.4.11. Percentages of accredited study programmes of different levels at all HEIs in the Republic of Serbia (2011)

BAS – Basic academic studies, MAS – Master academic studies, IAS – Integrated academic studies, DS – Doctoral studies, SAS – Specialist academic studies, BPS – Basic professional studies, SPS – Specialist professional studies

The highest percentage of students enrolled in the first year of study were in Basic academic studies (35.5% in public and 8.8% in private HEIs). The percentage of students enrolled in the first year of Master academic studies was 21.4% (19.1% in public and 2.3% in private HEIs).

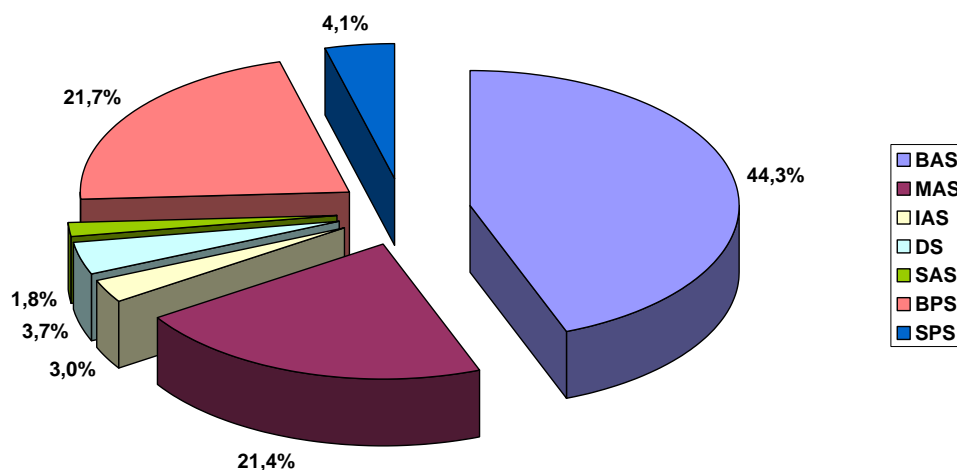


Figure 2.1.4.12. Percentages of students attending particular study programme types at HEIs in the Republic of Serbia (2011)

BAS – Basic academic studies, MAS – Master academic studies, IAS – Integrated academic studies, DS – Doctorate studies, SAS – Specialist academic studies, BPS – Basic professional studies, SPS – Specialist professional studies

The largest number of accredited programmes was in the field of TTS (technical and technological sciences), with 34.6% in public and 2.2% in private HEIs. In the field of HHS (humanities and social sciences), 25.4% programmes were accredited in public as well as 9.1% programmes in private HEIs.

