

BUSINESS INFORMATION SYSTEMS

General description of the programme

Qualification awarded	Professional Bachelor in Business Information Systems
Level of qualification	First
Specific admission requirements	Students must normally satisfy the minimum entry criteria for admission of students at IUC. Students whose native language is not English must provide evidence/certificate that they have at least IELTS 6.0 or equivalent. If students do not provide such evidence they hold an English language entry exam at IUC and the mark is translated into IELTS score. For entering the third year, students must have successfully completed year one and two at IUC.
Specific arrangements for recognition of prior (formal, non-formal and informal)	IUC recognizes periods of study of student transferring from other universities or colleges. Credits are recognized by a commission on the basis of the academic transcript provided by the student.
Qualification requirements and regulations	None
Profile of the programme	The programme in Business Information Systems is part of International University College programmes. Specialty education emphasizes on interdisciplinary and innovative educational methods, which helps establishing a beneficial, liberal education environment and encourage students to be to more creative. Students have the possibility to study one or two semesters in partner's universities abroad, which cooperates with their intercultural competence and competitive power improvement.
Key learning outcomes	<p>Programme outcomes</p> <p>A. The programme enables students to develop and demonstrate knowledge, skills, and attitudes in the following areas:</p> <p style="padding-left: 40px;">Knowledge and understanding</p> <ul style="list-style-type: none"> • A core of academic knowledge, understanding and technical skills related to Information Systems and the business computing environment. • Understanding of the behavioural aspects of individuals in organisations • Appreciation of the role of technology in information systems development • Appreciation of management theories and practices. • Awareness of the broader contextual, legal and ethical

issues influencing management in a business computing environment.

Skills and other attributes

1. Appreciate the significance of personal and professional managerial development
2. Apply relevant theory to practical management techniques
3. Analyse relevant research findings
4. Select and use appropriate techniques for development of information systems
5. Demonstrate analytical skills appropriate to business analysis and decision-making
6. Communicate effectively within a multi-disciplinary context
7. Utilise appropriate knowledge and skills to reflect upon and analyse work-based problems and practice.
8. Accept responsibility for their own learning and development
9. Perform appropriate mathematical computations for problem solving
10. Demonstrate competent research skills
11. Work autonomously and as part of a team.

B. Teaching/Learning Methods and Assessments

Lectures

Formal lectures are used for the delivery of core material and establishing a framework for the module against which other material can be set. Visiting lecturers from industry are invited to participate in the teaching programme.

Tutorials

Tutorial sessions are used in two ways. To expand upon material delivered in lectures, through an enquiry-driven problem solving approach, and to provide remedial work to overcome any deficiencies in students' background knowledge.

Case Studies

Case studies are employed in a range of modules. This strategy involves presenting students with realistic and complex problems they might not otherwise encounter, and requires them to synthesise or present their own solution orally or in writing.

Self-Managed Practical Work

In these classes students are able to practice and refine their

	<p>skills in a supportive environment where feedback is available from the module tutors.</p> <p>Seminars This strategy is used to provide students with experience in presentational skills as well as providing staff with a method of assessing student-centred learning. Visiting lecturers from industry are invited to participate in the teaching programme.</p> <p>Assessment Written examinations, essays, time constrained exercises, practical assessment, presentations, research reports, and project/dissertation.</p>
Occupational profiles of graduates with examples	<p>Students graduated at Business Information Technologies specialty can occupy leader positions in different trade, productive, bank, insurance, markets, consulting, transport, marketing and other organizations. They can occupy positions as assistant in Information technologies sphere, also as an expert in Information technologies department. Their practical preparation allows them to start even a small business in different economic spheres.</p>
Access to further studies	Yes

Course structure diagram with credits (60 per full-time academic year)

No	Code	Module / Subject	ECTS
1	2	3	12
Year One			
First semester			
Compulsory modules			
	BIS01	Module: Software development fundamentals	4,00
	BIS011	Software development fundamentals	4,00
	BIS02	Module: Economics and business environment	7,50
	BIS021	Economics	5,50
	BIS022	Business environment	2,00
	BIS03	Module: Marketing and business communications	7,50
	BIS031	Principles of marketing	5,00
	BIS032	Business communications	2,50
	BIS07	Module: Foreign languages I	7,50
	BIS0711	English for business and management	4,00
	BIS0712	Second foreign language (English/German/French/Spanish)	3,50
Total			26,50
Second semester			
Compulsory modules			
	BIS04	Module: Research and Statistics	7,50
	BIS041	Research and Statistics	4,50
	BIS042	Information technologies	3,00
	BIS05	Module: Accounting and finance	7,50
	BIS051	Introduction to accounting	5,00
	BIS052	Introduction to finance	2,50
	BIS06	Module: Management	7,50
	BIS061	Business applications	4,00
	BIS062	Management	3,50
	BIS07	Module: Foreign languages I	7,50
	BIS0711	English for business and information systems	4,00
	BIS0712	Second foreign language (English/German/French/Spanish)	3,50
Total			30,00
Summer Internship I			
	BIS08	Module: Summer internship I	15,00
	BIS081	Summer internship I	15,00
Total			15,00
Year Two			

Third semester			
Compulsory modules			
BIS09	Module: Foreign Languages II		7,50
BIS0911	English for information systems		4,00
BIS0921	Other Language (English/German/French/Spanish)		3,50
BIS10	Module: Human resource management and organisational behaviour		7,50
BIS101	Organisational behaviour		3,50
BIS102	Human resource management		4,00
BIS13	Module: Marketing communications and marketing research		7,50
BIS131	Marketing communications		4,00
BIS132	Marketing research		3,50
BIS11	Module: Systems design		7,50
BIS111	Systems analysis, development and design		3,50
BIS112	Databases development and applications		4,00
Total			30,00
Fourth semester			
Compulsory modules			
BIS12	Module: E-business		7,50
BIS121	E-business		2,50
BIS122	Multimedia and internet		2,50
BIS123	Information systems legislation		2,50
Elective specialisation modules - select 1 of 3			
BIS14	Module: Multimedia		7,50
BIS141	Multimedia 2		7,50
BIS14	Module: Networking		7,50
BIS142	Networking		7,50
BIS14	Module: Information systems security		7,50
BIS143	Information systems security		7,50
Elective modules			
BIS15	Module: Entrepreneurship		7,50
BIS151	Entrepreneurship		3,50
BIS152	Project management		2,00
BIS153	Managerial accounting		2,00
BIS15	Module: Business planning		7,50
BIS151	Business planning		3,50
BIS152	Project management		2,00
BIS153	Financial planning		2,00
Compulsory modules			
BIS09	Module: Foreign Languages II		7,50
BIS0912	English for academic writing		4,00
BIS0922	Other Language (English/German/French/Spanish)		3,50
Total			30,00
Summer Internship II			

BIS16	<i>Module: Summer internship II</i>	15,00
BIS161	Summer internship II	15,00
Total		15,00

Year Three		
Fifth and Sixth semester		
Compulsory modules		
BIS17	<i>Module: Information Systems in Business</i>	10,00
BIS18	<i>Module: Information Systems Project Management</i>	10,00
BIS19	<i>Module: Professional and Ethical Issues in Information Systems</i>	10,00
BIS-DP	<i>Module: Information Systems Diploma project</i>	20,00
BIS-DP1	Diploma project seminar	5,00
BIS-DP2	English for academic writing	5,00
BIS-DP3	Diploma project *	10,00
Elective specialisation modules - select 1 of 3		
BIS20	<i>Module: Multimedia 3</i>	10,00
BIS21	<i>Module: Network and Internet Security</i>	10,00
BIS22	<i>Module: Data security and forensics</i>	10,00
Total		60,00
Total for the 3 years of study		210,00

Examination regulations, assessment and grading

Methods of delivery will include lectures supported by seminars, workshops, demonstrations, role-play, practical courses and case study.

