

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY NATIONAL AGRARIAN UNIVERSITY

EDUCATIONAL PROFESSIONAL PROGRAM
«Management»

LEVEL OF HIGHER EDUCATION - the first (bachelor's) level
DEGREE OF HIGHER EDUCATION - Bachelor
FIELD OF KNOWLEDGE 07 «Management and Administration»
SPECIALTY 073 «Management»

APPROVED BY THE SCIENTIFIC COUNCIL

Chairman of the Academic Council



/V.I.Ladyka/

(Protocol № 10 from «16» 04 2021y.)

The educational program will come into effect from «01» 09 2021 y.

Rector _____ **/V.I.Ladyka /**

Sumy 2021 y.

LETTER OF APPROVAL
educational and professional program

Project group consisting of:

Chairman of the project team,

Doctor of Economics, professor,

professor of management department



N.V. Stoyanets

Project team members:

Ph.D., Associate Professor of Management department



S.G. Turchina

Ph.D., Associate Professor of Management department



L.O. Dashutina

Ph.D., Associate Professor of Management department



E.M. Moghlyna

Considered and approved at an extended meeting of the Management Department with the participation of students and stakeholders, protocol № __ from ____ 2021 y.

Head of the educational department

N.V. Kolodnenko

Head of quality, licensing and accreditation,

Ph.D., Associate Professor



I.D. Sklyar

Vice-rector for scientific and pedagogical and educational work, Ph.D., professor



V.M. Zhmailov

Approved at a meeting of the Academic Council of the Faculty of Economics and Management _____ 2021 y., protocol № __.

Chairman of the Academic Council of the Faculty economics and management,

Ph.D., Professor



N.I. Strochenko

List of normative documents:

1. Zakon Ukrainy «Pro vyshchu osvitu» vid 01.07.2014 r. № 1556-VII // Baza danykh «Zakonodavstvo Ukrainy» / VR Ukrainy. – <http://zakon4.rada.gov.ua/laws/show/1556-18>.
2. Zakon Ukrainy «Pro osvitu» // Baza danykh «Zakonodavstvo Ukrainy» / VR Ukrainy. – <http://zakon5.rada.gov.ua/laws/show/2145-19>.
3. Natsional'nyy klasyfikator Ukrainy: «Klasyfikator profesiy» DK 003:2010 (Redaktsiya vid 30.11.2017 r.) // Baza danykh «Zakonodavstvo Ukrainy» / VR Ukrainy. – <http://zakon.rada.gov.ua/rada/show/va327609-10>.
4. Natsional'na ramka kvalifikatsiy // Baza danykh «Zakonodavstvo Ukrainy» / VR Ukrainy. – <http://zakon4.rada.gov.ua/laws/show/1341-2011-p>.
5. Postanova Kabinetu Ministriv Ukrainy «Pro zatverdzhennya pereliku haluzey znan' i spetsial'nostey, za yakymy zdiysnyuyet'sya pidhotovka zdobuvachiv vyshchoyi osvity» (redaktsiya vid 30.11.2017 r.) // Baza danykh «Zakonodavstvo Ukrainy» / VR Ukrainy. – <http://zakon4.rada.gov.ua/laws/show/266-2015-p>.
6. Metodychni rekomendatsiyi shchodo rozroblennya standartiv vyshchoyi osvity, zatverdzeni Nakazom Ministerstva osvity i nauky Ukrainy vid 01 chervnya 2016 r. № 600 (zi zminamy) [Elektronnyy resurs]. – rezhyom dostupu: <https://mon.gov.ua/ua/osvita/visha-osvita/naukovo-metodichna-rada-ministerstva-osviti-i-nauki-ukrayini/metodichni-rekomendatsiyi-vo>
7. Nakaz Ministerstva osvity i nauky Ukrainy «Pro zatverdzhennya standartu vyshchoyi osvity za spetsial'nistyu 073 «Menedzhment» dlya (bakalavrs'koho) pershoho rivnya osvity» №1165 vid 29 zhovtnya 2018 roku. - <https://mon.gov.ua/ua/npa/pro-zatverdzhennya-standartu-vishoyi-osviti-za-specialnistyu-073-menedzhment-dlya-pershogo-bakalavrskogo-rivnya-vishoyi-osviti>

