

Anexa 2

Universitatea: **ALEXANDRU IOAN CUZA IASI** Facultatea: **ECONOMIE SI ADMINISTRAREA AFACERILOR** Calificarea: **ECONOMIST** Nivelul de studii: **MASTER**
 Domeniul fundamental **STIINTE ECONOMICE** Domeniul de studii **INFORMATICA ECONOMICA** Programul de studii **Software Development and Business Information Systems**

Grila 2. Stabilirea corelațiilor dintre competențele profesionale și competențele transversale și ariile de conținut, disciplinele de studiu și creditele alocate

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu	Credite		
				Pe disciplină*	Pe competență	
C1			Cod			
C1 Competence to analyse, design and test business information systems	C1.1 Knowledge about tools, techniques and methods of analysis, design, implementation and testing of business information systems		Persistenta poliglota și Big Data / Polyglot Persistence and Big Data	101	2	15
	C1.2 Identification of the methodological and practical features and limits of business information systems analysis, design and testing methods within functional and technological requirements and constraints		Object Oriented Analysis and Design	105	3	
	C1.3 Combine and adapt the tools, methods and techniques for analysis, design and testing of information systems based on functional and technological requirements of the system		Multi-tiered Software Development	106	1	
			Mobile Applications	107	0,5	
	C1.4 Selection of the method, methodology, and tools for system analysis, design and test, according to the human, financial and time organizational resources and in conformity with the economic, functional and technical requirements		Software Quality Assurance	108	3,5	

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite		
	C1.5 Development of analysis, design, implementation and testing of an information system based on real-world case studies and compare various solutions		Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	201	1		
			Database Logic in Business Applications	102	0,5		
			IT Governance and Service Management	204	0,5		
			Enterprise Systems Development Methodologies	206	1		
			Research project	209	2		
C2							
C2 Competence to model, manage and analyse high volumes of business data	C2.1 Mastering theoretical and technological knowledge and tools concerning business data modeling, query, processing, administration and analysis, including Big Data		Business Intelligence	103	3	19,5	
			Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	109	3		
			Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	110	3		

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite	
C3	C2.4 Design the most appropriate solutions for gathering, storage, processing, administration and analysis of business data according to the organizational resources and constraints		Database Logic in Business Applications	102	3,5	
	C2.5 Develop projects and case-studies concerning modeling, implementation (database logic), administration and analysis of data for real-world applications		Information Integration and Web of Data	202	2	
			Polyglot Persistence and Big Data	203	3	
			Research project	209	2	

C3

C3 Competence to develop and deploy multi-tiered and service oriented applications	C3.1 Detailed understanding of modern, multi-tiered and service oriented information architectures in order to develop and implement business applications		Persistența poliglotă și Big Data / Polyglot Persistence and Big Data	101	2	14
	C3.2 Analysis of the architectural and technological trends in software and service development; assessment of the appropriate solutions to be applied in different business and technological environments.		Object Oriented Analysis and Design	105	1	
	C3.3 Choose and adapt different commercial and open-source solutions in order to fulfill organizational requirements and which are suited to the organizational constraints		Multi-tiered Software Development	106	3	
	C3.4 Develop detailed architectural and technical solutions to be implemented, in terms of layers, modules and services, according to system requirements		Mobile Applications	107	4	

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite	
C4	C3.5 Design and implementation of modules, applications and services for real-world problems		Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	201	2	
			Research project	209	2	
C4 Competence to integrate data, components and services in business systems and applications	C4.1 Gaining detailed knowledge on all aspects of methodological and technological regarding the representation and persistence of data formats, the protocols and means of communication and integration of applications and services within distributed business information systems.		Business Intelligence	103	1	21,5
	C4.2 Identification of technically and economically feasible solutions for data, applications and services integration using existing methodologies and tools		Object Oriented Analysis and Design	105	1	
	C4.3 Identification of information sources, application modules and available services, both inside and outside the business system; estimate the solutions of their integration in order to match the current and future information needs of the organization		Multi-tiered Software Development	106	1,5	

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite	
	C4.4 Define the most appropriate solutions for data and modules integration, in order to meet the organizational requirements towards information integrity and security.		Mobile Applications	107	1	
	C4.5 Write the specifications and deploy the modules regarding data, applications and services integration		Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	109	2	
			Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	110	2	
			Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	201	2	
			Database Logic in Business Applications	102	1,5	
			Information Integration and Web of Data	202	3	
			Polyglot Persistence and Big Data	203	2	
			Enterprise Systems Development Methodologies	206	0,5	

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite	
C5			Sisteme inteligente în economie / Artificial Intelligence for Business Managementul cunoștințelor / Knowledge Management, Analytics and Data Science Auditul sistemelor informaționale / Information Systems Audit Cloud computing E-Comunicare și E-Documente / E- Documents and E-Communication Managementul relațiilor cu clienții / Customer Relationship Management Dezvoltarea sistemelor Web/Web Systems Development	205	1	
			Programare concurentă și distribuită / Concurrent and Distributed Computing	207	1	
			Metodologii de dezvoltare a sistemelor informaționale / Enterprise Systems Development Methodologies Știință, tehnologie și societate / Science, Technology and Society	208	1	
			Research project	209	1	
C5 Competence to manage IT projects and provide IT services	C5.1 Acquiring knowledge on methodologies and standards for planning, implementation and monitoring of software projects, the governance of technologies, services and IT systems within organizations		Project Management	104	3	16

