List of Competences

Competences Area	Competences
Systems Development and Deployment	1. Managing plan-based, hybrid, and agile development approaches
	2. Specifying and documenting systems requirements
	3. Managing IS development projects
Data, Information and Content Management	4. Selecting appropriate data management technologies based on the needs of the domain
	5. Integrating and preparing data captured from various sources for analytical use
	6. Selecting and using appropriate analytics methods
Innovation, Organizational Change and Entrepreneurship	7. Developing a business plan
	8. Understanding how to apply creative problem solving to technology-related issues
IS Strategy and Governance	9. Engaging in IS strategic planning
	10. Planning and implementing IS governance
Enterprise Architecture	11. Understanding enterprise architecture principles and the value it provides to business
	12. Communicating and deploying an EA
Business Continuity and Information Assurance	13. Implementing and managing quality audit processes
	14. Managing Information Systems risks
IS Management and Operations	15. Managing IS/IT projects and programs
IT Infrastructure	16. Monitoring emerging technologies to understand their potential to support the domain

List of Programme learning Outcomes

№	Professional Learning Outcomes	P
1.	to understand essential concepts, facts, principles, and theories of information system	P1
2.	to understand the diversity and state-of-the-art in area of information system	P2
3.	to be able to analyze, model, and evaluate organization's business processes from the perspective of information systems development	P3
4.	to be able to apply various methods of information systems analysis	P4
5.	to understand problems of users of information systems, to be able to identify, analyze and specify user requirements	P5
6.	to be able to manage information systems development projects and identify, analyze, evaluate, and solve the arising management problems	P6
7.	to be able to identify, analyze, and understand unorthodox problems of information systems development	P7
8.	to be able to apply various methods of information systems design	P8
9.	to be able to apply methods of knowledge, metadata analysis and information safety engineering	P9
10.	to be able to identify, find and evaluate information relevant to information systems by using data bases and other sources of information	P10
11.	to be able to apply various computerized tools for model driven information systems analysis and design	P11
12.	to be able to choose and apply various technologies of information systems' development	P12
13.	to be able to apply various tools for management of information systems projects	P13
14.	to be able to develop innovative decisions for IT business creation and support	P14
	Personal and Social Learning Outcomes	
15.	to be able to think systematically when analysing different situations, solving problems and tasks	PS1
16.	to be able to apply the acquired knowledge creatively	PS2
17.	to be able to work individually with minimum guidance, manage one's work and time	PS3
18.	to be able to work efficiently in a group, manage the team, and act collectively	PS4
19.	to be able to understand the impact of information systems solutions on the society and environment and their economic aspects	PS5

Correlation matrix of Competences and Programme learning Outcomes

Competencies/ Learning Outcomes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	PS1	PS2	PS3	PS4	PS5
1. Managing plan-based, hybrid, and agile development approaches	x	X	x	x		x		x			x	x	x		x	x	x	x	x
2. Specifying and documenting systems requirements	x	x	x	x	x		x	x							x	x	x	x	x
3. Managing IS development projects	x	x	x		x	x		x				x	x		x	x	x	x	x
4. Selecting appropriate data management technologies based on the needs of the domain	x	x							x	x	x	x			x	x	x	x	x
5. Integrating and preparing data captured from various sources for analytical use	x	x							x	x	x	x			x	x	x	x	x
6. Selecting and using appropriate analytics methods	x	x	x	x					x	x	x	x			x	x	x	x	x
7. Developing a business plan	x	x	x											x	x	x	x	x	x
8. Understanding how to apply creative problem solving to technology-related issues	x	x	x	x	x		x					x	x	x	x	x	x	x	x
Competencies/ Learning Outcomes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	PS1	PS2	PS3	PS4	PS5
9. Engaging in IS strategic planning	x	x	x	x		x	x							x	x	x	x	x	x

10. Planning and implementing IS governance	x	x	x	x		x	x			x	x		x	x	x	x	x	x	x
11. Understanding enterprise architecture principles and the value it provides to business	x	x	x	x											x	x	x	x	x
12. Communicating and deploying an EA	x	x	x												x	x	x	x	x
13. Implementing and managing quality audit processes	x	x	x	x	x		x		x				x		x	x	x	x	x
14. Managing Information Systems risks	x	x	x	x	x	x			x				x		x	x	x	x	x
15. Managing IS/IT projects and programs	x	x			x	x				x	x	x		x	x	x	x	x	x
16. Monitoring emerging technologies to understand their potential to support the domain	x	x	x				x	x			x				x	x	x	x	x