Useful links:

7. Standarty i rekomendatsiyi shchodo zabezpechennya yakosti v Yevropeys'komu prostori vyshchoyi osvity (ESG). – http://ihed.org.ua/images/pdf/standards-and-guidelines_for_qa_in_the_ehea_2015.pdf.
8. Data for Sustainable Development Goals. ISCED (MSKO) 2011. – <http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf>. Data for Sustainable Development Goals. ISCED (MSKO) 2013. – <http://www.uis.unesco.org/Education/Documents/isced-fields-of-education-training-2013.pdf>.

PREAMBLE

The educational-professional program is a normative document, which contains a system of educational components at the first (bachelor's) level of higher education within the specialty 073 "**Management**" in the field of knowledge 07 "**Management and Administration**", which defines the requirements for education of persons who can start training. under this program, the list of disciplines and the logical sequence of their study, the number of ECTS credits required to complete this program, as well as the expected learning outcomes that must be mastered by the bachelor's degree. Appointment of the educational-professional program of the bachelor's degree graduate - preparation of the person for acquisition of theoretical and practical knowledge, abilities and skills sufficient for successful performance of professional duties on a specialty 073 "Management", general principles of methodology of professional activity, other competences sufficient for effective performance of executive tasks of the appropriate level of professional activity.

The educational and professional program takes into account the requirements of the Law of Ukraine "On Higher Education", the Standard of Higher Education OS "Bachelor" specialty 073 "Management" and the National Qualifications Framework.

Users of the educational and professional program:

- applicants for higher education who study at Sumy National Agrarian University at the first (bachelor's) level in the specialty 073 "Management";
- scientific and pedagogical workers of Sumy National Agrarian University, who train bachelors in the specialty 073 "Management";
- Admissions Committee of Sumy National Agrarian University;
- examination commission of specialty 073 "Management" in the field of knowledge 07 "Management and Administration".

Developers of the educational-professional program "Management":

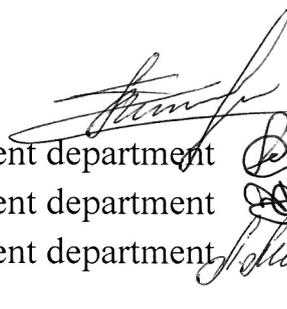
Doctor of Economics, Professor,

Professor of management department

Ph.D., Associate Professor of Management department

Ph.D., Associate Professor of Management department

Ph.D., Associate Professor of Management department



N.V. Stoyanets

S.G. Turchina

L.O. Dashutina

L.M. Moghylna

Reviews of external stakeholders:

1. **Nazarenko Oleksiy Hryhorovych**, project coordinator of the Ukrainian Educational Club NGO, representative of the SES Foundation in Ukraine.
2. **Goman Alexander Viktorovich**, founder, director of LLC "Alimentarius SM".
3. **Bespalova Alina Oleksandrivna**, director of ALEX CROSS CAPITAL LLC.

