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Education for Security at Polish Universities

Abstract

Formally, security science as a scientific discipline has been registered in Poland in 2011 in a newly separated area and a newly separated field of social sciences, next to defense sciences, media studies, political sciences, science on public policy, sciences on cognition and social communication, pedagogy, psychology, sociology. The authors in the article carry out a critical analysis and diagnosis of the state of education for security in Poland in the context of the paradigms of security sciences and European Union standards.

Keywords: security science, safety studies, security, science, security practice, threats

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Introduction

Establishment of the European Union was aimed at creating an economic area that could compete with the most dynamically developing economies in the world. For the Member States, European integration has proven to be a source of prosperity and economic success. However, the new challenges related to globalization and the growing competitiveness of other world economies, the emergence of structural barriers to economic growth in EU countries, slowing down its pace and high level of unemployment have led to the economic reform program adopted by the Lisbon European Council. Since 2004, Poland and other countries incorporated in the Union have also been involved in its implementation.

In the UNESCO report of the International Commission on Education for the 21st century, Jacques Delors postulated: “On the threshold of the 21st century, education because of its mission and the many forms it takes, should cover, from childhood to the end of life, all treatments that would allow each individual to know the dynamics of the world, other people and themselves by flexibly combining the four fundamental principles of teaching” (behind: Michalska, Zarębska 2017, p. 40).

In order to fulfill its mission in its entirety, education should be organized around four aspects of education, which will be pillars of its competence for each individual throughout life: learn to know, that is, to gain tools for understanding, learn to act in order to be able to affect your environment, learn to live together to participate and cooperate with others in all areas of human activity, learn to be. These four ways of knowledge form a whole, have many convergent, intersecting and complementary characteristics. It includes individual development and development of social characteristics in all forms and in all contexts – in the institutional system (in schools, vocational training centres, at higher vocational schools and academic universities, adult education centres) and as part of non-institutional education and improvement (at home, at work, in a social environment).

In Europe, there is an undergoing change of the current model shifting attention from the education process into its effects. The concept of European Area of Higher Education enables learning various programs and forms of organization and methods of education in an uniform system, called European Qualification Framework. Qualifications here mean the formal result of the assessment and validation process obtained

in a situation where the competent authority has determined, in accordance with an established procedure, that a person has achieved learning outcomes in accordance with certain standards.

Security in pre-university education programs

In the European Union Member States, Member States of the European Agreement to Free Trade (EFTA) – parties to the Agreement on the European Economic Area and the Swiss Confederation, professional qualifications are understood to be confirmed by a diploma, certificate or other document specializing knowledge, skills and competences to perform a profession or activity (Ustawa z dnia 22 grudnia 2015 r. o zasadach uznawania kwalifikacji zawodowych nabytych w państwach członkowskich Unii Europejskiej). There are three types of professions here:

1. **Sectoral professions** which relate to the profession of doctor, nurse, midwife, pharmacist, dentist, veterinarian, architect and attorney. Recognition of qualifications in the case of these competitions takes place automatically. European Union law also automatically recognizes qualifications in the case of: artisans, business entities and farmers who have acquired relevant professional experience in their home country.
2. **Regulated professions** that can be performed only after gaining appropriate qualifications. These qualifications are specified in detail by the chambers of commerce, ministries, etc. operating in a given country. Each country individually chooses regulated professions, so their number may be different for individual countries. Typically, related professions appear on the list of regulated professions linked with finance, education or technical professions.
3. In the case of **other professions**, the recognition of qualifications depends on the good will of the future employer. It is he who, during the recruitment process he makes, decides about accepting the candidate's qualifications.

One should also distinguish the recognition of qualifications giving the right to practice and the recognition of a diploma (nostrification) that gives the opportunity to continue education at a higher level than the one at which the educational process in the country of current education was completed.

Recognition of professional qualifications in European Union countries is governed by the provisions of the European Parliament and the Council of 2005 (Parlament Europejski i Rada 2005). Recognition of professional qualifications is the recognition of qualifications and professional titles necessary to conduct a professional activity in the home country, from any European Union country. Professional qualifications are understood to be confirmed by a diploma, certificate or other document, specialist knowledge, skills and competences to perform a profession or activity (Ustawa z dnia 22 grudnia 2015 r. o zasadach uznawania kwalifikacji zawodowych nabytych w państwach członkowskich Unii Europejskiej). These rules do not apply to people who acquired their qualifications in a country that is not a member of the European Union.

