



Mapping of Graduate Attributes to Programme Objectives & Courses

ESAP

Bachelor of Science in Computing

Programme Objectives	Graduate Attributes						
	Knowledge Base	Application	Creativity	Acquisitions	Communication	Team Work	Ethical
1. Select and apply proven methods, tools and techniques to the effective and efficient implementation of information systems;	✓	✓	✓				
2. Evaluate computer systems in a local area network, and understand the additional requirements for connection to other networks through wide area networks;	✓	✓					
3. Be competent in system development in the Internet and the web platform;	✓	✓					
4. Work independently to design and implement a relational database, with an emphasis on how to organise, maintain and retrieve information from a DBMS;	✓	✓					
5. Acquire essential knowledge in specific fields of computing disciplines including multimedia, security and artificial intelligence;	✓	✓					
6. Acquire the perceptive skills needed to understand information presented in the form of UML diagram, flow chart or other	✓	✓					

industry standard formats;							
7. Understand the need for and use of the necessary mathematical techniques;	✓	✓					
8. Work independently to develop an understanding of, and the knowledge and skills associated with the general support of computer systems and networks;	✓	✓					
9. Work as an effective member of a team in the analysis, design and development of software systems;						✓	
10. Use project planning and management techniques in systems development;	✓	✓					
11. Understand the fundamental and operational issues of computer systems in business environments;	✓						✓
12. Equip with adequate written, oral communication and interpersonal skills;					✓		
13. Build the capacity and desire for lifelong learning and to learn advanced and emerging technologies on one's own;			✓	✓			
For the Enterprise Information Systems specialisation							
14. Gain an in-depth understanding of the information technology related to enterprise information systems, with an emphasis on development of such systems to support business processes;	✓	✓					

For the Gaming Technology specialisation								
15. Acquire the general and advanced knowledge of current technologies and operating environment in the gaming industry;		✓	✓					
For the Computer Education specialisation								
16. Develop awareness, knowledge, attributes, skills, evaluation ability and full participation in the teaching and learning process.		✓	✓			✓	✓	✓
Year 1	Course	Graduate Attributes						
		Knowledge Base	Application	Creativity	Acquisitions	Communication	Team Work	Ethical
Sem 1	Introduction to Computing	✓	✓				✓	
	Programming I	✓	✓	✓	✓			
	Web Technologies	✓	✓					
	Essential Computer Mathematics	✓	✓					
	Introduction to Business	✓	✓				✓	✓
	English I				✓	✓		
Sem 2	Computer Architecture	✓	✓					
	Data Structures and Algorithms	✓	✓		✓			
	Data Communications	✓	✓					

	Discrete Mathematics	✓	✓					
	English II				✓	✓		
	Accounting	✓	✓					
	Communication	✓	✓			✓		
	Graphic Design		✓	✓	✓			
	Human Resources Management	✓	✓					
	Interpersonal Relationships		✓			✓		
	Introduction to Economics	✓	✓					
	Introduction to Marketing	✓	✓					
	Introduction to Psychology	✓	✓					
	Introduction to Public Administration	✓	✓					
	Special Topics I (PE)		✓		✓		✓	
	Special Topics II (Music Appreciation)	✓		✓				
	Introduction to Sociology	✓	✓					
Year 2	Course	Graduate Attributes						
		Knowledge Base	Application	Creativity	Acquisitions	Communication	Team Work	Ethical
Sem 1	Database Design	✓	✓				✓	
	Programming II	✓	✓		✓			

	Operating Systems	✓	✓					
	Computer Networks	✓	✓					
	Statistics I	✓	✓					
	English III				✓	✓		
Sem 2	Object Oriented Technologies	✓	✓		✓			
	Internet Programming I	✓	✓					
	Software Engineering	✓	✓					
	Database Management Systems	✓	✓		✓		✓	
	Network and System Administration	✓	✓	✓				
	English IV				✓	✓		
Year 3	Course	Graduate Attributes						
		Knowledge Base	Application	Creativity	Acquisitions	Communication	Team Work	Ethical
Sem 1	Multimedia Application Development	✓	✓		✓			
	Internet Programming II	✓	✓					
	Project Management	✓	✓				✓	
	Human Factors and User Interfaces	✓	✓		✓			
	Performance Evaluation (EIS)	✓	✓					
	Introduction to Gaming Technology (GT)	✓					✓	✓

	Introduction to Education (EDU)	✓	✓			✓		✓
	English V				✓	✓		
Sem 2	Information System Implementation	✓	✓		✓		✓	
	Introduction to E-Business	✓	✓				✓	
	Data Warehousing and Data Mining (EIS)	✓	✓					
	Statistics II (EIS)	✓	✓					
	Gaming Technology I (GT)	✓	✓					
	Mathematics for Gaming Technology (GT)	✓	✓					
	Educational Psychology and Counseling (EDU)	✓	✓			✓		
	Curriculum and Teaching Methods (EDU)	✓	✓	✓	✓			
	English VI				✓	✓		
	Accounting	✓	✓					
	Communication	✓	✓			✓		
	Graphic Design		✓	✓	✓			
	Human Resources Management	✓	✓					
	Interpersonal Relationships		✓			✓		
Introduction to Economics	✓	✓						

	Introduction to Marketing	✓	✓					
	Introduction to Psychology	✓	✓					
	Introduction to Public Administration	✓	✓					
	Introduction to Sociology	✓	✓					
Year 4	Course	Graduate Attributes						
		Knowledge Base	Application	Creativity	Acquisitions	Communication	Team Work	Ethical
Sem 1	Digital Image and Video Processing	✓	✓		✓			
	Computer Security	✓	✓					
	Enterprise System and Application Development (EIS)	✓	✓		✓			
	Gaming Technology II (GT)	✓	✓					
	Teaching Practice I (EDU)	✓	✓	✓		✓	✓	✓
	Final Year Project	✓	✓	✓	✓			
	Computer Aided Design	✓	✓	✓				
	Computer Forensics	✓	✓	✓	✓			✓
	Database Administration and Programming	✓	✓				✓	
	IP Routing	✓	✓	✓				
	Mobile Computing and Wireless Networks	✓	✓	✓				

	Internship	✓	✓			✓	✓	✓
	Selected Topics I, II, III and IV	✓	✓					
Sem 2	Artificial Intelligence	✓	✓					
	Ethics and Professional Issues in Computing	✓	✓					✓
	Strategic Planning for Information Systems (EIS)	✓	✓				✓	
	Computer Game Design and Development (GT)	✓	✓		✓			
	Teaching Practice II (EDU)	✓	✓	✓		✓	✓	✓
	Final Year Project	✓	✓	✓	✓			
	Computer Aided Design	✓	✓	✓				
	Computer Forensics	✓	✓	✓	✓			✓
	Database Administration and Programming	✓	✓				✓	
	IP Routing	✓	✓	✓				
	Internship	✓	✓			✓	✓	✓
	Mobile Computing and Wireless Networks	✓	✓	✓				
Selected Topics I, II, III and IV	✓	✓						