Innovative methodology will be used where applicable and would include field studies and work based learning and consultancy exercises.

The module leaders will as applicable utilise guest speakers from both the academic and business world to enhance the learning experience of the students and ensure currency within the curriculum.

The learning outcomes described in the previous section are assessed within the module through a variety of methods, including examinations, coursework, essays, presentations, assessed practical courses, reports and project work.

The matching of learning outcomes and assessment methods is under constant review by module leaders, Exams and Quality

	<p>Commission at IUC, external Examiners.</p> <p>A strong emphasis upon work based learning, experiential learning and work based assessment will be a fundamental characteristic of the Year One of the programme.</p>
Graduation requirements	All exams from the third years need to be taken.
Mode of study (full-time, part-time, e-learning...),	Full-time
Programme director or equivalent.	Vasil Donev Email: academic@vumk.eu

Description of the individual course units

Course unit title	Business Communications	
Course unit code	BIS032	
Type of course unit (compulsory, optional)	Compulsory	
Level of course unit (e.g. first, second or third)	First	
Year of study (if applicable)	First year	
Semester/trimester when the course unit is delivered	First semester	
Number of ECTS credits allocated	2.5 ECTS	
Name of lecturer(s)	Nedka Dimitrova	
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Apply their knowledge for communication in business environment • Be able to lead discussions in working environment • Be able to present their verbal and nonverbal communication skills • Be able to listen and deliver working messages 	
Mode of delivery (face-to-face, distance learning)	Face-to-face	
Prerequisites and co-requisites	None	
Recommended optional programme components	n/a	
Course contents	<ul style="list-style-type: none"> • Essence and significance of business communications • Skills of listening and talking • Effective listening and presenting • Nonverbal communications • Strategies for written communications. Correspondence • Distance conversations • Organization communications • Business etiquette 	
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Roebuck, D. (2002) Improving Business Communication skills. Kennesaw State University • Janasz, S.C., Dowd K, O., Schneider B.Z. (2002) Interpersonal Skills in Organizations. McGraw Hill <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Wayne, F. S., Dauwalder, D. P. (1994) Communicating in business. An Action-Oriented Approach. Illinois: Burr Ridge 	
Planned learning activities and teaching methods	Lectures	10 hours
	Seminars	15 hours

	Student Centred Learning	40 hours
	Total hours	65 hours
Assessment methods and criteria	Written Examination 1.5 hours	50%
	Presentation of a project	50%
Language of instruction	English	
Work placements	n/a	

Course unit title	Business environment
Course unit code	BIS022
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year
Semester/trimester when the course unit is delivered	First semester
Number of ECTS credits allocated	2.0 ECTS
Name of lecturer(s)	Ivelina Yoveva
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Prepare analysis of the business environment of a business • Distinguish the different sources of investment for new businesses • Understand the different forms of ownership for business • Articulate the advantages and disadvantages of the different forms of ownership • Know the European sources of funding for businesses
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	None
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Introduction to Business Environment • Forms of ownership • Social responsibility of business • Government policy and regulation regarding business • Labor force and unions • Types of investments, European funds • Banking and insurance system • Business associations

Recommended or required reading	Required Reading/Learning Materials <ul style="list-style-type: none"> Worthington, I. and C. Britton (2003) The Business Environment. Prentice Hall 		
Planned learning activities and teaching methods	Lectures		5 hours
	Seminars		20 hours
	Student Centred Learning		25 hours
	Total hours		50 hours
Assessment methods and criteria	Coursework	3000 words	100%
Language of instruction	English		
Work placements	n/a		

Course unit title	Business Planning
Course unit code	BIS151
Type of course unit (compulsory, optional)	Optional
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Fourth semester
Number of ECTS credits allocated	3.5 ECTS
Name of lecturer(s)	Robert Stevenson
Learning outcomes of the course unit	<ul style="list-style-type: none"> Write a business plan Defend a business plan Know how to start their own business Know where to seek funding Know the pitfalls of business planning
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	Economics and business environment Marketing and business communications Management Human resource management and organisational behaviour Marketing communications and marketing research
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> Analysis of the external environment Analysis of the internal environment SWOT analysis and confrontation matrix Setting goals and objectives

	<ul style="list-style-type: none"> • Strategies • Marketing plan • Financial plan • Human resource plan • Operations plan • Control 										
Recommended or required reading	Required Reading/Learning Materials <ul style="list-style-type: none"> • Stutely, R. (2007) The Definitive Business Plan: The fast track to intelligent business planning for executives and entrepreneurs. Financial times/Prentice hall 										
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>15 hours</td> </tr> <tr> <td>Seminars</td> <td>15 hours</td> </tr> <tr> <td>Consultations</td> <td>10 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>50 hours</td> </tr> <tr> <td>Total hours</td> <td>90 hours</td> </tr> </table>	Lectures	15 hours	Seminars	15 hours	Consultations	10 hours	Student Centred Learning	50 hours	Total hours	90 hours
Lectures	15 hours										
Seminars	15 hours										
Consultations	10 hours										
Student Centred Learning	50 hours										
Total hours	90 hours										
Assessment methods and criteria	Coursework-business plan with PowerPoint presentation and defence 4000 words 100%										
Language of instruction	English										
Work placements	n/a										

Course unit title	E-business
Course unit code	BIS121
Type of course unit (compulsory, optional)	Optional
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Fourth semester
Number of ECTS credits allocated	3.5 ECTS
Name of lecturer(s)	Silvena Dencheva
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Identify different e-business models • Be able to select the proper e-business model for their company • Have developed an e-marketing strategy for a company • Know how to use different reservation systems • Identify the role of Internet on hotel's marketing and management
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	Management Marketing and business communications

	Marketing communications and marketing research								
Recommended optional programme components	n/a								
Course contents	<ul style="list-style-type: none"> • Introduction to e-commerce • Evolution of e-business • Consumer behaviour and Internet • Internet technologies • E-marketing and e-branding • Internet as a communication channel • Internet and the corporate strategies • Internet-based business models • Customer relationship management and the Internet 								
Recommended or required reading	Required Reading/Learning Materials <ul style="list-style-type: none"> • Chaffey, D., R. Mayer, K. Johnston, F. Ellis-Chadwick (2003) Internet marketing: Strategy, implementation and practice. Financial Times/ Prentice Hall 								
Planned learning activities and teaching methods	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>Lectures</td> <td style="text-align: right;">15 hours</td> </tr> <tr> <td>Seminars</td> <td style="text-align: right;">35 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td style="text-align: right;">50 hours</td> </tr> <tr> <td>Total hours</td> <td style="text-align: right;">100 hours</td> </tr> </table>	Lectures	15 hours	Seminars	35 hours	Student Centred Learning	50 hours	Total hours	100 hours
Lectures	15 hours								
Seminars	35 hours								
Student Centred Learning	50 hours								
Total hours	100 hours								
Assessment methods and criteria	Written assignment with PowerPoint presentation 3000 words 100%								
Language of instruction	English								
Work placements	n/a								

Course unit title	Economics
Course unit code	BIS021
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year
Semester/trimester when the course unit is delivered	First semester
Number of ECTS credits allocated	5.5 ECTS
Name of lecturer(s)	Maria Neycheva
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Graph supply and demand and other curves • Use graphical and math analysis with economic problems • Find market equilibrium • Find consumer equilibrium • Analyze market structures