II. Profile of the educational and professional program "Management"

1. General information	
Level of higher education	The first (bachelor's) level
Higher education degree	Bachelor
Name of the field of knowledge	07 Management and administration
Name of specialty	073 Management
Restrictions on forms of education	No restrictions
Educational qualification	Bachelor of Management
Qualification in the diploma	Degree of higher education. Bachelor Specialty: Management Educational program: Management
Type of diploma and scope of educational program	Bachelor's degree, single, 240 ECTS credits, term of study 3 years 10 months
Availability of accreditation	Accreditation Commission of Ukraine. Certificate of accreditation of the specialty
Cycle / level	NRC of Ukraine - level 7, FQ-ENEA - the first cycle, EQF-LLL - level 6
Prerequisites	Presence of full general secondary education or ED "Junior Bachelor" in the relevant specialty
Languages of instruction	Ukrainian, English
Term of the educational program	Until 01.07.2024 y.
Internet address of the permanent placement of the description of the educational program	www.snau.edu.ua
2. The purpose of the educational program	
Training of specialists who are able to be leaders and solve complex problems in the field of management, to ensure the sustainability of the organization in a changing business environment, with a deep understanding of internal processes and external factors of organizations, including the agricultural sector.	
3 – Characteristics of the educational program	
Orientation of the educational program	Educational and professional
The main focus of the educational program and specialization	Professional training in the field of management of organizations, in particular, the focus on the formation of skills to justify the solution of problems in the field of management and administration. Key words: management, administration of activity, organization, management system, management tools.

Features of the program	Integrated training with the transformation of the theoretical to the practically oriented approach to the formation of skills of management of internal organizational units of organizations of sectors of the economy of Ukraine of different forms of ownership and organizational and legal forms. Its peculiarity is the possibility of mastering the best domestic and foreign management practices of agricultural enterprises operating in the domestic and international markets of agricultural products and food.	
Description of the subject area	<p>- Object of study: management of organizations and their departments.</p> <p>- Theoretical content of the subject area: paradigms, laws, patterns, principles, historical prerequisites for management development; concepts of system, situational, process, adaptive, anticipative, anti-crisis, innovation, project management, etc .; functions, methods, technologies and management decisions in management.</p> <p>- Methods, techniques and technologies: general scientific and specific research methods (computational-analytical, economic-statistical, economic-mathematical, expert evaluation, factual, sociological, documentary, balance sheet, etc.); methods of realization of management functions (methods of marketing researches; methods of economic diagnostics; methods of forecasting and planning; methods of designing of organizational structures of management; methods of motivation; methods of control; methods of estimation of social, organizational and economic efficiency in management, etc.); management methods (administrative, economic, socio-psychological, technological); technologies for substantiation of management decisions (economic analysis, simulation modeling, decision tree, etc.).</p> <p>- Tools and equipment: modern information and communication equipment, information systems and software products used in management.</p>	
Academic rights of graduates	They have the right to continue their studies at the second (master's) level of higher education. Acquisition of additional qualifications in the system of postgraduate education.	
4. The amount of ECTS credits required to obtain an appropriate higher education degree.		
The amount of education bachelor's programs	The scope of the bachelor's degree program: Educational and professional program 240 ECTS credits, 75% of the educational program is aimed at providing general and special (professional) competencies in the specialty, defined by the standard of higher education; 60 ECTS credits are provided for the disciplines of the cycle of special (professional) training (at the choice of applicants).	
5. Suitability of graduates for employment and further study		
Suitability for employment	Name and code of the professional group	Professional job title (position)
	<i>343 Management technicians</i>	
	3431 Secretaries of administrative bodies	Manager (Secretary) of the Executive Committee

		Administrative Secretary Secretary of the committee (organizations, enterprises, institutions)
	3435.2 Organizers of office work	Office organizer (government agencies)
	3435.3 Organizers of office work (types of economic activity)	Organizer of office work (types of economic activity)
	3436.1 Assistants to heads of enterprises, institutions and organizations	Assistant head of the enterprise (institution, organization); Referent
	3436.2 Assistants to heads of production and other major departments	Assistant head of the production unit; Assistant to the head of another main unit
	3436.3 Assistants to managers of small businesses without management staff	Assistant manager of a small business without management staff
	3439 Other management technicians	Inspector
Further training	The graduate has the right to continue studying at the second (master's) level - 8th level of NRC	
6 – Teaching and assessment		
Teaching and learning	Student-centered learning, problem-oriented learning, e-learning in the Moodle system, self-learning, research-based learning, etc. Teaching is carried out in the form of: lectures, multimedia lectures, interactive lectures, seminars, practical classes, laboratory work, self-study, individual lessons, etc. A combination of lectures, practical classes with the solution of situational tasks and the use of case methods, business games, trainings that develop practical skills, abilities and form creative thinking.	
Evaluation	Current survey, test control, presentation of individual tasks, team reports, practice reports. Final control - exams and tests, taking into account the accumulated points of the current control. State certification - public defense of qualifying work.	
7 – Program competencies		
Integral competence	The ability to solve complex specialized tasks and practical problems in the field of management or in the process of training, which involves the use of theories and management methods, characterized by completeness and uncertainty of conditions.	
General competencies (GC)	GC 1. The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine. GC 2. Ability to preserve and increase moral, cultural, scientific values and increase the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, techniques	

