ΠΙΝΑΚΑΣ 2:
ΚΑΤΑΝΟΜΗ ΜΑΘΗΜΑΤΩΝ ΠΡΟΓΡΑΜΜΑΤΟΣ ΣΠΟΥΔΩΝ ΑΝΑ ΕΞΑΜΗΝΟ
BSc in COMPUTING AND INFORMATION TECHNOLOGY

YEAR 1
Semester 1

SUBJECTS*	ECTS
(a) Core for all Specialisations	**(20)**
CST-111 INTRODUCTION TO COMPUTER SCIENCE AND ITS APPLICATIONS	5
CST-112 MATHEMATICS FOR COMPUTER SCIENCE I	5
CST-113 INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING	5
CST-114 COMPUTER FUNDAMENTALS	5
(b) Core Specialisation	**(5)**
(i) Information Technology (System and Networks Technologies)	
BSM-111 INTRODUCTION TO MANAGEMENT	5
(ii) Information Technol. (Software Development)	
CST-116 FUNDAMENTALS OF COMPUTER ENGINEERING	5
(iii) Information Technol. (Business Applications)	
BSM-111 INTRODUCTION TO MANAGEMENT	5
(c) Electives for all Specialisations ONE * from:	**(5)**
BSM-110 ECONOMICS I	5
BSM-111 INTRODUCTION TO MANAGEMENT	5
CST-116 FUNDAMENTALS OF COMPUTER ENGINEERING	5
PRL-111 INTRODUCTION TO MEDIA CULTURE	5
PRL-115 COMMUNICATION AND LANGUAGE DEVELOPMENT I	5
PSY-110 GENERAL PSYCHOLOGY	5
	Total:30 ECTS

*A core subject for one specialisation can also be available as elective for the other specialisation

Semester 2

SUBJECTS*	ECTS
(a) Core for all Specialisations	**(20)**
CST-121 ADVANCED OBJECTS-ORIENTED PROGRAMMING	5
CST-122 DISCRETE MATHEMATICS	5
CST-123 DATABASES AND THE WEB	5
CST-124 DATA SCIENCE	5
(b) Core Specialisation	**(5)**
(i) Information Technology (System and Networks Technologies)	
CST-126 FUNDAMENTALS OF TECHNOLOGICAL CHANGE	5
(ii) Information Technology (Software Development)	
CST-127 DATA VISUALISATION	5
(iii) Information Technol. (Business Applications)	
CST-126 FUNDAMENTALS OF TECHNOLOGICAL CHANGE	5
(c) Electives for all Specialisations	**(5)**
ONE from:	
ACF-122 FUNDAMENTALS OF LAW FOR COMPUTER SCIENTISTS	5
BSM-238 DYNAMICS OF CYPRUS ECONOMY I	5
CST-126 FUNDAMENTALS OF TECHNOLOGICAL CHANGE	5
CST-127 DATA VISUALISATION	5
PRL-125 COMMUNICATION AND LANGUAGE DEVELOPMENT II	5
PSY-112 INTRODUCTION TO SOCIAL PSYCHOLOGY	5
	Total: 30 ECTS

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YEAR 2
Semester 3

SUBJECTS*	ECTS	
(a) Core for all Specialisations	**(20)**	
CST-230 FUNCTIONAL PROGRAMMING	5	
CST-231 OPERATING SYSTEMS	5	
CST-232 ALGORITHMS AND DATA STRUCTURES	5	
CST-233 SYSTEMS ANALYSIS AND DESIGN	5	
(b) Core Specialisation	**(5)**	
(i) Information Technology		
(System and Networks Technologies)		
CST-234 HUMAN COMPUTER INTERACTION	5	
(ii) Information Technology (Software Development)		
CST-235 LOGIC AND MODELLING	5	
(iii) Information Technology (Business Applications)		
CST-234 HUMAN COMPUTER INTERACTION	5	5
(c) Electives for all Specialisations	**(5)**	
ONE from:		
ACF-236 FUNDAMENTALS OF FINANCIAL ACCOUNTING	5	
BSM-231 PRINCIPLES OF MARKETING	5	
BSM-237 BUSINESS IN EUROPE	5	
CST-234 HUMAN COMPUTER INTERACTION	5	
CST-235 LOGIC AND MODELLING	5	
	Total: 30 ECTS	

* A core subject for one specialisation can also be available as elective for the other Specialisation.

