المقارنة المرجعية

لقسم علوم الحاسب والمعلومات - كلية العلوم بالزلفي – جامعة المجمعة

مع قسم علوم الحاسب – كلية الحاسب – جامعة القصيم

Compatibility with National Qualification Framework (NQF)

Terms	CSI Department/College of Science /MU	CS Department/College of Computer /Qassim Univ.	Per. to QU
1- Qualification Degree	BSc. Of computer Science & information technology	BSc. Of computer Science	Almost the same
2- Vision	Building an outstanding teaching environment that empowers the graduates in professional computing and contributes in development of an informatics knowledge society.	The Computer Science Department is looking to achieve recognition in both Education and Scientific Research in all fields of Computer Science.	Almost the same
3- Mission	Providing high quality education and scientific research environment to equip graduates sufficient skills and knowledge to work effectively in labor market; and support society by participating in technology transfer.	To prepare highly qualified graduates who are ready to work and compete in the Computer Science field, to continue their postgraduate studies, to achieve recognition in Scientific Research, to disseminate knowledge and to develop sustainable technology for the service of society.	Almost the same
4- Objectives	1. Teach strong foundation in mathematics and basic concepts of computer science and information. 2. Lay the foundation for further research. 3. Equip graduates methods and procedures to communicate and work effectively within multi-disciplinary team. 4. Encourage graduates to follow appropriate practices within a professional, legal, and ethical responsibility. 5. Provide efficient IT	1. Provide students with sufficient knowledge and learning in all aspects of computer science. 2. Improve the technical and interpersonal skills of students to enable them to work with others effectively in their professional careers. 3. Prepare students to pursue and excel in graduate studies in Computer Science and other related fields 4. Make students more responsible to the	Almost the same

	capabilities, and search for information and engage in life-long self-learning	community and work within professional and ethical framework.	
5. Credit Hours	134 without Prep. Year	145	92%
6. Students Enrolment	88	128	69%
7. Faculty Staff	19	18	105%
8. Labs No.	7	9	77.87%
9. Students No. for each faculty staff	8	12	66.67%
10. Graduates No.	122	953	13%
11. The number of compulsory hours	108/134	142/145	81%
12. The number of selective hours	26/134	3/145	950%
13. Tracks No.	Track I- Computer Graphics & Multimedia Track II- Computer Networks Track III- individual Track	One track only (BSc in CS)	3:1
14.Courses	Compatibility of courses specification	Compatibility of courses specification	Almost the same
15. Student learning Outcomes (SLOs)	The CSI program enables students to acquire, by the time of graduation, the following learning outcomes which allows graduates to be able to: • apply knowledge of computing and mathematics appropriate to the discipline. • analyze a problem, and identify and define the computing requirements appropriate to its solution. • design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs. • function effectively on teams to accomplish a common goal. • understand professional, ethical, legal, security and social issues and responsibilities.	The CS program enables students to acquire, by the time of graduation, the following learning outcomes which allows graduates to be able to: • apply knowledge of computing and mathematics appropriate to the discipline. • analyze a problem, and identify and define the computing requirements appropriate to its solution. • design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs. • function effectively on teams to accomplish a common goal. • understand professional,	The same

	• communicate effectively with a range of audiences. • analyze the local and global impact of computing on individuals, organizations, and society. • Recognize the need for and an ability to engage in continuing professional development. • use current techniques, skills, and tools necessary for computing practice. • use and apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, web systems and technologies. • identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems. • effectively integrate IT-based solutions into the user environment. • understand of best practices and standards and their application.	ethical, legal, security and social issues and responsibilities. • communicate effectively with a range of audiences. • analyze the local and global impact of computing on individuals, organizations, and society. • Recognize the need for and an ability to engage in continuing professional development. • use current techniques, skills, and tools necessary for computing practice. • use and apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, web systems and technologies. • identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems. • effectively integrate IT-based solutions into the user environment. • understand of best practices and standards and their application.	