	<p>and technologies. forms of physical activity for active recreation and a healthy lifestyle.</p> <p>GC 3. Ability to abstract thinking, analysis, synthesis.</p> <p>GC 4. Ability to apply knowledge in practical situations</p> <p>GC 5. Knowledge and understanding of the subject area and understanding of professional activity.</p> <p>GC 6. Ability to communicate in the state language both orally and in writing.</p> <p>GC 7. Ability to communicate in a foreign language.</p> <p>GC 8. Skills in the use of information and communication technologies.</p> <p>GC 9. Ability to learn and master modern knowledge.</p> <p>GC 10. Ability to conduct research at the appropriate level.</p> <p>GC 11. Ability to adapt and act in a new situation.</p> <p>GC 12. Ability to generate new ideas (creativity).</p> <p>GC 13. Appreciation and respect for diversity and multiculturalism.</p> <p>GC 14. Ability to work in an international context. Ability to act on the basis of ethical considerations (motives)</p>
<p>Professional competence (PC)</p>	<p>PC 1. Ability to identify and describe the characteristics of the organization.</p> <p>PC 2. The ability to analyze the results of the organization, to compare them with the factors of external and internal environment.</p> <p>PC 3. The ability to determine the prospects for the development of the organization.</p> <p>PC 4. Ability to identify functional areas of the organization and the relationships between them.</p> <p>PC 5. Ability to manage the organization and its units through the implementation of management functions,</p> <p>PC 6. The ability to act socially responsibly and consciously.</p> <p>PC 7. Ability to choose and use modern management tools.</p> <p>PC 8. Ability to plan the activities of the organization and manage time.</p> <p>PC 9. Ability to work in a team and establish interpersonal interaction in solving professional problems.</p> <p>PC 10. Ability to evaluate the work performed, ensure their quality and motivate the staff of the organization.</p> <p>PC 11. Ability to create and organize effective communications in the management process.</p> <p>PC 12. Ability to analyze and structure the problems of the organization, to form sound decisions.</p> <p>PC 13. Understand the principles and norms of law and use them in professional activities.</p> <p>PC 14. Understand the principles of psychology and use them in professional activities.</p> <p>PC 15. Ability to form and demonstrate leadership qualities and behavioral skills</p> <p>PC 16. Ability to act in professional activities in accordance with the principles of sustainable development</p> <p>PC 17. Ability to apply innovative technologies in management.</p>