Semester 4

SUBJECTS*	ECTS
(a) Core for all Specialisations	**(20)**
CST-240 DESIGN AND IMPLEMENTATION OF PROGRAMMING LANGUAGES	5
CST-241 COMPUTER NETWORKING I	5
CST-242 ALGORITHMS, CORRECTNESS AND EFFICIENCY	5
CST-243 SOFTWARE ENGINEERING I	5
(b) Core Specialisation	**(10)**
(i) Information Technology (System and Networks Technologies)	
CST-244 WEB APPLICATIONS TECHNOLOGIES	5
(ii) Information Technology (Software Development)	
CST-244 WEB APPLICATIONS TECHNOLOGIES	5
(iii) Information Technology (Business Applications)	
BSM-242 INTERNATIONAL HUMAN RESOURCES MANAGEMENT	5
(c) Electives for all Specialisations	**(5)**
ONE from:	
ACF-246 FUNDAMENTALS OF MANAGEMENT ACCOUNTING	5
BSM-242 INTERNATIONAL HUMAN RESOURCES MANAGEMENT	5
BSM-249 MARKETING IN THE DIGITAL ENVIRONMENT	5
CST-244 WEB APPLICATIONS TECHNOLOGIES	5
CST-245 OPERATIONS RESEARCH	5
CST-246 INTRODUCTION TO CYBER SECURITY	5
CST-247 COLLABORATION, TEAMWORK AND PROFESSIONALISM IN THE IT INDUSTRY	5
PSY-227 WORK AND ORGANISATIONAL PSYCHOLOGY	5
	Total: 30 ECTS

5

YEAR 3
Semester 5

SUBJECTS*	ECTS
(a) Core for all Specialisations	**(10)**
CST-350 MOBILE APPLICATION DEVELOPMENT	5
CST- 351 CLOUD COMPUTING	5
(b) Core Specialisation	**(10)**
(i) Information Technology (System and Networks Technologies)	
CST-352 COMPUTER NETWORKING II	5
CST-353 COMPUTER GRAPHICS AND IMAGE PROCESSING	5
(ii) Information Technology (Software Development)	
CST-354 COMPUTER ARCHITECTURE I	5
CST-355 SOFTWARE DEVELOPMENT WITH AGILE SCRUM	5
(iii) Information Technology (Business Applications)	
CST-356 COMPUTATIONAL INTELLIGENCE IN BUSINESS, ECONOMICS AND FINANCE	5
CST-357 MANAGING REQUIREMENTS	5
(c) Electives for all Specialisations	**(10)**
ONE or TWO from:	
ACF-356 BUSINESS FINANCE I	5
CST-352 COMPUTER NETWORKING II	5
CST-353 COMPUTER GRAPHICS AND IMAGE PROCEESING	5
CST-354 COMPUTER ARCHITECTURE I	5
CST-355 SOFTWARE DEVELOPMENT WITH AGILE SCRUM	5
CST-356 COMPUTATIONAL INTELLIGENCE IN BUSINESS, ECONOMICS AND FINANCE	5
CST-357 MANAGING REQUIREMENTS	5
CST-357 COMPUTING IN THE CLASSROOM	5
CST-358 ETHICAL HACKING	5
	Total: 30 ECTS

* A core subject for one specialisation can also be available as elective for the other
  Specialisation.