	<ul style="list-style-type: none"> • Find comparative advantage • Calculate GDP • Calculate deflator, CPI • Calculate unemployment rate • Understand macroeconomic analysis • Know the functions of the central bank • Calculate maximum money creation 								
Mode of delivery (face-to-face, distance learning)	Face-to-face								
Prerequisites and co-requisites	None								
Recommended optional programme components	n/a								
Course contents	<ul style="list-style-type: none"> • Production Possibilities Frontier, opportunity Costs • Supply and Demand • Elasticity of Supply and Demand • Consumer Equilibrium • Utility • Market Structures • Gross Domestic Product • Inflation • Unemployment • Aggregate Demand and Supply 								
Recommended or required reading	O'Sullivan, A., S. Sheffrin and S. Perez (2007) Economics: Principles and Applications and Tools with MyEconLab and Ebook, Pearson								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>30 hours</td> </tr> <tr> <td>Seminars</td> <td>35 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>75 hours</td> </tr> <tr> <td>Total hours</td> <td>140 hours</td> </tr> </table>	Lectures	30 hours	Seminars	35 hours	Student Centred Learning	75 hours	Total hours	140 hours
Lectures	30 hours								
Seminars	35 hours								
Student Centred Learning	75 hours								
Total hours	140 hours								
Assessment methods and criteria	<table> <tr> <td>Coursework</td> <td>3000 words</td> <td>50%</td> </tr> <tr> <td>Examination</td> <td>2 hours</td> <td>50%</td> </tr> </table>	Coursework	3000 words	50%	Examination	2 hours	50%		
Coursework	3000 words	50%							
Examination	2 hours	50%							
Language of instruction	English								
Work placements	n/a								

Course unit title	Entrepreneurship
Course unit code	BIS151
Type of course unit (compulsory, optional)	Optional
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year

Semester/trimester when the course unit is delivered	Fourth semester										
Number of ECTS credits allocated	3.5 ECTS										
Name of lecturer(s)	Robert Stevenson										
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Write a business plan • Defend a business plan • Know how to start their own business • Know where to seek funding • Use the Chicago Method to calculate company value • Know the pitfalls of business creation 										
Mode of delivery (face-to-face, distance learning)	Face-to-face										
Prerequisites and co-requisites	<p>Economics and business environment Marketing and business communications Management Human resource management and organisational behaviour Marketing communications and marketing research</p>										
Recommended optional programme components	n/a										
Course contents	<ul style="list-style-type: none"> • Introduction. What is Entrepreneurship? Brief history. • Creative Destruction-Joseph Schumpeter revisited. The role of entrepreneurs in society's economic development. • The Entrepreneurial Life. • Opportunity Recognition and Selection. Methods of entrepreneurial analysis. • Entrepreneurial strategies. Traditional and modern. • Competitive advantage. • Forms of entrepreneurship: starting a business, obtaining somebody else's business, team entrepreneurship, entrepreneurial corporate management. • Managing People. • Social responsibility and entrepreneurial culture. Entrepreneurial culture in Bulgaria. • Lifecycle of an enterprise. • Financing options and analysis. Venture Capital. • Components of a business plan. 										
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Barringer, Bruce R., and R. Duane Ireland (2007) Entrepreneurship: Successfully Launching New Ventures. Pearson Prentice-Hall 										
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>15 hours</td> </tr> <tr> <td>Seminars</td> <td>15 hours</td> </tr> <tr> <td>Consultations</td> <td>10 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>50 hours</td> </tr> <tr> <td>Total hours</td> <td>90 hours</td> </tr> </table>	Lectures	15 hours	Seminars	15 hours	Consultations	10 hours	Student Centred Learning	50 hours	Total hours	90 hours
Lectures	15 hours										
Seminars	15 hours										
Consultations	10 hours										
Student Centred Learning	50 hours										
Total hours	90 hours										

Assessment methods and criteria	Coursework-business plan with PowerPoint presentation and defence 4000 words 100%
Language of instruction	English
Work placements	n/a

Course unit title	Financial Planning
Course unit code	BIS153
Type of course unit (compulsory, optional)	Optional
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Fourth semester
Number of ECTS credits allocated	2.0 ECTS
Name of lecturer(s)	Stanislav Ivanov
Learning outcomes of the course unit	<ul style="list-style-type: none"> • The challenges that face a financial planner • Financial risk management • Select from among the various financial instruments, those most appropriate for a personal financial portfolio for clients at differing stages in their life cycle; • Show how insurance strategies contain portfolio risks. • Explain the differences between various asset classes; • Describe the regulatory framework under for financial planners and the impact of tax systems
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	Economics and Business Environment Accounting and Finance
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Pensions • Retirement accounts • Insurance • Investments • Options (Real and Financial) • Different Financial Instruments • Portfolio Optimization
Recommended or required reading	Required Reading/Learning Materials Brigham, E. (2004) Financial Management: Theory and Practice, South-Western College Pub. Petty, J. W., A. J. Keown, D. F. Scott, J. D. Martin. Basic

	financial management. Prentice Hall, current edition
Planned learning activities and teaching methods	Lectures and seminars 25 hours Student Centred Learning 25 hours Total hours 50 hours
Assessment methods and criteria	Coursework 2000 words 100%
Language of instruction	English
Work placements	n/a

Course unit title	Human Resource Management
Course unit code	BIS102
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Third semester
Number of ECTS credits allocated	4.0 ECTS
Name of lecturer(s)	Silvena Dencheva
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Acquire basic knowledge, models and approaches for human resource management • Be able to apply technical skills connected with selection, recruitment, analysis and evaluation of human resources • Have participated in a management games and have skills for proper behaviour within an organisation • Know about the different factors affecting the management of human resources in the company • Be able to prepare a strategy and a programme for motivation of human resources
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	Economics and Business environment Introduction to management and tourism Marketing and Business communications
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Introduction in human resource management theory • Strategic human resource management • Human resource management and the labour market

	<ul style="list-style-type: none"> • Human resource planning • Recruitment and selection • Managing equality and diversity • Learning and development • Management development • The employee relationship and employee rights at work • Establishing the terms and conditions of employment • Reward and performance management • Employee participation and involvement • International HRM 									
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Edwards, T., C. Rees (2006) International human resource management. Prentice Hall • Beardwell, J., T. Claydon (2007) Human resource management. Prentice Hall 									
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>15 hours</td> </tr> <tr> <td>Seminars</td> <td>35 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>50 hours</td> </tr> <tr> <td>Total hours</td> <td>100 hours</td> </tr> </table>	Lectures	15 hours	Seminars	35 hours	Student Centred Learning	50 hours	Total hours	100 hours	
Lectures	15 hours									
Seminars	35 hours									
Student Centred Learning	50 hours									
Total hours	100 hours									
Assessment methods and criteria	<table> <tr> <td>Written Examination</td> <td>2 hours</td> <td>50%</td> </tr> <tr> <td>Participation in management game</td> <td></td> <td>25%</td> </tr> <tr> <td>Current assessment</td> <td></td> <td>25%</td> </tr> </table>	Written Examination	2 hours	50%	Participation in management game		25%	Current assessment		25%
Written Examination	2 hours	50%								
Participation in management game		25%								
Current assessment		25%								
Language of instruction	English									
Work placements	n/a									

Course unit title	Information Technologies
Course unit code	BIS042
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year
Semester/trimester when the course unit is delivered	Second semester
Number of ECTS credits allocated	3.0 ECTS
Name of lecturer(s)	Vasil Donev
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Know and apply methods for systematical planning, usage and evaluation of information • Work out and present their presentations through different media • Define operational systems • Work with MS Office applications
Mode of delivery (face-to-	Face-to-face

face, distance learning)									
Prerequisites and co-requisites	None								
Recommended optional programme components	n/a								
Course contents	<ul style="list-style-type: none"> • General presentation skills • Visual means – role, functions and design • Multimedia in business – role, function and design • Internet in business – role and functions • Computer and operational systems • MS Office applications – Word, Excel, PowerPoint 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Horch, John W. (2003) Practical guide to software quality management. Boston: Artech House • Boddy, D., A. Boonstra, G. Kenedy (2002) Managing information systems. An organisational perspective. Prentice Hall 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>10 hours</td> </tr> <tr> <td>Seminars</td> <td>25 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>40 hours</td> </tr> <tr> <td>Total hours</td> <td>75 hours</td> </tr> </table>	Lectures	10 hours	Seminars	25 hours	Student Centred Learning	40 hours	Total hours	75 hours
Lectures	10 hours								
Seminars	25 hours								
Student Centred Learning	40 hours								
Total hours	75 hours								
Assessment methods and criteria	<table> <tr> <td>Written Examination 1.5 hours</td> <td>50%</td> </tr> <tr> <td>Course project 1500 words</td> <td>50%</td> </tr> </table>	Written Examination 1.5 hours	50%	Course project 1500 words	50%				
Written Examination 1.5 hours	50%								
Course project 1500 words	50%								
Language of instruction	English								
Work placements	n/a								