8 – Programmatic results of studies

- PRS 1. Know your rights and responsibilities as a member of society, to realize the values of civil society, the rule of law, human rights and freedoms and citizen in Ukraine.
- PRS 2. To maintain moral, cultural, scientific values and multiply the achievements of society, use different types and forms of motor activity to conduct a healthy lifestyle.
- PRS 3. Demonstrate the knowledge of theories, methods and functions of management, modern leadership concepts.
- PRS 4. Demonstrate problems for identifying problems and substantiation of managerial decisions.
- PRS 5. Describe the content of functional areas of organization.
- PRS 6. To identify search skills, collecting and analyzing information, calculation of indicators for substantiation of managerial decisions.
- PRS 7. To identify organizational design skills.
- PRS 8. Apply management methods to ensure the effectiveness of the organization.
- PRS 9. Demonstrate the skills of interaction, leadership, and command work.
- PRS 10. Have a skill to substantiate effective instruments to motivate the personnel of the organization.
- PRS 11. Demonstrate the skills of analyzing the situation and the implementation of communication in various fields of organization.
- PRS 12. Evaluate the legal, social and economic consequences of the organization's functioning.
- PRS 13. Communicate in oral and written forms by public and foreign languages.
- PRS 14. Identify the reasons for stress, adapt yourself to the team members to a stress situation, and find means to neutralize it.
- PRS 15. Demonstrate the ability to act socially responsibly and publicly deliberately on the basis of ethical reasons (motives), respect for diversity and intercultural.
- PRS 16. Demonstrate self-work skills, flexible thinking, openness to new knowledge, is critical and self-critical.
- PRS 17. Perform research individually and / or in a group under the leadership of the leader.
- PRS 18. To identify mastering skills with standard methods of analysis and evaluation of indicators of development of management objects in the conditions of implementation of sustainable development and balanced nature management.
- PRS 19. Be able to use modern information technologies, blocking technologies in resource management and databases to justify managerial decisions on the choice of innovative technologies in agrarian enterprises.
- PRS 20. Demonstrate the ability to ensure legal substantiation, financial expediency, customs support and safety of economic operations of business entities in markets of agricultural products and food.

9 – Resource Provision of Program

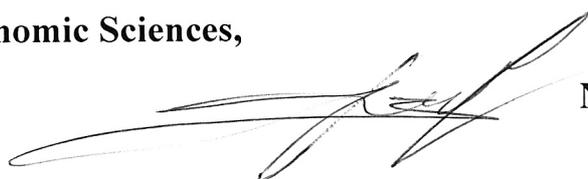
Staffing	<p>The implementation of the educational and professional program of management of organizations and administration is carried out by five doctors of economic sciences, professors and fifteen candidates for economic sciences, associate professors with work experience of at least 10 years.</p> <p>All scientific and pedagogical workers involved in the implementation of an educational and professional program of management of organizations and administration are staff members of the Sumy National Agrarian University; have a scientific degree and / or academic rank and confirmed level of scientific and professional activity.</p> <p>To increase the practical orientation of the educational process for lecture classes, leading practices and foreign specialists are involved.</p>
-----------------	---

	For the implementation of educational and professional program at the Faculty of Economics and Management, specialized training and computer laboratories are equipped with the necessary equipment and software (Diamond FMS software package, 1C: Agricultural Enterprise Management, access to 1C: ITS Ukraine, 1C: Enterprise 8.2, Master Test).
Information and teaching and methodological support	<p>SNAU official website: http://sau.sumy.ua contains information on educational programs, educational, scientific and educational activities, structural divisions, reception rules, international cooperation, practice and employment, contacts.</p> <p>All SNAU registered users have unlimited Internet access. The Snow Scientific Library Fund contains more than 313 thousand copies of educational, scientific literature, periodical scientific publications. More than 7, 6700 records have been made to the electronic catalog. The electronic databases of secondary information are created and used - a buffinistic directory (more than 1,100 entries), dissertation directory (363 records), catalog of abstracts (2585 entries), etc.</p> <p>Electronic cardboard is created. Reading room is equipped with wireless access to the Internet. All library resources are available through the University's website: http://library.sau.sumy.ua</p> <p>All educational disciplines of the course of educational and professional training in the management of organizations and administration are provided with summary of lectures, methodical recommendations for practical classes and independent work, methodological recommendations for the passage of professional internship and pre-diploma practices, as well as recommendations for writing a master's degree.</p>
10 – Academic Mobility	
National Credit Mobility	Based on bilateral agreements between Sumy National Agrarian University and Ukrainian universities of economic orientation
International Credit Mobility	Based on bilateral agreements between Sumy National Agrarian University and foreign partner educational institutions
Training of foreign applicants for higher education	Possible after studying the course of the Ukrainian language
11. Form of attestation of applicants for higher education	
Forms of attestation of applicants for higher education	Attestation is carried out in the form of public protection of qualification work
Requirements for qualifying work	<p>The qualification work should provide for the solution to a complex specialized task or practical problem in the field of management characterized by a comprehensive and uncertainty of conditions, with the use of theories and methods of economic science.</p> <p>In qualifying work there can be no academic plagiarism, falsification and writing. It is transmitted to the repository of Sumy NAU. The successful certification of graduates ends with the publication of the document of the established sample on the awarding of them an educational degree of a bachelor with the awarding of qualifications "Bachelor of Management".</p>