مصفوفة المخرجات لمواد قسم علوم الحاسب والمعلومات –كلية العلوم – جامعة المجمعة

النواتج الأساسية للبرنامج الأكاديمي

√- If the outcome completely achieved. X- If the outcome partially achieved.															
Code	**Course Name**	**Program Learning Outcomes (PLOs)**													
		a1	a2	a3	b1	b2	b3	b4	b5	c1	c2	c3	d1	d2	d3
CSI 211	Programming 1	X		X	X	X									
CSI 212	Disc. Math for CS 1	X		X	X					X					
MATH 212	Calculus I	X			X	X	X								
PHYS 217	Physics 2	X		X	X		X								
ENG 210	Tech. English									X			X		
ZPSY 211	Educational & Thinking Skills												X	X	X
CSI 221	Programming 2		X	X	X	X									
CSI 222	Disc. Math For CS 2	X			X							X			X
MATH 220	Calculus 2	X			X	X	X								
CSI 223	Dig. Logic Design	X		X		X						X			
CSI 124	Fund. of Inf. Systems	X	X		X			X							
CHEM 226	General Chemistry	X	X	X	X										
BIO 226	Biology	X		X	X							X			
CSI 311	Visual Programming			X	X	X					X				
CSI 312	Data Structure			X	X	X							X		
CSI 313	Computer Organization and Assembly Language				X	X				X		X			
CSI 314	Database		X	X		X	X								
MATH 310	Linear Algebra & Differential Equations	X	X	X	X										
CSI 321	Design & Analysis of Algorithms				X	X					X	X			
CSI 322	Computer Networks			X	X			X						X	
CSI 323	Computer Architecture		X		X					X					X
CSI 324	Advanced Database				X	X		X				X			
CSI 325	Software Engineering 1	X		X				X		X					
STAT 320	Probability & Statistics	X	X	X	X										
CSI 411	Artificial Intelligence			X		X						X			X

Course code	Course Title	a1	a2	a3	b1	b2	b3	b4	b5	c1	c2	c3	d1	d2	d3
CSI 412	Operating Systems			X	X	X							X		
CSI 413	Computational Complexity				X	X						X	X		
CSI 414	Digital Image Processing			X	X		X					X			
CSI 421	Compiler Design					X	X			X			X		
CSI 422	Software Engineering 2			X			X	X	X						
CSI 423	Cryptography and Information Security	X				X				X				X	
CSI 424	Computer Vision				X		X					X	X		
CSI 425	Computer Graphics						X		X	X		X			
CSI 431	Advanced Computer Networks					X		X	X		X				
CSI 432	Network Security					X		X	X	X					
CSI 441	Machine Learning						X	X				X	X		
CSI 442	Introduction to Robotics						X	X	X			X			
CSI 443	Expert Systems							X	X		X	X			
CSI 444	Computational Methods			X	X		X					X			

√- If the outcome completely achieved. X- If the outcome partially achieved.													
Code	**Course Name**	**Program Learning Outcomes (PLOs)**												
		a1	**a2**	**a3**	**b1**	**b2**	**b3**	**b4**	**b5**	**c1**	**c2**	**c3**	**d1**	**d2**	**d3**
CSI 445	Operational Research		X		X	X									X
CSI 446	Information System Management			X					X				X	X	
CSI 447	Information Security			X		X	X				X				
CSI 448	Project Management					X		X		X			X		
CSI 449	Geographic Information Systems (GIS)	X			X	X	X								
CSI 510	Capstone Project I				X				X				X	X	
CSI 511	Web Programming & Internet Technology						X			X			X	X	
CSI 512	Data Mining				X	X				X					X
CSI 513	Concepts of Programming Languages					X		X	X			X			
CSI 514	Interactive Computer Graphics						X					X	X	X	X
CSI 520	Capstone Project II							X	X				X	X	
CSI 521	Multimedia Technology						X	X					X	X	
CSI 522	Human Computer Interaction						X	X		X	X				
CSI 525	Professional Ethics									X	X		X	X	
CSI 530	Digital Photography						X		X			X	X		
CSI 531	Wireless & Mobile Computing			X	X					X			X		
CSI 532	Network Programming					X			X			X	X		
CSI 533	Cloud Computing						X				X		X		X