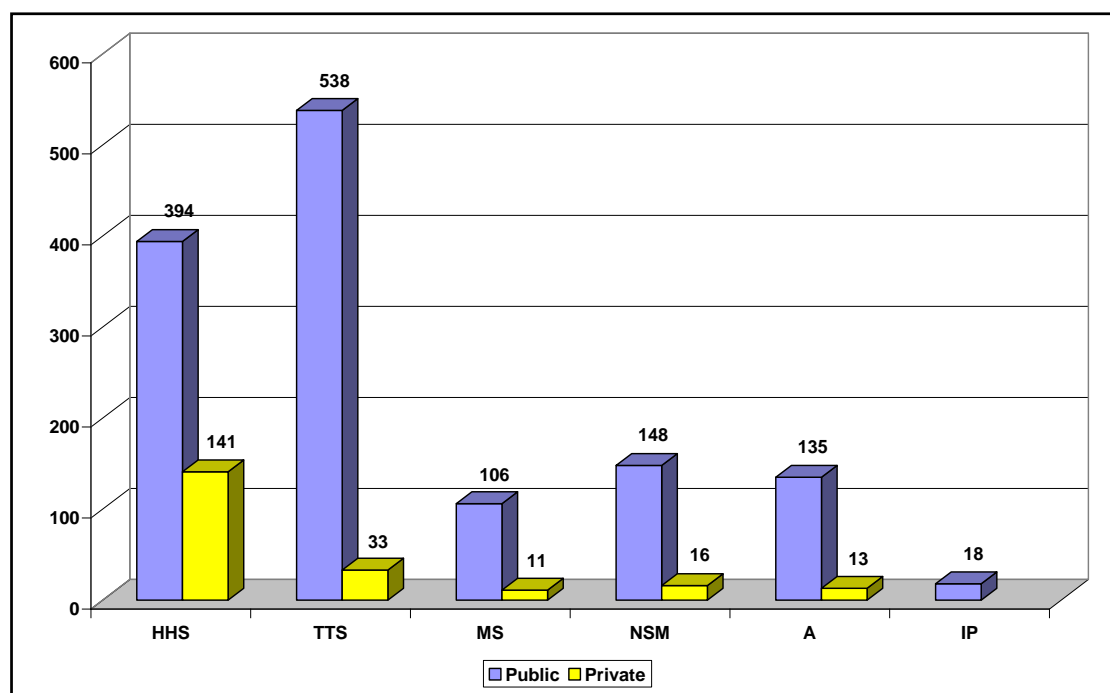


Figure 2.1.4.13. Number of study programmes in different scientific/artistic fields and HEI type in the Republic of Serbia (2011)

HHS – Humanities and Social Sciences, TTS – Technical and Technological Sciences, MS – Medical Sciences, NSM – Natural Sciences and Mathematics, A – Arts, IP – Interdisciplinary Programmes

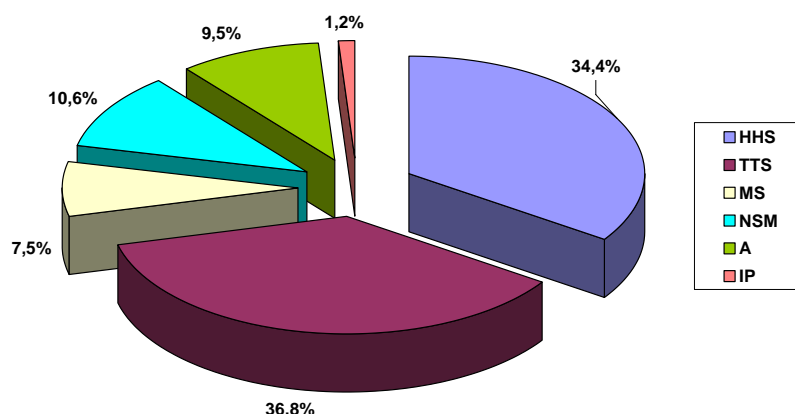


Figure 2.1.4.14. Percentages of study programmes in different scientific/artistic fields in all HEIs in the Republic of Serbia (2011)

HHS – Humanities and Social Sciences, TTS – technical and Technological Sciences, MS – Medical Sciences, NSM – Natural Sciences and Mathematics, A – Arts, IP – Interdisciplinary Programmes

Data for figures from Figure 2.1.4.1.toFigure 2.1.4.14.are taken from CAQA Self-evaluation report.²

In order to analyze the real number of students according to the type of studies, data from Statistical yearbook³ for 2010/11are used.

Side by side with the rise of the number of higher education institution there increased the number of students. The total rise of the number of students in the ten year period is somewhat over 30000. The largest number of students' studies at academic studies, and in 2010/11, a bit over 9600 students who studied according to the old programs still did not finish their studies.