Guarantee of an educational program

Doctor of Economic Sciences,

Professor



N.V. Stoyanets

The list of components of the educational-professional program and their logical sequence

1.1. List of components of the Educational Program

The list of academic disciplines of the normative part of the EP by cycles

Code	The name of the discipline	Minimum number of credits for studying the discipline.	The minimum number of studies. hours of study of the discipline	Form of control
1.1. Humanities and socio-economic disciplines				
SC 1.	HT 1. Historical and philosophical studies	5	150	exam, test
SC 2.	HT 2. Fundamentals of scientific research	5	150	exam
SC 3.	HT3. Foreign language (for professional purposes)	5	150	exam, test
SC 4.	HT 4. Civic education	5	150	exam
SC 5.	HT 5. Ukrainian language and academic writing	5	150	exam
	Total	25	750	
1.2 Disciplines of natural science (fundamental) training				
SC 6	NST 1. Microeconomics	5	150	exam
SC 7	NST 2. Macroeconomics	5	150	exam
SC 8	NST 3. Higher mathematics	5	150	exam, test
SC 9.	NST 4. Probability theory and mathematical statistics	5	150	test
SC 10	NST 5. Mathematical programming	5	150	exam
SC 11	NST 6. Informatics and computer technology	5	150	exam, test
SC 12	NST 7. Systems of innovative technologies in agricultural production	5	150	exam
	Total	35	1050	
1.3 Disciplines of general professional training				
SC 13.	GPT 1. Economics of enterprises	5	150	exam
SC 14.	GPT 2. Management	5	150	exam
SC 15.	GPT 3. Marketing	5	150	exam
SC 16.	GPT 4. Public finance and enterprise finance	5	150	exam
SC 17.	GPT 5. Accounting	5	150	exam
SC 18.	GPT 6. Information professional technologies	5	150	exam
SC 19.	GPT 7. Statistics	5	150	exam
SC 20	GPT 8. Analysis of economic activity	5	150	exam
	Total	40	1200	
1.4. Disciplines of professional and practical training of the student				
SC 21.	PT 1. Personnel management	5	150	exam
SC 22.	PT 2. Self-management	5	150	exam

SC 23.	PT 3. Innovation management	5	150	exam
SC 24.	PT 4. FEA Management	5	150	exam
SC 25.	PT 5. Administrative management	5	150	exam
SC 26.	PT 6. Operations Management	5	150	exam
SC 27	PT 7. International economic relations	5	150	exam
SC 28.	PT 8. Management in the digital economy	5	150	exam
SC 29.	PT 9. Foreign language in the business environment	5	150	exam
SC 30	PT 10. Strategic management	5	150	exam
SC 31	PT 11. Training practice			
SC 32	PT12. Production practice			
SC 33	PT 13. Professional internship and undergraduate practice			
SC 34	PT 14. Qualification work			
	Total	50	1500	
Total for the regulatory part		150	4500	

2. Form of attestation of higher education applicants

Certification of graduates of the educational program "Management of organizations and administration" specialty 073 "Management", OS "Bachelor" is carried out in the form of performance and public defense of qualifying work.

The final qualification work should not contain academic plagiarism, be original and authentic. It is published on the official website of the university, transferred to the repository of Sumy NAU.

Successful certification of graduates is completed by the issuance of a standard document on the award of a bachelor's degree with the qualification "Bachelor of Management".