In Poland in 1997, when Poland was not a member of the European Union, the Act on the Protection of Persons and Property was passed, which introduced the license of the first and second degree physical protection agent and defined the qualifying requirements for obtaining it. In 1999, the core curriculum for education in the profession of “physical protection techniques for people and property” was developed and approved jointly by the Ministers of National Education and Internal Affairs and Administration. The core curriculum defined professional skills, being qualifications in the profession, psychophysical requirements, specific requirements of education in the profession, and the core curriculum of education in curricula in post-secondary education.

In 1997, the Sejm also adopted a law on the safety of mass events, which provided the basis for determining the requirements for the protection of sport, artistic and entertainment events. In 2002, the Council of Ministers on this basis determined the obligation of appropriate qualifications of members of security services and safety managers.

In 2001, the act on detective services was passed, which defined the principles of conducting business activity in the scope of detective services, law and the responsibilities of detectives, as well as the rules and procedure for acquiring entitlements to perform detective services. On this basis, the Minister of Internal Affairs and Administration in 2002 determined the scope of applicable examination subjects for applicants for a detective license.

On September 1, 1999, a school reform was implemented to change the structure of education as well as its program base (Ustawa z dnia 7 września 1991 r. o systemie oświaty). Then in 2003, the task of popularizing knowledge about security and shaping

appropriate attitudes towards threats and emergency situations, among children and youth was introduced into Polish education system (Ustawa z dnia 27 czerwca 2003 r. o zmianie ustawy o systemie oświaty oraz o zmianie niektórych innych ustaw). In 2008 a new subject, education for safety, was introduced into the core curriculum of pre-schools, junior high schools and secondary schools – one school year- one-hour per week (MEN 2008).

Standards of specializations and specializations related to security in universities.

In Poland, specializations, *Security management* (Korzeniowski 2004), *Administering security* (Korzeniowski 2005a), *European security* (Korzeniowski 2005b) have been incidentally pursued on the academic level since 2003. Universities used proprietary specialization programs in areas such as: *Management and marketing*, *Administration*, *European Studies* and similar. Some of these programs have obtained a decision of Ministry of Internal Affairs and Administration regarding the recognition of diplomas of these studies as a sufficient basis for the professional license of the people and property protection agent:

- *Security Management* in the field of *Management and Marketing* at the School of Management in Slupsk.
- *Administration of Security* in the field of *Administration* at the Private Higher Vocational School in Giżycko.
- *European Security* in *European Studies* at the Athenaeum University in Gdansk.

Graduates of these studies were prepared to manage an organizational unit authorized to protect people and property, to develop a plan of protection, organization and managing teams of physical security agents, performing activities in the structure of armed protective formations, escort teams, in areas, in facilities and facilities subject to mandatory protection, direct actions related to the protection of persons, supervising and controlling security personnel, and the use of direct coercion measures and the use of firearms in the cases provided for by law.

It was not until 2006 that the Minister of Science and Higher Education introduced new studies (MNiSW 2006) and then in 2007, educational standards in public education for security faculties in first and second cycle studies: *National Security*, *Internal Security*, *Safety Engineering*, *Emergency Medical Services* (MNiSW 2007).

Since 2011, the National Qualifications Framework for Higher Education has been introduced with requirements for learning outcomes (knowledge, skills, social competences) for the general academic profile and for the practical profile in the areas of education – in relation to security – in the social sciences (MNiSW 2011b, załącznik nr 2).

The education program for a specific field of study, level and profile of education includes a description of the assumed learning outcomes and the program of studies (Ustawa z dnia 22 grudnia 2015 r. o zasadach uznawania kwalifikacji zawodowych nabytych w państwach członkowskich Unii Europejskiej).

General requirements and qualifications of the graduate of *National Security Studies*

First-cycle studies last not less than 6 semesters. The number of hours of classes should not be less than 2,000. The number of ECTS (European Credit Transfer System) points should not be less than 180.

„The graduate should have general interdisciplinary knowledge in the field of social sciences and the ability to use it in work and life while maintaining ethical principles. He should understand and be able to analyze and apply legal principles as well as security and crisis management procedures on a global, regional, national and local scale. He should know the essence of security and its determinants. He should know the rules of functioning of security entities. He should be able to solve professional problems, collect, process and share information using modern technologies, as well as participate in teamwork. He should be familiar with the foreign language at the B2 proficiency level of the European Language Description System of the Council of Europe and be able to use the specialist language necessary to practice the profession. The graduate should be prepared to work in the structures of public administration, organizations dealing with the security of citizens and business entities as well as crisis response teams. He should be prepared to undertake second-cycle studies. and crisis response teams. He should be prepared to undertake second-degree studies” (MNiSW 2007b).

