

Course unit title:	Networks and Information Security
Course unit code:	CSW241
Type of course unit: (Compulsory/optional)	Compulsory
Level of course unit: (First, second or third cycle)	Bachelor (1 st Cycle)
Year of study:	2 or 3
Semester when the unit is delivered:	5 or 6
Number of ECTS credits allocated:	5
Name of lecturer(s):	TBA
Learning outcomes of the course unit:	
<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> • Describe and categorize computer networks, models and standards • State and identify transmission concepts and media approaches. • Explain and describe layering, addressing and routing • Define and discuss network technologies for wired and wireless networks. • Describe network management concepts and classify security risks, prevention and detection technologies. • Design and analyze business network needs considering business and communication aspects. 	
Mode of delivery:	Face- to- face
Prerequisites and co-requisites:	CSW205
Recommended optional program components:	None
Course Contents:	
Objective:	
<p>To provide students with an introduction of data communications and networking in the context of a business environment. To make students aware of and familiar with networking technologies currently being used in the world for local and wide area connectivity and internet-working. To prepare an information system professional to deal with telecommunications and networks in an organizational situation.</p>	
Description:	
<p>Introduction to communication and business information. Data communications and networking; distributed processing the internet and distributed applications. Business</p>	

information: audio, data, image, video.

Internet and distributed applications: the Internet and how it works, TCP/IP, client/server networking; internet based applications; internet operation;

Local Area Networks: architecture and infrastructure; topologies, components, Ethernet, switches, VPNs, Wireless LANs. Wide Area Networks: technologies, services and wireless WANs.

Networks and information security: threats and their types, attacks, malware, counter measures and techniques, cryptography, security software, security policies. Network management, planning and design

Recommended or required reading:

Business Data Communications – Infrastructure, Networking and Security, Stallings W. and Case T., Pearson

Computer Security Fundamentals, Easttom W., Pearson

Network security essentials: applications and standards, Stallings W., Pearson

Planned learning activities and teaching methods:

Class Instruction:	42 Hours
Consultation:	15 Hours

Assessment methods and criteria:

Examinations	80%
Coursework/Independent study/ Participation	20%
	100%

Language of instruction:

English

Work placement(s):

No

Place of Teaching:

Regular Classroom,
European University Cyprus, Nicosia