Certification is carried out openly and publicly

Explanatory note

Table 1
Matrix of compliance of the competencies defined by the Standard with the National Qualifications Framework descriptors (6th level, bachelor's degree)

Classification competencies under the National Qualifications Framework	Knowledge Kn1 Conceptual knowledge acquired in the process of learning and professional activity, including certain knowledge of modern achievements Kn2 Critical comprehension of basic theories, principles, methods and concepts in teaching and professional activities	Skills Sk 1 Solving complex unforeseen tasks and problems in specialized areas of professional activity and / or training, which involves the collection and interpretation of information (data), the choice of methods and tools, the use of innovative approaches	Communication C1 Reporting to specialists and non-specialists information, ideas, problems, solutions and personal experience in the field C2 Ability to effectively form communication strategy	Autonomy and responsibility AR1 Management of complex actions or projects, responsibility for decision-making in unpredictable conditions AR2 Responsibility for professional development of individuals and / or groups of persons ability to further study with a high level of autonomy
General Competences (GC)				
GC 1.	Kn 2		C 1, C 2	AR 1
GC 2.	Kn 2		C1	
GC 3.	Kn 1, Kn 2	Sk 1		
GC 4.		Sk 1		
GC 5.		Sk 1		
GC 6.			C 1, C 2	
GC 7.			C 1, C 2	
GC 8.	Kn 1	Sk 1	C 1	AR 2
GC 9.		Sk 1	C 1	AR 1, AR 2
GC 10.	Kn 1, Kn 2	Sk 1		
GC 11.		Sk 1	C 2	
GC 12.		Sk 1	C 2	
GC 13.			C 1, C 2	AR 1
GC 14.			C 1, C 2	AR 1
GC 15.			C 1, C 2	AR 1
Professional competencies (PC)				
PC 1	Kn 2	Sk 1		
PC 2			C 2	
PC 3			C 2	
PC 4		Sk 1		
PC 5	Kn 2		C 2	
PC 6				
PC 7	Kn 1	Sk 1		
PC 8		Sk 1		
PC 9				
PC 10			C 1	AR 1
PC 11				AR 1
PC 12	Kn 1			
PC 13		Sk 1		AR 1
PC 14	Kn 1		C 1	
PC 15			C 1	AR 2
PC 16	Kn 2	Sk 1		AR 1
PC 17	Kn 1	Sk 1		

Table 2

Matrix of providing program learning outcomes (PLO) with the relevant components of the educational program

Program learning outcomes	SC 1	SC 2	SC 3	SC 4	SC 5	SC 6	SC 7	SC 8	SC 9	SC 10	SC 11	SC 12	SC 13	SC 14	SC 15	SC 16	SC 17	SC 18	SC 19	SC 20	SC 21	SC 22	SC 23	SC 24	SC 25	SC 26	SC 27	SC 28	SC 29	SC 30	SC 31	SC 32	SC 33	SC 34	
PLO 1	+			+																															
PLO 2	+		+	+	+																								+						
PLO 3		+										+		+							+	+			+				+						
PLO 4				+							+	+		+				+	+		+	+		+	+	+					+	+	+	+	
PLO 5												+		+	+	+				+					+										
PLO 6		+									+		+	+	+	+		+	+	+			+					+		+	+	+	+	+	
PLO 7										+	+		+					+														+	+	+	
PLO 8		+											+	+							+	+	+	+	+	+		+		+	+	+	+	+	
PLO 9				+										+							+	+			+	+				+	+	+			
PLO 10														+							+				+										
PLO 11			+	+	+			+	+	+					+				+	+		+					+		+	+	+	+	+		
PLO 12	+												+			+	+										+								+
PLO 13			+		+																			+				+			+	+	+		
PLO 14																					+										+	+	+		
PLO 15	+			+																							+								
PLO 16		+		+	+	+	+	+	+						+					+									+						+
PLO 17															+							+						+			+	+	+	+	
PLO 18		+						+	+	+						+	+	+	+	+			+								+	+	+	+	
PLO 19								+	+	+	+	+				+		+	+	+			+			+		+							+
PLO 20													+			+	+			+				+			+			+					+