Course unit title	Introduction to Accounting
Course unit code	BIS051
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year
Semester/trimester when the course unit is delivered	Second semester
Number of ECTS credits allocated	5.0 ECTS
Name of lecturer(s)	Ivelina Yoveva
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Know and apply methods for double-entry accounting rule • Work out main financial statements – Balance Sheet, Income Statement, Cash Flow Statement • Work out bookkeeping in accounting • Work out financial result for a given accounting period

Mode of delivery (face-to-face, distance learning)	Face-to-face								
Prerequisites and co-requisites	Economics and Business Environment								
Recommended optional programme components	n/a								
Course contents	<ul style="list-style-type: none"> • Introducing the world of accounting • Accounting in context /accounting as the basis for business decisions/ • Balance sheet • Income statement • Cash flow statement • Using accounts • The bookkeeping base of accounting 								
Recommended or required reading	Required Reading/Learning Materials <ul style="list-style-type: none"> • Meigs, Walter, Accounting – the basis for business decisions, McGraw-Hill Book Company, current edition Recommended Reading/Learning Materials <ul style="list-style-type: none"> • Sundem, Horngren, Elliott, Introduction to Financial Accounting, current edition 								
Planned learning activities and teaching methods	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Lectures</td> <td style="text-align: right;">15 hours</td> </tr> <tr> <td>Seminars</td> <td style="text-align: right;">45 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td style="text-align: right;">65 hours</td> </tr> <tr> <td>Total hours</td> <td style="text-align: right;">125 hours</td> </tr> </table>	Lectures	15 hours	Seminars	45 hours	Student Centred Learning	65 hours	Total hours	125 hours
Lectures	15 hours								
Seminars	45 hours								
Student Centred Learning	65 hours								
Total hours	125 hours								
Assessment methods and criteria	Written Examination 2 hours 100%								
Language of instruction	English								
Work placements	n/a								

Course unit title	Introduction to Finance
Course unit code	BIS052
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year
Semester/trimester when the course unit is delivered	Second semester
Number of ECTS credits allocated	2.5 ECTS
Name of lecturer(s)	Stanislav Ivanov
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Know and apply methods for evaluating time value of money • Manage financially small enterprise by using available

	resources in an optimal way <ul style="list-style-type: none"> • Define the return on investments in long-term assets • Define the risk within financial investments • Be able to apply capital budgeting techniques • Be able to make basic financial analysis of a company 								
Mode of delivery (face-to-face, distance learning)	Face-to-face								
Prerequisites and co-requisites	Economics and Business Environment								
Recommended optional programme components	n/a								
Course contents	<ul style="list-style-type: none"> • Introduction to finance • The financial system • Time value of money • Capital budgeting • Financial analysis • Loan amortization • Long-term financing • Short-term financing • Leasing 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Ross, S. A., R. W. Westerfield, J. Jaffe. Corporate finance. Irwin McGraw-Hill, 5th ed. • Petty, J. W., A. J. Keown, D. F. Scott, J. D. Martin. Basic financial management. Prentice Hall, current edition <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Pinches, G. E. (1990) Essentials of financial management. New York: HarperCollins Publishers 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>15 hours</td> </tr> <tr> <td>Seminars</td> <td>15 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>35 hours</td> </tr> <tr> <td>Total hours</td> <td>65 hours</td> </tr> </table>	Lectures	15 hours	Seminars	15 hours	Student Centred Learning	35 hours	Total hours	65 hours
Lectures	15 hours								
Seminars	15 hours								
Student Centred Learning	35 hours								
Total hours	65 hours								
Assessment methods and criteria	Written Examination 2 hours 100%								
Language of instruction	English								
Work placements	n/a								

Course unit title	Management
Course unit code	BIS062
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year

Semester/trimester when the course unit is delivered	Second semester	
Number of ECTS credits allocated	4.0 ECTS	
Name of lecturer(s)	Silvena Dencheva	
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Set priority managerial goals • Prepare analysis for the environment • Formulate business strategies and mechanisms for their fulfillment • Be able to prepare an organizational structure of a company • Know about different management functions 	
Mode of delivery (face-to-face, distance learning)	Face-to-face	
Prerequisites and co-requisites	None	
Recommended optional programme components	n/a	
Course contents	<ul style="list-style-type: none"> • Business organization elements • Organizational structure • Managerial process in business organizations • Development of managerial thought • Making decisions within business organizations – models and methods • Essence of managerial functions • Planning • Organizing • Directing • Controlling • Organization culture 	
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Mullins, L. J. Management and Organisational behaviour. Financial Times, current edition • Robbins, S., D. DeCenzo. Fundamentals of management. Prentice Hall, current edition <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Griffin, R W. Management, Houghton Mifflin company, current edition 	
Planned learning activities and teaching methods	Lectures	20 hours
	Seminars	20 hours
	Consultations	10 hours
	Student Centred Learning	50 hours
	Total hours	100 hours
Assessment methods and criteria	Written Examination 2 hours	70%
	Course work 1500-2000 words	30%
Language of instruction	English	

Work placements	n/a
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Course unit title	Managerial Accounting						
Course unit code	BIS153						
Type of course unit (compulsory, optional)	Optional						
Level of course unit (e.g. first, second or third)	First						
Year of study (if applicable)	Second year						
Semester/trimester when the course unit is delivered	Fourth semester						
Number of ECTS credits allocated	2.0 ECTS						
Name of lecturer(s)	Ivelina Yoveva						
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Be able to define and apply knowledge regarding variable and fixed costs • Be able to prepare budget financial statements • Be able to prepare schedule for CGM and CGS • Be able to define Break even quantities 						
Mode of delivery (face-to-face, distance learning)	Face-to-face						
Prerequisites and co-requisites	Accounting and Finance						
Recommended optional programme components	n/a						
Course contents	<ul style="list-style-type: none"> • Introduction in Managerial Accounting • Fixed and Variable Costs • Budgeting and main financial statements • Schedule for CGM • Schedule for CGS • Break even analysis quantities 						
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Horngren, C., G. Foster, S. Datar. Cost accounting – managerial emphasis. Prentice hall, current edition <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Garrison, R., E. Noreen (2000) Managerial Accounting. Irwin/McGraw-Hill 						
Planned learning activities and teaching methods	<table> <tr> <td>Lectures and seminars</td> <td>25 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>25 hours</td> </tr> <tr> <td>Total hours</td> <td>50 hours</td> </tr> </table>	Lectures and seminars	25 hours	Student Centred Learning	25 hours	Total hours	50 hours
Lectures and seminars	25 hours						
Student Centred Learning	25 hours						
Total hours	50 hours						
Assessment methods and criteria	Written Examination 2 hours 100%						
Language of instruction	English						

Work placements	n/a
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Course unit title	Marketing communications
Course unit code	BIS131
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Third semester
Number of ECTS credits allocated	4.0 ECTS
Name of lecturer(s)	Robert Stevenson
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Acquire basic knowledge, principles and approaches to marketing communications • Be able to analyze and make difference between the elements of marketing communications • Be able to integrate marketing communications elements • Be able to analyze the influence of marketing communications on sales • Be able to prepare a marketing communications campaign
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	Economics and business environment Management Marketing and business communications
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Introduction in marketing communications • Advertising • Public relations • Personal selling • Direct marketing • Integrated marketing communications • Influence of marketing communications on sales • Marketing communications budgeting • Marketing communications campaign • Marketing communications and the Internet
Recommended or required reading	Required Reading/Learning Materials <ul style="list-style-type: none"> • Smith Paul (2004) Marketing Communications – an integrated approach. Kogan Page Publisher