Second-degree studies last not less than 4 semesters. The number of hours of classes should not be less than 800. The number of ECTS points should not be less than 120.

„The graduate should have an extended – in relation to the first degree studies – knowledge and the ability to creatively solve security and crisis management problems

- also in non-standard situations, based on incomplete information. The knowledge and skills acquired should be able to be used in professional work, observing legal and ethical principles. He should be able to manage the work of human teams in a competent and ethical manner and organize crisis response operations. He should be prepared to work in the structures of public administration on managerial positions, organizations working for national and international security, research institutes, educational and academic institutions dealing with security issues. The graduate should have established habits of continuing education and professional development and be prepared to undertake research challenges and undertake third degree (doctoral) studies” (*Ibidem*).

National Security is carried out by 55 basic organizational units including 37 at the same time implementing the second degree studies.

Within 4 years there was a slight increase in the number of organizational units conducting the field of study *National Security*.

Table 1. *National Security*: number of units leading the field of study according to the level of education and educational profiles in 2013 and 2017

Education Profile Date of Reading	Level of Education			
	First Degree		Second Degree	
	14 – 10 – 2013	5 – 04 – 2017	14 – 10 – 2013	5 – 04 – 2017
Practical	9	25	32	15
General academic	82	25	29	25
Unspecified	46	8	12	9
Total	137	57	44	45
Number of Units (Departments)	53	55	20	37

Source: POL-on 2013; POL-on 2017.

In 2013, there was a significant excess of the number of first-degree units with a general academic profile (82) with only 9 units with a practical profile. In comparison with the requirements of educational standards and expectations of the labour market, such

a significant disproportion, in the author's opinion, was the result of the overstatement of academic ambitions of teachers who are the minimum personnel, lack of professional skills and lack of rooms and equipment for practical classes.

Within 4 years, there was a clear improvement – a two-fold decrease in the number of first-degree postgraduate students with a general academic profile and more than two-fold increase in the number of first-degree studies with a practical profile.

Most of the organizational units conduct this course in the discipline of *Science of Security* in the area and in the field of social sciences, but there are also examples of many disciplines in various areas and in various fields. In the extreme case, 15 disciplines in the fields of social sciences, humanities and legal sciences (POL-on 2013; POL-on 2017).

General requirements and qualifications of the graduate of studies *Internal security*

First-cycle studies last not less than 6 semesters. The number of hours of classes should not be less than 2,000. The number of ECTS points should not be less than 180.

„The graduate should have general knowledge of social and legal issues forming a foundation for understanding the essence of internal security. He should understand and be able to analyze security-related phenomena on a global, state, regional and local scale. The graduate should have basic knowledge of social sciences, human rights and principles of the functioning of the state – its system and structure. He should know the division of power in the state and the tasks and principles of functioning of state organs, including the location and role of public administration responsible for internal security. The graduate should know issues related to internal security, and in particular legal regulations in this area. He should know the rules of functioning of state institutions, the scope of tasks of public administration and the issues of crisis management. He should be able to solve simple professional problems and participate in teamwork. He should be able to: manage small human teams, communicate with the environment and collect, hierarchize, process and transmit information. The graduate should know the foreign language at the B2 proficiency level of the European Language Description System of the Council of Europe. A graduate should be prepared to work in public administration with a focus on organizational units of state services responsible for

internal security of the state. The graduate should be prepared to undertake second-degree studies” (MNiSW 2007c).

Second-degree studies last not less than 4 semesters. The number of hours of classes should not be less than 800. The number of ECTS points should not be less than 120.

„The graduate should have in-depth knowledge of socio-psychological issues and the ability to confront it with elements of reality affecting the state of internal security. It should have the ability to abstractly understand the idea of security and to choose a specific and optimal way of proceeding in given circumstances. He should be able to take into account the risk and anticipate the effects of decisions made. He should be able to: solve complex professional problems, manage and creatively participate in team work and manage human teams. Should be able to justify the actions taken (decisions), and at the same time be able to bear responsibility for inappropriate actions. The graduate should be prepared to work on managerial positions in public administration, in particular in organizational units of state services responsible for internal security. The graduate should be prepared to undertake third- degree (doctoral) studies” (*Ibidem*).