Realization of doctoral studies began in 2007/8 at a limited number of faculties when only a few tens of students were enrolled. Only after three years the number of students at these studies was over 5200, which deserves a special attention Based on these data, it can be expected that in the next period the interest for doctoral studies grows, but what is needed is that in parallel with the development of these studies there should follow an extensive social action on the part of universities and economy and public sector, directed at opening new job positions at which doctors of philosophy can be employed as well as a severe control of doctoral studies. Of the total number of students, 83% studies at state higher education institutions. Figure 2.1.4.15 shows the distribution of students who study at state and private higher education institutions. The above given data clearly state that the newly formed higher education institutions are numerous with yet not such a large number of students which is a consequence of the unfavourable economic situation in the country, still not enough developed study programs in

²Self-evaluation report of The Commission for Accreditation and Quality Assurance (CAQA), 2012, http://www.kapk.org/index.php?option=com_content&task=view&id=51&Itemid=59

³ Statistical Office of the Republic of Serbia, <http://webzrzs.stat.gov.rs/WebSite/public/ReportView.aspx>

all fields offered by private universities and to a large extent the limited teaching staff resources in those higher education institutions. The largest number of private higher education institutions has developed study programs in the field of humanities, social sciences and arts, and a very small number of students in other fields. The largest number of students study social sciences, up to 38%, while natural sciences and technology is studied by 34% of students. Surprisingly big is the percentage of students who study different kinds of arts, and a very low percentage of students who study agricultural and veterinary sciences, only 3%. This distribution of the number of students in relation to the fields is the consequence on one side of the capacity and the high autonomy of higher education institutions and on the other the way of financing and the unregulated development of higher education in the previous ten years. The distribution of students according to the area of studies completely follows the number of students that complete studies. In 2010/11 the total of 45000 students completed their studies.

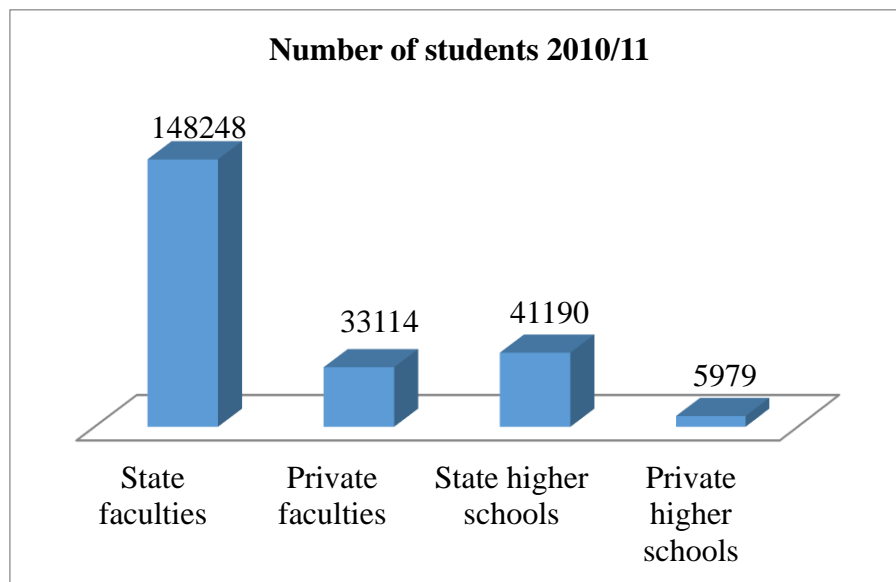


Figure 2.1.4.15.Comparative overview of the number of students at state and private higher education institutions who studies in 2010/11 school year

Table 2.1.4.2.Students of the Republic of Serbia according to the types and levels of studies, school year 2010/11

Type of studies	Number of students
First stage studies	184237
Basic academic studies	135477
Basic vocational studies	48760
Second stage studies	29471
Master and integrated studies	26996
Specialist vocational studies	1744
Specialist academic studies	731
Third stage studies	14823
Doctorate academic studies	5206
Former Ph.D programme	9617
Total	228531

Table 2.1.4.3.Graduated students according to the types of financing, 2010

Type of financing	Number of graduated students
State faculties	28476
Private faculties	8179
State higher schools	8518
Private higher schools	989
Total	46162