	<ul style="list-style-type: none"> • Kimmel, Allan (2005) Marketing Communications – new approaches, technologies and style. Oxford University Press. Recommended Reading/Learning Materials • Pickton, D., A. Broderick (2005) Integrated marketing communications. Harlow: Prentice Hall, 2nd ed. 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>15 hours</td> </tr> <tr> <td>Seminars</td> <td>35 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>50 hours</td> </tr> <tr> <td>Total hours</td> <td>100 hours</td> </tr> </table>	Lectures	15 hours	Seminars	35 hours	Student Centred Learning	50 hours	Total hours	100 hours
Lectures	15 hours								
Seminars	35 hours								
Student Centred Learning	50 hours								
Total hours	100 hours								
Assessment methods and criteria	<table> <tr> <td>Written Examination</td> <td>2 hours</td> <td>50%</td> </tr> <tr> <td>Course Project</td> <td>2000-2500 words</td> <td>50%</td> </tr> </table>	Written Examination	2 hours	50%	Course Project	2000-2500 words	50%		
Written Examination	2 hours	50%							
Course Project	2000-2500 words	50%							
Language of instruction	English								
Work placements	n/a								

Course unit title	Marketing research
Course unit code	BIS132
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Third semester
Number of ECTS credits allocated	3.5 ECTS
Name of lecturer(s)	Rumiana Konstantinova
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Be able to use methods for market research, for collecting information • Be able to conduct market research • Prepared a survey questionnaire • Analyse data with SPSS • Draw marketing conclusions on the basis of gathered information
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	Economics and business environment Marketing and business communications Research and statistics
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Introduction in Marketing Research • Methods for collecting information • Questionnaire design • Methods for analyzing information

	<ul style="list-style-type: none"> • Use of SPSS for analysis • Methods for conducting research • Types of marketing researches • Decision making based on the marketing researches 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Churchill, G, (1999) Marketing Research. Dryden Press <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Wrenn, B. (2001) Marketing Research: Text and Cases. The Haworth Press 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>10 hours</td> </tr> <tr> <td>Seminars</td> <td>30 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>50 hours</td> </tr> <tr> <td>Total hours</td> <td>90 hours</td> </tr> </table>	Lectures	10 hours	Seminars	30 hours	Student Centred Learning	50 hours	Total hours	90 hours
Lectures	10 hours								
Seminars	30 hours								
Student Centred Learning	50 hours								
Total hours	90 hours								
Assessment methods and criteria	Course Project 3000 words 100%								
Language of instruction	English								
Work placements	n/a								

Course unit title	Organizational Behaviour
Course unit code	BIS101
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Third semester
Number of ECTS credits allocated	3.5 ECTS
Name of lecturer(s)	Silvena Dencheva
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Apply their knowledge for organizational behavior in class • Be able to prepare and present their skills in class • Be able to make difference between individual behavior and organizational behaviour • Be able to work more effectively in groups • Learn how to manage time • Know how to manage conflicts in organisations
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	<p>Economics and Business environment</p> <p>Introduction to management and tourism</p> <p>Marketing and Business communications</p>

Recommended optional programme components	n/a								
Course contents	<ul style="list-style-type: none"> • Organizational behavior as science • Essence and roots of organizations • Individual and organizational behavior • Solving problems and decision making • Individual human characteristics and people's labor behavior • Personal characteristics. Behavioral theory for the personality • Phenomenological and psychoanalytical theories • Types of organizations and their features • Communications in organizations • Organization culture • Organization alteration and development. Time management • Conflict management in organizations • Negotiations • Inter-group relations 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Kreitner, R., A. Kinicki (2001) Organisational behaviour. McGraw-Hill • George, J., G. Jones (1996) Understanding and managing organizational behaviour. Addison Wesley 								
Planned learning activities and teaching methods	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>Lectures</td> <td style="text-align: right;">20 hours</td> </tr> <tr> <td>Seminars</td> <td style="text-align: right;">20 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td style="text-align: right;">50 hours</td> </tr> <tr> <td>Total hours</td> <td style="text-align: right;">90 hours</td> </tr> </table>	Lectures	20 hours	Seminars	20 hours	Student Centred Learning	50 hours	Total hours	90 hours
Lectures	20 hours								
Seminars	20 hours								
Student Centred Learning	50 hours								
Total hours	90 hours								
Assessment methods and criteria	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>Written Examination</td> <td style="text-align: right;">2 hours</td> <td style="text-align: right;">50%</td> </tr> <tr> <td>Course work</td> <td style="text-align: right;">1500 words</td> <td style="text-align: right;">50%</td> </tr> </table>	Written Examination	2 hours	50%	Course work	1500 words	50%		
Written Examination	2 hours	50%							
Course work	1500 words	50%							
Language of instruction	English								
Work placements	n/a								

Course unit title	Principles of marketing
Course unit code	BIS031
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year
Semester/trimester when the course unit is delivered	First semester
Number of ECTS credits allocated	5.0 ECTS

Name of lecturer(s)	Vesselin Blagoev, Stanislav Ivanov
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Be able to analyse the marketing environment of a company • Be able to analyse the strengths and weaknesses of a company • Know about the way consumers think and make decisions • Be able to identify profitable market segments • Be able to develop successful consumer products • Know about the different pricing approaches • Be able to identify potential distribution channels for specific products • Be able to develop a marketing plan for a small company • Know about the available options to promote the product
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	None
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Introduction to marketing • Role of marketing in strategic planning • The marketing environment of the company • Consumer behaviour • Business buyer behaviour • Marketing information system • Marketing research • Market segmentation, targeting and positioning • Product • Pricing the product • Distributing the product • Integrated marketing communications • Marketing plan • Relationship marketing
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Kotler, P., G. Armstrong, J. Saunders, V. Wong (2002) Principles of marketing. Harlow: Prentice Hall <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Lovelock, C. H., J. Wirtz (2004) Services marketing: people, technology, strategy. Harlow: Pearson Prentice Hall • Lovelock, C. H. (2002) Principles of service marketing and management. Harlow: Prentice Hall • Wood, M. B. (2004) Marketing planning. Principles into practice. Harlow: Pearson Education

	<ul style="list-style-type: none"> Nagle, T. T., J. E. Hogan (2006) The strategy and tactics of pricing. A guide to growing more profitably. Upper Saddle River: Pearson Education 									
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>20 hours</td> </tr> <tr> <td>Seminars</td> <td>40 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>65 hours</td> </tr> <tr> <td>Total hours</td> <td>125 hours</td> </tr> </table>	Lectures	20 hours	Seminars	40 hours	Student Centred Learning	65 hours	Total hours	125 hours	
Lectures	20 hours									
Seminars	40 hours									
Student Centred Learning	65 hours									
Total hours	125 hours									
Assessment methods and criteria	<table> <tr> <td>Coursework with PowerPoint presentation</td> <td>2500 words</td> <td>40%</td> </tr> <tr> <td>Written test during the module</td> <td>1 hour</td> <td>25%</td> </tr> <tr> <td>Written examination</td> <td>2 hours</td> <td>35%</td> </tr> </table>	Coursework with PowerPoint presentation	2500 words	40%	Written test during the module	1 hour	25%	Written examination	2 hours	35%
Coursework with PowerPoint presentation	2500 words	40%								
Written test during the module	1 hour	25%								
Written examination	2 hours	35%								
Language of instruction	English									
Work placements	n/a									