Table 2. *Internal security*: number of units conducting the field of study according to the level of education and educational profiles in 2013 and 2017

Education Profile	Level of Education			
	First Degree		Second Degree	
	Date of Reading			
	14 – 10 – 2013	5 – 04 – 2017	14 – 10 – 2013	5 – 04 – 2017
Practical	40	44	2	14
General academic	72	44	20	24
Unspecified	43	39	4	2
Total	155	127	26	40
Number of Units (Departments)	59	95 (included 1 in liquidation)	32	32 (included 1 in liquidation)

Source: POL-on 2013; POL-on 2017.

Internal Security is carried out by 95 basic organizational units, including 32 implementing the second level.

Within 4 years, there has been a significant increase in the number of organizational units conducting the field of *Internal Security Studies*, with the number of units conducting second-cycle studies being at the same level. At the same time, 6 first-degree studies and one second-degree studies unit were put into liquidation.

In 2013, there was a significant excess of the number of first-degree units with a general academic profile (72) with 40 with a practical profile. In comparison with the requirements of educational standards and expectations of the labour market, such a significant disproportion, in the author's opinion, was the result of the overstatement of academic ambitions of teachers who are the minimum personnel, lack of professional skills and lack of rooms and equipment for practical classes. Within 4 years, there was a clear improvement – a decrease in the number of first-degree units with a general academic profile and a small increase in the number of units with first-degree studies with a practical profile.

Most of the organizational units conduct this course in the scientific discipline of *Security Science* and in the sphere and domain of social sciences, in one case – in the scientific discipline of *Law* in the field of social sciences and in legal sciences, in one case – *History* in the field and field of humanities, there are also examples of many disciplines in different areas and in different fields. In the extreme case, there are 9 disciplines in the fields of social sciences, economic sciences and legal sciences (POL-on 2013; POL-on 2017).

General requirements and qualifications of the graduate of studies

Safety engineering

First-cycle studies last not less than 7 semesters. The number of hours of classes should not be less than 2,500. The number of ECTS points should not be less than 210.

„The graduate should have general knowledge in the field of technical sciences and specialist knowledge in the field of safety engineering, including in the area of machine safety, construction, equipment and technical installations. He should have the ability to use knowledge in professional life, communicate with the external and internal environment, actively participate in group work, manage subordinate employees and deal with

legal and economic issues. The graduate should have the skills to organize work, including organizing and conducting rescue operations as well as activities preventing and limiting accidents, failures and occupational diseases. He should be able to design and monitor the status and security conditions. He should be able to: organize and conduct rescue operations, perform safety and risk analyses, control compliance with safety rules and regulations, control working conditions and safety standards, conduct accident and accident investigation, conduct training, perform organizational functions in the field of safety management and keep documentation related to with broadly understood security. The graduate should be prepared to undertake work related to the functioning of the security and civil protection system, whose main purpose is to save life and protect life, health and property from threats. The graduate should be prepared for work and service in fire protection units and for work in public administration directed at public services responsible for security. A graduate should be prepared to work in the economic sector. The graduate should know the foreign language at the B2 proficiency level of the European Language Description System of the Council of Europe and be able to use a specialist language in the field of technical sciences. The graduate should be prepared to undertake second- degree studies” (MNiSW 2007c).

Second-degree studies last not less than 3 semesters. The number of hours of classes should not be less than 900. The number of ECTS points should not be less than 90.

„The graduate should have – augmented in relation to the first degree studies – the knowledge in the field of mathematical, technical and economic sciences as well as the ability to solve problems in the field of safety engineering. He should be able to use professional software, conduct research, analyze, evaluate and compare alternative solutions, propose and optimize new solutions and independently analyze problems in the field of safety engineering. The graduate should be prepared for the design and implementation of operations and processes in the sphere of human security, in emergency situations. He should be able to take into account the risk and anticipate the effects of decisions - especially in emergency situations. He should be aware of the responsibility for the actions taken. He should follow the principles of professional ethics. The graduate should be prepared for work and service in fire protection units and to work in public administration directed at organizational units of public services responsible for security as well as for the economy. It should be prepared to make decisions taking into account technical, legal and administrative conditions and logistic – in conditions of

danger and stress. The graduate should be prepared to undertake third-degree (doctoral) studies” (*Ibidem*).

Table 3. *Safety engineering*: number of units conducting the field of study according to the level of education and educational profiles in 2013 and 2017

Education Profile Date of Reading	Level of Education			
	First Degree		Second Degree	
	14 – 10 – 2013	5 – 04 – 2017	14 – 10 – 2013	5 – 04 – 2017
Practical	3	5	2	1
General academic	34	22	6	7
Unspecified	26	18	4	4
Total	63	45	12	12
Number of Units (Departments)	27	27	5	9

Source: POL-on 2013; POL-on 2017.