List of Course Learning Outcomes (IS Development and Deployment (SDAD)

Code of Learning Outcomes	Course Learning Outcomes
SDAD1	to understand, determine and implement the basic SDAD principles, methodologies, technologies and systems development approaches.
SDAD2	to be able to apply key DevOps concepts to integrate between development and operations, determine their relevance to specific domain.
SDAD3	to be able to analyze, modelling and evaluate business processes of the customer organization for their adaptation to IS development and deployment capabilities
SDAD4	to be able to analyze, evaluate and manage risks associated with various design and implementation alternatives
SDAD5	to be able to select appropriate requirements specification methods considering the system type, organizational context, and selected systems development approach
SDAD6	to be able to estimate costs of various system design and implementation alternatives using formal estimation techniques appropriate to the systems development approach.
SDAD7	to be able to analyze the domain impact of various design and implementation alternatives.
SDAD8	to be able to implement processes of IS development and deployment (planning, analysis requirements, design, Implementation, support, ongoing activities)
SDAD9	to be able to use a modern application development environment to produce an IS artifact based on relevant design documentation.
SDAD10	to be able to implement and test the IS application
SDAD11	to be able to install, integrate and configure the IS applications
SDAD12	to be able to acquire IS applications from the market
SDAD13	to be able to manage external systems development resources
SDAD14	to be able to make decision and take responsibility for them
SDAD15	to be able to argue, justify and present their decision and plans

Correlation matrix of Programme Learning Outcomes and
Course Learning Outcomes (IS Development and Deployment (SDAD))

Code of Programme Learning Outcomes	Programme Learning Outcomes	Course Learning Outcomes	Code of Course Learning Outcomes
1.	2.	3.	4.
Professional Learning Outcomes			
P1	to understand essential concepts, facts, principles, and theories of information system	to understand, determine and implement the basic SDAD principles, methodologies, technologies and systems development approaches.	SDAD1
		to be able to apply key DevOps concepts to integrate between development and operations, determine their relevance to specific domain.	SDAD2
P3	to be able to analyze, model, and evaluate organization's business processes from the perspective of information systems development	to be able to analyze, modelling and evaluate business processes of the customer organization for their adaptation to IS development and deployment capabilities	SDAD3
P4	to be able to apply various methods of information systems **analysis**	to be able to analyze, evaluate and manage risks associated with various design and implementation alternatives	SDAD4
P5	to understand problems of users of information systems, to be able to identify, analyze, specify user requirements	to be able to select appropriate requirements specification methods considering the system type, organizational context, and selected systems development approach	SDAD5
P8	to be able to apply various methods of information systems **design**	to be able to estimate costs of various system design and implementation alternatives using formal estimation techniques appropriate to the systems development approach.	SDAD6
		to be able to analyze the domain impact of various design and implementation alternatives.	SDAD7
P10	to be able to identify, find and evaluate information relevant to information systems by using data bases and other sources of information	to be able to implement processes of IS development and deployment (planning, analysis requirements, design, Implementation, support, ongoing activities)	SDAD8

Code of Programme Learning Outcomes	Programme Learning Outcomes	Course Learning Outcomes	Code of Course Learning Outcomes
1.	**2.**	**3.**	**4.**
P11	to be able to apply various computerized tools for model driven information systems analysis and design	to be able to use a modern application development environment to produce an IS artifact based on relevant design documentation.	SDAD9
P12	to be able to choose and apply various technologies of information systems' development	to be able to implement and test the IS application	SDAD10
		to be able to install, integrate and configure the IS applications	SDAD11
		to be able to acquire IS applications from the market	SDAD12
		to be able to manage external systems development resources	SDAD13
Personal & Social Learning Outcomes			
PS1	to be able to think systematically when analysing different situations, solving problems and tasks	to be able to make decision and take responsibility for them	SDAD14
PS2	to be able to apply the acquired knowledge creatively	to be able to make decision and take responsibility for them	SDAD14
		to be able to argue, justify and present their decision and plans	SDAD15
PS3	to be able to work individually with minimum guidance, manage one's work and time	to be able to argue, justify and present their decision and plans	SDAD15
PS4	to be able to work efficiently in a group, manage the team, and act collectively	to be able to make decision and take responsibility for them	SDAD14
PS5	to be able to understand the impact of information systems solutions on the society and environment and their economic aspects	to be able to argue, justify and present their decision and plans	SDAD15