Course unit title	Project management
Course unit code	BIS152
Type of course unit (compulsory, optional)	Optional
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Fourth semester
Number of ECTS credits allocated	2.0 ECTS
Name of lecturer(s)	Robert Stevenson
Learning outcomes of the course unit	<ul style="list-style-type: none"> Selection of business project Evaluation of the new product or service Analysis of the business environment Analysis of the available resources Analysis of the institutions Creating a project plan. Operational project plans. Managing the project Closing the project
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	<p>Economics and business environment</p> <p>Marketing and business communications</p> <p>Management</p>
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> Define the characteristics of a project Roles and responsibilities of project team members Statement of work

	<ul style="list-style-type: none"> • Work breakdown structure • Task-flow network • Gantt charts 								
Recommended or required reading	Required Reading/Learning Materials <ul style="list-style-type: none"> • Meredith, J. R., S. J. Mantel (2008) Project management: A managerial approach. Wiley 								
Planned learning activities and teaching methods	<table> <tr> <td>Seminars</td> <td>15 hours</td> </tr> <tr> <td>Consultations</td> <td>10 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>25 hours</td> </tr> <tr> <td>Total hours</td> <td>50 hours</td> </tr> </table>	Seminars	15 hours	Consultations	10 hours	Student Centred Learning	25 hours	Total hours	50 hours
Seminars	15 hours								
Consultations	10 hours								
Student Centred Learning	25 hours								
Total hours	50 hours								
Assessment methods and criteria	Coursework (preparation of a project for EU programmes) 2000 words 100%								
Language of instruction	English								
Work placements	n/a								

Course unit title	Research and Statistics
Course unit code	BIS041
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year
Semester/trimester when the course unit is delivered	Second semester
Number of ECTS credits allocated	4.5 ECTS
Name of lecturer(s)	Emil Penchev, Stanislav Ivanov
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Apply different methods for collection, organizing and analysis of information. • Use the methods for hypotheses testing, types of statistical relations • Use the methods for statistical interpretations • Use software products as Microsoft Excel and SPSS
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	None
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Research process and methods for information collection • Types of research methods • Statistical variation, normal distribution • Statistical relations

	<ul style="list-style-type: none"> Hypotheses testing Introduction to Microsoft Excel Introduction to SPSS 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> Gudjarati, Damodar, (1992) Essentials of Econometrics. New York: McGraw – Hill International Editions Levin, Richard (1991) Statistics for Management. New Jersey: Prentice - Hall <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> Saunders, Mark & others, (2000) Research Methods for Business Students. Prentice Hall 2nd edition 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>20 hours</td> </tr> <tr> <td>Seminars</td> <td>30 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>65 hours</td> </tr> <tr> <td>Total hours</td> <td>115 hours</td> </tr> </table>	Lectures	20 hours	Seminars	30 hours	Student Centred Learning	65 hours	Total hours	115 hours
Lectures	20 hours								
Seminars	30 hours								
Student Centred Learning	65 hours								
Total hours	115 hours								
Assessment methods and criteria	<p>Written Examination 2 hours 70%</p> <p>Coursework 1500 words 30%</p>								
Language of instruction	English								
Work placements	n/a								

Course unit title	Summer internship I
Course unit code	BIS081
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year
Semester/trimester when the course unit is delivered	Second semester
Number of ECTS credits allocated	15.0 ECTS
Name of lecturer(s)	Zornitsa Rasheva
Learning outcomes of the course unit	<ul style="list-style-type: none"> Have had a traineeship for at least 10 weeks Have improved their practical skills Be more motivated to study
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	Completed all courses from the first year
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> The region where the company is located History and location of the company Description and categorization of the working place

	<ul style="list-style-type: none"> Organizational structure of the company, the means of communication and the company functions in practice Standards of performance Description of the department where the trainee worked and the duties he/she performed - analysis and control of the working process The way in which the student was able to put theory in to practice Establishing gaps in the theoretical education Personal impressions and recommendation 						
Recommended or required reading	-						
Planned learning activities and teaching methods	<table> <tr> <td>Consultations</td> <td>30 hours</td> </tr> <tr> <td>Student centred learning</td> <td>370 hours</td> </tr> <tr> <td>Total hours</td> <td>400 hours</td> </tr> </table>	Consultations	30 hours	Student centred learning	370 hours	Total hours	400 hours
Consultations	30 hours						
Student centred learning	370 hours						
Total hours	400 hours						
Assessment methods and criteria	<table> <tr> <td>Coursework</td> <td>3000 words</td> <td>50% written part</td> </tr> <tr> <td></td> <td></td> <td>50 % defence</td> </tr> </table>	Coursework	3000 words	50% written part			50 % defence
Coursework	3000 words	50% written part					
		50 % defence					
Language of instruction	English						
Work placements	Various IT companies						

Course unit title	Summer internship II
Course unit code	BIS161
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Fourth semester
Number of ECTS credits allocated	15.0 ECTS
Name of lecturer(s)	Zornitsa Rasheva
Learning outcomes of the course unit	<ul style="list-style-type: none"> Have had a traineeship for at least 10 weeks Have improved their practical skills Be more motivated to study
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	Completed all courses from the first and second year
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> Analysis of the macro environment Analysis of the hospitality industry

	<ul style="list-style-type: none"> History, location and mission of the company Analysis of the company's microenvironment Internal environment of the company SWOT analysis Departments where the trainee worked and the duties he/she performed The way in which the student was able to put theory into practice Establishing gaps in the theoretical education; Recommendation 						
Recommended or required reading	-						
Planned learning activities and teaching methods	<table> <tr> <td>Consultations</td> <td>30 hours</td> </tr> <tr> <td>Student centred learning</td> <td>370 hours</td> </tr> <tr> <td>Total hours</td> <td>400 hours</td> </tr> </table>	Consultations	30 hours	Student centred learning	370 hours	Total hours	400 hours
Consultations	30 hours						
Student centred learning	370 hours						
Total hours	400 hours						
Assessment methods and criteria	Coursework 3000 words 50% written part 50 % defence						
Language of instruction	English						
Work placements	In various IT companies						

Course unit title	Application Development Fundamentals
Course unit code	BIS042
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year
Semester/trimester when the course unit is delivered	First semester
Number of ECTS credits allocated	4.0 ECTS
Name of lecturer(s)	
Learning outcomes of the course unit	At the completion of this course the students will be able to design and program basic applications using C# and Microsoft .NET Framework, write basic code, include installers, and tools for configuring, monitoring, and managing the application, enable drawing and text handling functions, serialization and file I/O, interoperability, reflection, and email, and prepare an application and its interface for global users.
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	Mathematical Fundamentals of IT Part I, Programming Language Fundamentals
Recommended optional	

programme components									
Course contents	<ul style="list-style-type: none"> • Comprehensive tutorial on the C# programming language • Introduction to the Common Language Runtime (CLR) • Mix and match different languages with CLR • Overview of the .NET class library and interfaces to reuse in applications • Introduction to database programming with ADO.NET • Description of ASP.NET for building dynamic web pages • Examples of web services using SOAP and HTTP protocols • Programming applications to cooperate across the Internet • Description of the most important tools under .NET 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Hanspeter Mössenböck, Wolfgang Beer, Dietrich Birngruber, Albrecht Wöss; .NET Application Development: with C#, ASP.NET, ADO.NET and Web Services (Component Software Series); Addison Wesley <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Shawn Wildermuth, Jim Wightman, Mark Blomsma; MCTS Self-Paced Training Kit: Microsoft® .NET Framework 3.5 ADO.NET Application Development. Microsoft Press 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>25 hours</td> </tr> <tr> <td>Seminars</td> <td>25 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>50 hours</td> </tr> <tr> <td>Total hours</td> <td>100 hours</td> </tr> </table>	Lectures	25 hours	Seminars	25 hours	Student Centred Learning	50 hours	Total hours	100 hours
Lectures	25 hours								
Seminars	25 hours								
Student Centred Learning	50 hours								
Total hours	100 hours								
Assessment methods and criteria	<table> <tr> <td>Final Course Project</td> <td>Working C# Program</td> <td>60%</td> </tr> <tr> <td>Final Written Examination</td> <td>2 hour</td> <td>40%</td> </tr> </table>	Final Course Project	Working C# Program	60%	Final Written Examination	2 hour	40%		
Final Course Project	Working C# Program	60%							
Final Written Examination	2 hour	40%							
Language of instruction	English								
Work placements									