Security engineering is conducted by 27 basic organizational units, including 9 implementing the second level at the same time.

Within 4 years, there has been no change in the number of organizational units conducting the field of study of Safety engineering, with the number of units running second-degree studies increased from 5 to 9.

In 2013, there was a significant excess of the number of first-degree postgraduate units with a general academic profile (34) with 3 offering practical studies. In comparison with the requirements of educational standards and expectations of the labor market, such a significant disproportion, in the author’s opinion, was the result of the overstatement of academic ambitions of teachers who are the minimum personnel, lack of professional skills and lack of rooms and equipment for practical classes. Within 5 years, there has been no significant improvement – only a tendency of a drop in the number of first-level first-cycle units with a general academic profile and an increase in the number of first-degree studies with a practical profile.

Several organizational units conduct this course in the field of *Mechanical Engineering* in the field and domain of technical sciences; *Production Engineering* in the field and domain of technical sciences; *Construction and Operation of Machines* in the area and the field of technical sciences; *Mining And Engineering Geology* in the area and the field of technical sciences. There are also examples of many disciplines in different areas and in different fields. In the extreme case, there are 19 disciplines in the fields of technical sciences, chemical sciences, social sciences, economic sciences and mathematical law sciences (POL-on 2013; POL-on 2017).

Conclusions

When assessing the problem of vocational education in the field of security at different levels of education and different profiles of education, one can find a discrepancy between the goals of lifelong learning and the implementation of education policy in the system of education and higher education in Poland. The field of study which in the analyzed cases, does not correspond to a specific discipline or scientific specialty, it also does not correspond to social needs for graduates with specific qualifications (knowledge, skills and social competences).

Compared to the requirements of educational standards and expectations of the labor market, such a significant disproportion, as assessed by the authors, was the result of the overgrowth of ambition of academic teachers being the minimum staff, lack of professional skills and lack of laboratories and equipment for practical classes.

National Security, Internal Security and Security Engineering are carried out by 177 basic organizational units, including 78 implementing the second level.

Within 4 years, there has been an increase in the number of organizational units conducting these fields of study at the first and second level, with a significant increase in first-degree studies and a slight decrease in the number of second-degree studies with a practical profile. At the same time, 6 first-degree studies and one second-degree studies unit were put into liquidation.

Most of the organizational units conduct these specializations in the discipline of *Science of Security* in the area and in the field of social sciences, in one case – in the scientific discipline *Law* in the field of social sciences and in legal sciences, in one case

– *History* in the area and field of humanities. There are also examples of many disciplines in the fields of social sciences, economic sciences, humanities, legal sciences (POL-on 2013; POL-on 2017).

Most units of organizational units conduct this Safety Engineering in the discipline of *Mechanical Engineering* in the area and field of technical sciences; *Production Engineering* in the field and domain of technical sciences; *Construction and Operation of Machines* in the area and field of technical sciences; *Mining and Engineering Geology* in the area and field of technical sciences. There are also examples of many disciplines in different areas and in different fields – in the extreme cases of 19 disciplines in the fields of technical sciences, chemical sciences, social sciences, economic sciences and mathematical sciences (POL-on 2013; POL-on 2017).

Formally, security science as a scientific discipline has been registered in 2011 (in Poland) first in the field of humanities (CKdSSiT 2001), and then in a newly separated area and a newly separated field of social sciences, next to the defense sciences, media studies, political sciences, public sciences, cognition and social communication, pedagogy, psychology, sociology. The area of social sciences also covers the field of economic sciences with the following disciplines: *Economics, Finance, Management Sciences, Commodities*, and the field of legal sciences with disciplines: *Administration Sciences, Law, Canonical Law* (MNiSW 2011a).