Table 2.1.4.4. Graduated students of the Republic of Serbia by type and level of studies, 2010

Type and level of studies	Number of students
First stage studies	15243
Basic academic studies	5535
Basic vocational studies	9708
Second stage studies	24415
Master and integrated studies	23566
Specialist vocational studies	349
Specialist academic studies	500
Third stage studies	6504
Doctorate academic studies	596
Former Ph.D programme	5908
Total	46162

Table 2.1.4.5. Graduated students by fields of education, 2010

Field of education	Number of students
Education	4020
Arts	5341
Social sciences, business and law	15811
Natural sciences, mathematics and computing	4265
Engineering, manufacturing and construction	7306
Agriculture and veterinary	1231
Health and welfare	4210
Services	3960
Total	46162

Currently, at the labour market there are 58440 unemployed with higher education, 55 of them are doctors of science and 804 are masters of science.

This fact is telling of the need to coordinate the enrolment policy with the needs of the labour market and the directions of the country development.

According to the data noted by the Statistical Office, the number of professors and assistants in the previous ten year period is significantly larger, which supports the fact that in this period there was an important improvement in the number of students per one professor. In 2000 that ratio was 42, and in 2010 it fell to 27, but was still much higher than the European average where the ratio is on average 12 students per a professor. According to the data presented by CAQA out of the total of professors employed full time, 73% work at state universities. The distribution of the number of professors according to the type of higher education institution in the state and private higher education institutions is not known as there is no register of teaching stuff and no register of study programs which are to be compiled according to the Law on higher education.

In the next period, especially in the process of reaccreditation, it is necessary to enhance competencies but also the number of professors in higher education institutions. That especially relates to professors in academies of professional studies where currently there are even 50% of lecturers who do not hold a PhD degree. The lecturers of professional studies do not have a reappointment which is necessary to be introduced.

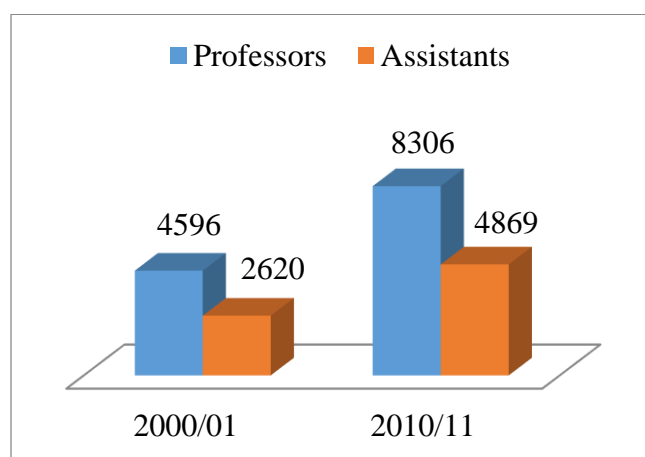


Figure 2.1.4.15. Comparative overview of the number of professors and assistants full time employed

Table 2.1.4.6. Teaching staff in tertiary education institutions, 2010/11 school year

Teaching staff	Number of people
With full working hours	13175
Doctors of Arts (Sciences)	8087
Full-time	7090
Masters of Arts (Sciences) and Specialists	3873
Without scientific title	2895
Total	14855

Another fact needs also to be pointed out, namely, in comparison to European Union countries the age structure of professors in our country is unfavorable as even 57% of professors are over 50 years of age while in Europe 37% of professors are over 50 years of age. The largest number of professors holds the highest scientific title, while the number of assistant professors does not grow in speed that would allow for a smooth development of higher education.

The aforementioned data clearly illustrate that, apart from increasing the number of professors, it is necessary to pay special attention to the appointment of assistant professors at universities and professors of professional studies by giving advantage to younger candidates. The amendments to the Law on higher education are not to prolong the engagement of professors who have completed the first condition for retirement (65 years of age).