Course unit title	Business Applications
Course unit code	BIS061
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Fourth semester
Number of ECTS credits allocated	4 ECTS

Name of lecturer(s)	Vasil Donev
Learning outcomes of the course unit	<p>Upon completion of this course, students should be able to use different Microsoft Office applications like PowerPoint, Word, Excel, Access, etc. in different business cases. They will learn how to use cross-references between office applications and how to build complex business software environments just with Microsoft Office 2007.</p> <p>Students will learn also how to work with SPSS as complement business tool together with Microsoft Office for marketing and statistical analyzes as well as for business intelligence and decisions support, and they will future develop this knowledge in course “Business Intelligence and Decision Support Systems”</p>
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	none
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Creating PowerPoint presentation • Enhancing and delivering presentation • Introducing to Word document • References and Shared objects • Excel data managing and editing • Excel formatting and printing • Excel formulas and functions • Excel data presenting with charts • Financial planning and accounting in Office • Introduction in Access as desktop RDBMS • Selecting and summarizing data in Access • Calculations with data in Access • Access data presenting with reports • Getting data into and out of SPSS • Analyzing statistical data with SPSS • SPSS data presenting with graphics
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • by Joseph J. Manzo, Dee Piziak, Christine J. Rhoads; Microsoft Office 2007 In Business Core (2nd Edition) (Paperback); Prentice Hall; 2 edition (January 7, 2009) • Lee A. Kirkpatrick, Brooke C. Feeny; A Simple Guide to SPSS for Version 16.0 (Paperback); Wadsworth Publishing; 9 edition, May 2, 2008 <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Marija Norusis; SPSS 16.0 Guide to Data Analysis (2nd Edition) (Paperback); Prentice Hall; 2 edition, January 28, 2008
Planned learning activities	Lectures 20 hours

and teaching methods	Seminars Student Centred Learning Total hours	25 hours 45 hours 90 hours
Assessment methods and criteria	Continuous Written Tests Final Course Project	2 tests in 1 hour each Business case study 40% 60%
Language of instruction	English	
Work placements	n/a	

Course unit title	Networking	
Course unit code	BIS142	
Type of course unit (compulsory, optional)	Optional	
Level of course unit (e.g. first, second or third)	First	
Year of study (if applicable)	Second year	
Semester/trimester when the course unit is delivered	Fourth semester	
Number of ECTS credits allocated	7.5 ECTS	
Name of lecturer(s)	Luben Boyanov, Vladimir Dimitrov	
Learning outcomes of the course unit	<p>After the completing of this course, students will have theoretical knowledge for the computer communications and networks like network protocols and the OSI Model, TCP/IP Suite, Routing, and etc. Students also will have more profound knowledge of WAN (Wide Area Network), MAN (Metropolitan Area Network) and LAN (Local Area Network), network devices, network software, and etc. Students will be able to create local computer networks, install and set up network software, connect local networks to the Internet and other public networks, etc.</p>	
Mode of delivery (face-to-face, distance learning)	Face-to-face	
Prerequisites and co-requisites	Information technologies	
Recommended optional programme components	n/a	
Course contents	<p>Network Design Methodology Network Structure Models Enterprise LAN Design Wireless LAN Design WAN Technologies WAN Design The Internet Protocol and Routing Protocols</p>	

	RIP and EIGRP Characteristics and Design OSPF and IS-IS Border Gateway Protocol, Route Manipulation, and IP Multicast Security, Convergence, and Network Management Traditional Voice Architectures and IP Telephony Design Network Management Protocols
Recommended or required reading	Required Reading/Learning Materials <ul style="list-style-type: none"> Diane Teare; Designing for Cisco Internetwork Solutions (DESGN); Macmillan Technical Pub Recommended Reading/Learning Materials <ul style="list-style-type: none"> Curt White; Data Communications and Computer Networks: A Business User's Approach; Course Technology; 5 edition
Planned learning activities and teaching methods	Lectures 25 hours Seminars 25 hours Student Centred Learning 50 hours Total hours 100 hours
Assessment methods and criteria	Continuous Written Tests 2 tests in 1 hour each 30% Final Course Project 1500-2000 words 30% Final Written Examination 2 hours 40%
Language of instruction	English
Work placements	n/a

Course unit title	Information Systems in Business
Course unit code	BCO301
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Third year
Semester/trimester when the course unit is delivered	Fifth and sixth semester
Number of ECTS credits allocated	10.0 ECTS
Name of lecturer(s)	John Jamieson
Learning outcomes of the course unit	Evaluate the importance of information provision to the management of an organisation. * Appreciate the extent and provision of sources of data for information processing from both within and external to the organisation. * Demonstrate an understanding of the complexity of the environment, both internal and external, in which information systems have to operate. * Describe the system theory approach to management

	<p>concepts and decision making.</p> <ul style="list-style-type: none"> * Describe various information systems and identify the categories of specific systems. * Assess competitive forces facing organisations. * Explain how information technology can provide solutions to business problems and provide opportunities for organisations. * Identify how managing information resources, new technologies and communication networks are essential to survival of organisations. 						
Mode of delivery (face-to-face, distance learning)	Face-to-face						
Prerequisites and co-requisites	None						
Recommended optional programme components	n/a						
Course contents	<ul style="list-style-type: none"> • The concepts of Information Systems • Identifying the Needs, Requirements and Types of Information Required from an Information System • Information Systems and the organisation • Organisations and management changes. • Trends in information technology. • Competitive Advantage • Strategic Information Systems • Business processing re-engineering • Total quality management • Information system development 						
Recommended or required reading	<p>Required Reading Bocij, P et al. Business Information Systems, FT Prentice Hall. 3rd ed</p> <p>Recommended Reading/Learning Materials Curtis, G. Business Information Systems, FT Prentice Hall. 4th Ed Laudon, Kenneth C & Laudon Jane P. Management Information Systems, Prentice Hall 9th Ed Lucey T. Management Information Systems, Thomson Publishers. 9th ed</p> <p>This module is extensively supported via Blackboard</p>						
Planned learning activities and teaching methods	<table> <tr> <td>Learning</td> <td>24 hours</td> </tr> <tr> <td>Tutorials</td> <td>24 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>152 hours</td> </tr> </table>	Learning	24 hours	Tutorials	24 hours	Student Centred Learning	152 hours
Learning	24 hours						
Tutorials	24 hours						
Student Centred Learning	152 hours						
Assessment methods and criteria	<table> <tr> <td>Coursework and presentation</td> <td>3000 words</td> <td>50%</td> </tr> <tr> <td>Examination</td> <td>3 hours</td> <td>50%</td> </tr> </table>	Coursework and presentation	3000 words	50%	Examination	3 hours	50%
Coursework and presentation	3000 words	50%					
Examination	3 hours	50%					
Language of instruction	English						

Work placements	n/a
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Course unit title	Information Systems Project Management
Course unit code	BCO302
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Third year
Semester/trimester when the course unit is delivered	Fifth and sixth semester
Number of ECTS credits allocated	10.0 ECTS
Name of lecturer(s)	Nikolay Raychev
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Plan, monitor and control small scale projects in areas of familiar technology. • Determine the resource requirements of projects in a range of areas. • Manage time. • Select and make use of appropriate software for project management functions. • Estimate effort using modelling techniques. • Identify, explain and appraise different approaches to software development • Describe the purpose of and construct a software prototype. • Categorise and comprehend various levels of software reuse. • Explain the principles of software quality assurance. • Recognise and evaluate the main themes of business process re-engineering. • Justify the use of software metrics.
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	None
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Models of the project management process as reflections of broader methodology. • Sources of problems for the project team. • Estimation models and their respective strengths/weaknesses. • Aspects of motivational theory.

