MODULE SPECIFICATION

Name of Module		Introduction to Computer Systems					
Parent School/Dept		**Computer Science/Information Systems**					
Programme(s) where module is offered		BSc Computer Science with Electrical Engineering; BSc Computer Science with Economics; BSc Computer Science with Business; BSc Computer Science with International Relations; BSc Computer Science with Political Science; BSc Information Systems with Electrical Engineering; BSc Information Systems with Economics; BSc Information Systems with Business; BSc Information Systems with International Relations; BSc Information Systems with Political Science;					
Status (core, option, free choice)		Core		**Pre-Requisite Modules or Qualifications**		None	
FHEQ Level	4	**Unit Value**	8 ECTS	**Module Code**	CS120	**Module coordinator**	Emir Ganic
Semester taught		Autumn		**Applicable From**		2016	

Educational Aims of the Module

The overall aim of this module is to introduce students to the fundamental concepts and principles of computer and information systems. In particular, it introduces the basic Information Technology (IT) concepts such as hardware, software, data, telecommunications and networks. It also provides an understanding of the role and value of Information Systems (IS) in business, describes different types of IS and their functionalities, and the methods and tools used to develop and manage Computer and Information Systems in organizations. Furthermore, this module also takes in consideration business prospective of performing e business transactions. It introduces students about different business revenue models, selling strategies and payment options that need to be considered in e-business environment.

Module Outline/Syllabus

- An Introduction to Information Systems
- Information Systems in Organizations
- Hardware: Input, Processing and Output Devices
- Software: Systems and Application Software
- Database Systems, Data Centers and Business Intelligence
- Telecommunications and Networks
- The Internet, Web, Intranets and Extranets
- Electronic and Mobile Commerce
- Enterprise Systems
- Information and Decision Support Systems
- Knowledge Management and Specialized Information Systems
- Systems Development
- Systems Investigations and Analysis
- Systems Design, Implementation and Maintenance
- Green Computing
- E-business components

Student Engagement Hours

Type	**Number per Term**	**Duration**	**Total Time**
Lectures	30	2 hours	60 hours
Laboratory sessions	15	2 hours	30 hours
		Total Guided/Independent Learning Hours	**110**
		Total Contact Hours	**90**
		Total Engagement Hours	**200**

Assessment Method Summary				
Type	**Number Required**	**Duration / Length**	**Weighting**	**Timing/Submission Deadline**
Test	3	45 minutes	10%	Weeks 4, 8, 12
Project (group)	1	2,000 words	10%	Semester-long
Lab assignment	10	90 minutes	10%	Semester-long
Mid-term exam	1	90 minutes	20%	Week 9
Final Exam	1	180 minutes	50%	End of semester

Module Outcomes		
Intended Learning Outcomes: 1. Understanding of basic hardware, software and network components. 2. Understanding of data representation. 3. Understanding of types of computer and information systems. 4. Introduction to computer and information system development lifecycle. 5. Introduction to security and ethics in computer and information systems. 6. Understand the meaning and purpose of green computing.	→	**Teaching and Learning Strategy:** 1. Lectures on module material. 2. Practical demonstration of hardware and network components during lectures or labs. 3. Laboratory sessions with appropriate tolls and practical problems and exercises. 4. Group projects enabling students to develop communication and research skills and apply what they have learnt in the module to a practical problem.
	→	**Assessment Strategy** 1. Test (ILO:1-3) 2. Mid-term exam (ILO:1-3) 3. Final exam (ILO:1-6) 4. Lab assignment (ILO:4,5) 5. Project (ILO:1-6)
Practical Skills 1. Ability to identify hardware components and put together computer systems. 2. Ability to analyse a given practical problem and suggest the right information system based on the required performance parameters. 3. Ability to analyse business processes and their information system needs.	→	**Teaching and Learning Strategy:** 1. Lectures on module material. 2. Practical demonstrations. 3. Laboratory sessions
	→	**Assessment Strategy** 1. Lab assignment (ILO:3) 2. Project (ILO:1-3)
Transferable Skills 1. Communication skills 2. Presentation skills 3. Team work: ability to collaborate and solve problems in team projects. 4. Research and report writing skills	→	**Teaching and Learning Strategy:** 1. In-class communication 2. Reading and exercises during laboratory sessions 3. Reading and in class practice 4. Participation in group project
	→	**Assessment Strategy** 1. Test (ILO:4) 2. Mid-term exam (ILO:4) 3. Final exam (ILO:4) 4. Lab assignment (ILO:2-4) 5. Project (ILO:1-4)

Key Texts and/or other learning materials
Set Text

- Ralph Stair, George Reynolds, (2015) Principles of Information Systems, second Edition. Cengage Learning

Supplementary Materials

- Wallace, P., (2015), Introduction to Information Systems, Pearson
- Rainer, K., et al., (2014), Introduction to Information Systems, International Student Edition, Wiley
- Brookshear, G., Brylow, D., (2014), Computer Science: An Overview, Global Edition, Pearson
- Laudon, K., Traver, C., (2019) E-commerce 2019: Business, Technology, Society. 15th Edition. Pearson
- Information Systems and e-Business Management (Journal), (2019), http://www.springer.com/business+%26+management/business+information+systems/journal/10257 (Accessed 16th July 2019)
- Additional Reading to be advised

Please note: This specification provides a concise summary of the main features of the module and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module and programme can be found in the departmental or programme handbook. The accuracy of the information contained in this document is reviewed annually by the University of Buckingham and may be checked by the Quality Assurance Agency.

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