References

- CKdSSiT (2011), Uchwała Centralnej Komisji do Spraw Stopni i Tytułów z dnia 28 stycznia 2011 r. zmieniająca uchwałę w sprawie określenia dziedzin nauki i dziedzin sztuki oraz dyscyplin naukowych i artystycznych, M.P. nr 14 poz. 149
- Korzeniowski L. (2004), *Zarządzanie bezpieczeństwem. Program kształcenia w szkole wyższej – przedmioty specjalizacyjne*, Kraków, EAS
- Korzeniowski L. (2005a), *Administrowanie bezpieczeństwem. Program kształcenia w szkole wyższej – przedmioty specjalizacyjne*, Kraków, EAS
- Korzeniowski L. (2005b), *Bezpieczeństwo europejskie. Program kształcenia w szkole wyższej – przedmioty specjalizacyjne*, Kraków, EAS

- MEN (2008), Rozporządzenie Ministra Edukacji Narodowej z dnia 23 grudnia 2008 roku w sprawie podstawy programowej wychowania przedszkolnego oraz kształcenia ogólnego w poszczególnych typach szkół, Dz.U. z 2009 r. nr 4, poz. 17
- Michalska M., Zarębska J. (2017), *Edukacja ekologiczna osób starszych w kontekście koncepcji lifelong learning*, „General and Professional Education” No. 3
- MNiSW (2006), Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 13 czerwca 2006 r. w sprawie nazw kierunków studiów, Dz.U. nr 121, poz. 838
- MNiSW (2007a), Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 12 lipca 2007 r. w sprawie standardów kształcenia dla poszczególnych kierunków oraz poziomów kształcenia, a także trybu tworzenia i warunków, jakie musi spełniać uczelnia, by prowadzić studia międzykierunkowe oraz makrokierunki, Dz.U. nr 164, poz. 1166 zm.
- MNiSW (2007b), *Standardy kształcenia dla kierunku studiów: Bezpieczeństwo narodowe*, Załącznik nr 10 Rozporządzenia Ministra Nauki i Szkolnictwa Wyższego z dnia 12 lipca 2007 r. w sprawie standardów kształcenia dla poszczególnych kierunków oraz poziomów kształcenia, a także trybu tworzenia i warunków, jakie musi spełniać uczelnia, by prowadzić studia międzykierunkowe oraz makrokierunki, Dz. U. nr 164, poz. 1166 zm.
- MNiSW (2007c), *Standardy kształcenia dla kierunku studiów: Bezpieczeństwo wewnętrzne*, Załącznik nr 11 Rozporządzenia Ministra Nauki i Szkolnictwa Wyższego z dnia 12 lipca 2007 r. w sprawie standardów kształcenia dla poszczególnych kierunków oraz poziomów kształcenia, a także trybu tworzenia i warunków, jakie musi spełniać uczelnia, by prowadzić studia międzykierunkowe oraz makrokierunki, Dz. U. nr 164, poz. 1166 zm.
- MNiSW (2007d), *Standardy kształcenia dla kierunku studiów: Inżynieria bezpieczeństwa*, Załącznik nr 48 Rozporządzenia Ministra Nauki i Szkolnictwa Wyższego z dnia 12 lipca 2007 r. w sprawie standardów kształcenia dla poszczególnych kierunków oraz poziomów kształcenia, a także trybu tworzenia i warunków, jakie musi spełniać uczelnia, by prowadzić studia międzykierunkowe oraz makrokierunki, Dz. U. nr 164, poz. 1166 zm.
- MNiSW (2011a), Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 8 sierpnia 2011 r. w sprawie obszarów wiedzy, dziedzin nauki i sztuki oraz dyscyplin naukowych i artystycznych, Dz.U. nr 179, poz. 1065

- MNiSW (2011b), Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 2 listopada 2011 r. w sprawie Krajowych Ram Kwalifikacji dla Szkolnictwa Wyższego, Dz.U. nr 253, poz. 1520
- Parlament Europejski i Rada (2005), Dyrektywa 2005/36/WE Parlamentu Europejskiego i Rady z dnia 7 września 2005 r. w sprawie uznawania kwalifikacji zawodowych, Dz.U. UE L 255 z 30.09.2005, z późn. zm.
- POL-on (2013), System Informacji o Nauce i Szkolnictwie Wyższym [2013-10-14], <https://polon.nauka.gov.pl/opi/aa/kierunki/studia>
- POL-on (2017), System Informacji o Nauce i Szkolnictwie Wyższym [2017-04-05], <https://polon.nauka.gov.pl/opi/aa/kierunki/studia>
- Ustawa z dnia 22 grudnia 2015 r. o zasadach uznawania kwalifikacji zawodowych nabytych w państwach członkowskich Unii Europejskiej, Dz.U. 2016 nr 0, poz. 65
- Ustawa z dnia 27 czerwca 2003 r. o zmianie ustawy o systemie oświaty oraz o zmianie niektórych innych ustaw, Dz.U. nr 137, poz. 1304
- Ustawa z dnia 7 września 1991 r. o systemie oświaty, Dz.U. nr 67, poz. 329 ze zm.