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite	
	C5.2 Development of an organizational framework for the IT projects and services, according to the needs of stakeholders/customers		Software Quality Assurance	108	0,5	
	C5.3 Use of planning, budgeting and controlling tools within software projects and IT services		IT Governance and Service Management	204	3,5	
	C5.4 Development of decision and analysis models to be applied in the dynamic IT environment		Enterprise Systems Development Methodologies	206	2	
	C5.5 Elaborate a research project that identifies the trends and challenges within the field of software projects and IT services management		Sisteme inteligente în economie / Artificial Intelligence for Business Managementul cunoștințelor / Knowledge Management, Analytics and Data Science Auditul sistemelor informaționale / Information Systems Audit Cloud computing E-Comunicare și E-Documente / E-Documents and E-Communication Managementul relațiilor cu clienții / Customer Relationship Management Dezvoltarea sistemelor Web/Web Systems Development	205	1	
			Programare concurentă și distribuită / Concurrent and Distributed Computing	207	2	
			Metodologii de dezvoltare a sistemelor informaționale / Enterprise Systems Development Methodologies Știință, tehnologie și societate / Science, Technology and Society	208	2	
			Research project	209	2	

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite	
C6						
C6 Competence to manage and develop business processes using IT	C6.1 Understanding the tools and standards for business process modeling, as well as methodological and technical tools for automating business processes		Persistenta poliglota și Big Data / Polyglot Persistence and Big Data	101	1	16,5
	C6.2 Identification and orchestration of information processes in business using BPM (Business Process Management) tools		Business Intelligence	103	1	
	C6.3 Understand common and specific features of the business processes of the company and how they can be organized and implemented using information technologies		Project Management	104	1,5	
	C6.4 Manage business processes and related services in organization for a maximum impact on organizational performance		Software Quality Assurance	108	1	
	C6.5 Case study development concerning modeling, design and implementation of business processes using BPM tools		IT Governance and Service Management	204	1	
			Enterprise Systems Development Methodologies	206	2	
			Sisteme inteligente în economie / Artificial Intelligence for Business Managementul cunoștințelor / Knowledge Management, Analytics and Data Science Auditul sistemelor informaționale / Information Systems Audit Cloud computing E-Comunicare și E-Documente / E-Documents and E-Communication Managementul relațiilor cu clienții / Customer Relationship Management Dezvoltarea sistemelor Web/Web Systems Development	205	3	

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite	
			Programare concurentă și distribuită / Concurrent and Distributed Computing	207	2	
			Metodologii de dezvoltare a sistemelor informaționale / Enterprise Systems Development Methodologies			
			Știință, tehnologie și societate / Science, Technology and Society	208	2	
			Research project	209	2	
Competențe transversale			Discipline	Discipline de studiu	Credite	
					Pe disciplină	Pe competență
CT1 – The ability to communicate and collaborate in teams of different professionals			Persistenta poliglota și Big Data / Polyglot Persistence and Big Data	101	0,5	6
			Business Intelligence	103	0,5	
			Project Management	104	0,5	
			Object Oriented Analysis and Design	105	0,5	
			Software Quality Assurance	108	0,5	
			Database Logic in Business Applications	102	0,5	
			Information Integration and Web of Data	202	0,5	
			Polyglot Persistence and Big Data	203	0,5	

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite	
			Sisteme inteligente în economie / Artificial Intelligence for Business Managementul cunoștințelor / Knowledge Management, Analytics and Data Science Auditul sistemelor informaționale / Information Systems Audit Cloud computing E-Comunicare și E-Documente / E- Documents and E-Communication Managementul relațiilor cu clienții / Customer Relationship Management Dezvoltarea sistemelor Web/Web Systems Development	205	0,5	
			Programare concurenta și distribuită / Concurrent and Distributed Computing	207	0,5	
			Metodologii de dezvoltare a sistemelor informaționale / Enterprise Systems Development Methodologies Știință, tehnologie și societate / Science, Technology and Society	208	0,5	
			Research project	209	0,5	
CT2 – The ability to coordinate project teams and manage informational projects			Project Management	104	1	4
			Object Oriented Analysis and Design	105	0,5	
			Software Quality Assurance	108	0,5	
			Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	201	0,5	
			IT Governance and Service Management	204	1	
			Enterprise Systems Development Methodologies	206	0,5	

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite	
CT3 – Continuous improvement of specific skills and knowledge towards approaching information systems, development of new software technologies and management of information systems.			Persistenta poliglota și Big Data / Polyglot Persistence and Big Data	101	0,5	7,5
			Business Intelligence	103	0,5	
			Multi-tiered Software Development	106	0,5	
			Mobile Applications	107	0,5	
			Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	109	1	
			Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	110	1	
			Administrarea bazelor de date / Database Administration Administrarea sistemelor Linux / Linux Administration Depozite de date și Data Mining / Data Warehouses, Data Mining and Knowledge Discovery	201	0,5	
			Information Integration and Web of Data	202	0,5	
			Polyglot Persistence and Big Data	203	0,5	

Competențe profesionale	nivel	Arii de conținut	Discipline de studiu		Credite	
			Sisteme inteligente în economie / Artificial Intelligence for Business Managementul cunoștințelor / Knowledge Management, Analytics and Data Science Auditul sistemelor informaționale / Information Systems Audit Cloud computing E-Comunicare și E-Documente / E-Documents and E-Communication Managementul relațiilor cu clienții / Customer Relationship Management Dezvoltarea sistemelor Web/Web Systems Development	205	0,5	
			Programare concurenta și distribuită / Concurrent and Distributed Computing	207	0,5	
			Metodologii de dezvoltare a sistemelor informaționale / Enterprise Systems Development Methodologies Știință, tehnologie și societate / Science, Technology and Society	208	0,5	
			Research project	209	0,5	