Semester 6

SUBJECTS	ECTS
(a) Core for all Specialisations	**(10)**
CST-360 SOFTWARE ENGINEERING II	5
CST-361 INTRODUCTION TO PROGRAMMING USING PYTHON	5
(b) Core Specialisation	**(10)**
(i) Information Technology (System and Networks Technologies)	
CST-362 THE INTERNET OF THINGS: ARCHITECTURE AND APPLICATIONS	5
CST-363 INTRODUCTION TO QUANTUM COMPUTING AND QUANTUM CRYPTOGRAPHY	5
(ii) Information Technology (Software Development)	
CST-364 COMPUTER SECURITY AND CRYPTOGRAPHY	5
CST-365 ARTIFICAL INTELLIGENCE	5
(iii) Information Technology (Business Applications)	
BSM-363 MANAGING BUSINESS OPERATIONS	5
CST-366 BIG DATA AND BUSINESS MODELS	5
(c) Electives for all Specialisations	**(10)**
ONE or TWO from:	
ACF-366 INTRODUCTION TO CORPORATE FINANCE AND FINANCIAL INSTRUMENTS	5
BSM-363 MANAGING BUSINESS OPERATIONS	5
CST-362 THE INTERNET OF THINGS: ARCHITECTURE AND APPLICATIONS	5
CST-363 INTRODUCTION TO QUANTUM COMPUTING AND QUANTUM CRYPTOGRAPHY	5
CST-364 COMPUTER SECURITY AND CRYPTOGRAPHY	5
CST-365 ARTIFICAL INTELLIGENCE	5
CST-366 BIG DATA AND BUSINESS MODELS	5
CST-367 PLACEMENT TRAINING	5
CST-368 DEVOPS FOUNDATION	5
PSY-421 WORK PSYCHOLOGY FOR CAREER SUCCESS	5
	Total: 30 ECTS

* **A core subject for one specialisation can also be available as elective for the other**
 Specialisation.

YEAR 4
Semester 7

SUBJECTS*	ECTS
(a) Core for all Specialisations	**(20)**
CST-470 PROJECT MANAGEMENT	5
CST-471 DISTRIBUTED SYSTEMS	5
CST-472 ADVANCED PROGRAMMING USING PYTHON	5
CST-473 INDIIVIDUAL PROJECT I	5
(b) Core Specialisation	**(5)**
(i) Information Technology **(**System and Networks Technologies**)**	
CST-474 NETWORK SECURITY	5
(ii) Information Technology (Software Development)	
CST-475 ADVANCED CHALLENGES IN THE WEB TECHNOLOGIES	5
(iii) Information Technology (Business Applications)	
CST-476 DATABASE MANAGEMENT AND ADMINISTRATION	5
(c) Electives for all Specialisations **ONE from:**	**(5)**
CST-474 NETWORK SECURITY	5
CST-475 ADVANCED CHALLENGES IN THE WEB TECHNOLOGIES	5
CST-476 DATABASE MANAGEMENT AND ADMINISTRATION	5
CST-477 DATA MINING AND KHOWLEDGE DISCOVERY	5
CST-478 INTRODUCTION TO INTELLIGENT SYSTEMS	5
CST-479 GRAPHICS AND COMPUTER VISION	5
	Total: 30 ECTS

* **A core subject for one specialisation can also be available as elective for the other Specialisation.**

Semester 8

SUBJECTS*	ECTS
(a) Core for all Specialisations	**(20)**
CST-480 INFORMATION RETRIEVAL	5
CST-481 INFORMATION SECURITY MANAGEMENT	5
CST-482 SYSTEMS VERIFICATION	5
CST-483 INDIVIDUAL PROJECT II	5
(b) Core Specialisation	**(5)**
(i) Information Technology **(System and Networks Technologies)**	
CST-484 MOBILE SYSTEMS	5
(ii) Information Technology (Software Development)	
CST-485 DIGITAL INNOVATIONS TRANSFORMING HEALTHCARE	5
(iii) Information Technology (Business Applications)	
CST-486 NEW PRODUCT DEVELOPMENT AND INNOVATION	5
(c) Electives for all Specialisations **ONE from:**	**(5)**
CST-484 MOBILE SYSTEMS	5
CST-485 DIGITAL INNOVATIONS TRANSFORMING HEALTHCARE	5
CST-486 NEW PRODUCT DEVELOPMENT AND INNOVATION	5
CST-487 CONCURRENCY	5
CST-488 TECHNOLOGY STRATEGY AND INNOVATION	5
CST-489 ROBOTICS I	5
PRL-420 BUSINESS ETHICS AND LEADERSHIP	5
	Total: 30 ECTS

*** A core subject for one specialisation can also be available as elective for the other
  Specialisation.**