	<ul style="list-style-type: none"> • Analysis of “silver bullets” proposed for solutions to software crisis. • The software crisis and why projects fail: approaches towards solutions. Including:- • Rapid software prototyping classification, content, development, evaluation. Strengths and weaknesses of prototyping. • Software re-use – justification, levels of abstraction, cognitive distance, approaches to re-use. Object-oriented class library approach.Re-use in practice. • Software quality assurance - principles, measurement, strategic implications. • Business process re-engineering - rationale, role of information technology, role of human resources, management involvement, approaches to re-design. • Software metrics. Justification. What and how to measure. 								
Recommended or required reading	<p>Required Reading</p> <ul style="list-style-type: none"> • Cadle J, Yeates, D - Project Management for Information Systems, Prentice Hall, (Current Edition), <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Edward Yourdon, Decline and Fall of the American Programmer, Yourdon Press Computing Series 1993 • Edward Yourdon, Rise and Resurrection of the American Programmer, Yourdon Press Computing Series 1996 • Mantel et al, Project Management in Practice Wiley & Sons (Current Edition), <p>This module is extensively supported via Blackboard</p>								
Planned learning activities and teaching methods	<table> <tr> <td>Learning</td> <td>24 hours</td> </tr> <tr> <td>Tutorials</td> <td>24 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>152 hours</td> </tr> <tr> <td>Total hours</td> <td>200 hours</td> </tr> </table>	Learning	24 hours	Tutorials	24 hours	Student Centred Learning	152 hours	Total hours	200 hours
Learning	24 hours								
Tutorials	24 hours								
Student Centred Learning	152 hours								
Total hours	200 hours								
Assessment methods and criteria	<table> <tr> <td>Coursework</td> <td>3000 words</td> <td>50%</td> </tr> <tr> <td>Examination</td> <td>3 hours</td> <td>50%</td> </tr> </table>	Coursework	3000 words	50%	Examination	3 hours	50%		
Coursework	3000 words	50%							
Examination	3 hours	50%							
Language of instruction	English								
Work placements	n/a								

Course unit title	Information Systems Project
Course unit code	BCO300
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First

Year of study (if applicable)	Third year
Semester/trimester when the course unit is delivered	Fifth and sixth semester
Number of ECTS credits allocated	10.0 ECTS
Name of lecturer(s)	Vasil Donev, John Jamieson, Nicolay Raychev, Todor Balabanov, Luben Boyanov, Vladimir Dimitrov, Eugenia Kovatcheva
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Prepare a project proposal • Control, manage and design an individual project consistent with this guide. • Clearly state the nature of the problem being investigated, stating Aims and Objectives that are appropriate, realistic and achievable. • Conduct a literature review within the context of the problem. • Apply appropriate academic theory and method in the resolution of the problem. • Analyse and report on the results of research findings. • Evaluate alternative approaches appropriate to a defined problem. • Demonstrate a capacity for self appraisal by referencing against the original objectives and the work of others. • Evaluate the research or development project and identify areas for further work. • Communicate and defend their work via a viva voce examination.
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	Completed all modules from Years 1 and 2
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Preparation of an achievable/practical project proposal • A major part of the project should comprise of theoretical perspectives/research methodologies relevant to the area of study. The project will normally also include a major practical element. • The subject matter of the project will be selected by the student during the second year, in consultation with a Project Co-ordinator. • The project will be in the form of a report on the subject area covered, and is to be accompanied by all other relevant analysis, design, implementation and primary source material.
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Final Year Project Guidelines Handbook provided by the

	<p>Course Team</p> <p>Recommended Reading/Learning Materials To cover research elements:</p> <ul style="list-style-type: none"> • Hoinville - Survey Research Practice and Survey Design, Heinemann (Current Edition) • Anderson, A J B - Interpreting Data, Chapman Hall (Current Edition) <p>This module is extensively supported via Blackboard</p>								
Planned learning activities and teaching methods	<table> <tr> <td>Learning</td> <td>12 hours</td> </tr> <tr> <td>Tutorials</td> <td>12 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>376 hours</td> </tr> <tr> <td>Total hours</td> <td>400 hours</td> </tr> </table>	Learning	12 hours	Tutorials	12 hours	Student Centred Learning	376 hours	Total hours	400 hours
Learning	12 hours								
Tutorials	12 hours								
Student Centred Learning	376 hours								
Total hours	400 hours								
Assessment methods and criteria	Coursework 12000 words 100%								
Language of instruction	English								
Work placements	n/a								

Course unit title	Multimedia & Internet
Course unit code	BIS122
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Fourth semester
Number of ECTS credits allocated	2.5 ECTS
Name of lecturer(s)	Nikolay Raychev
Learning outcomes of the course unit	<p>Upon completion of the discipline the students will:</p> <ul style="list-style-type: none"> - have received theoretical knowledge in the different types of computer graphics and multimedia; - be able to work with the program means of the raster graphics; - be able to work with the program means of the vector graphics; - be able to work with the program means of the multimedia;
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-	None

requisites									
Recommended programme components	n/a								
Course contents	<ul style="list-style-type: none"> • Introduction to the interface of the program product Photoshop. • Working with tools and menus. • Using different strata and their advantages. • Importing and exporting of images. • Working with texts. • Using filters and textures. Preparing. • Getting familiar with the interface of the program product CorelDraw. • Working with tools and menus. • Importing and exporting images. • Working with forms. Working with texts. Preparing. • Converting an object into a curve. Using effects and textures. • Historical overview of the evolution of multimedia. • Concepts needed to fully understand multimedia. • Introduction to all the basic concepts and tools of digital multimedia. 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Adobe Creative Team, Adobe Photoshop CS3 Classroom in a Book, Adobe Press • Gary David Bouton , CorelDRAW: The Official Guide, McGraw-Hill Osborne Media • T. M. Savage, K.E. Vogel; An Introduction to Digital Multimedia; Jones & Bartlett Publishers; <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Deke McClelland Adobe Photoshop CS3 One-On-One, O'Reilly Media, Inc.; • Steve Bain, CorelDRAW(R) 11: The Official Guide, McGraw-Hill Osborne Media 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>20 hours</td> </tr> <tr> <td>Seminars</td> <td>25 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>45 hours</td> </tr> <tr> <td>Total hours</td> <td>90 hours</td> </tr> </table>	Lectures	20 hours	Seminars	25 hours	Student Centred Learning	45 hours	Total hours	90 hours
Lectures	20 hours								
Seminars	25 hours								
Student Centred Learning	45 hours								
Total hours	90 hours								
Assessment methods and criteria	<table> <tr> <td>Final Course Project Multimedia WEB Project</td> <td>60%</td> </tr> <tr> <td>Final Written Examination</td> <td>2 hours 40%</td> </tr> </table>	Final Course Project Multimedia WEB Project	60%	Final Written Examination	2 hours 40%				
Final Course Project Multimedia WEB Project	60%								
Final Written Examination	2 hours 40%								
Language of instruction	English								
Work placements	n/a								

Course unit title	Information systems legislation
Course unit code	BIS123
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Fourth semester
Number of ECTS credits allocated	2.5 ECTS
Name of lecturer(s)	Todor Balabanov
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Analyse the main features of the legislation applicable to software and hardware contracts • Distinguish between E. Commerce, E. Communications within the information systems environment • Assess the main types of computer crime and identify the implications of each • Analyse the Computer Misuse Act with specific reference to the concept of hacking • Evaluate the principles of the Data Protection Act 1998 and consider its implications <p>Appreciate the areas of Intellectual Property applicable to information systems and analyse the international aspects of this area of law</p>
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	None
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Law relating to Computer Contracts – hardware and software – as regulated by The Sale of Goods Act 1979 (as amended) and the Supply of Goods & Services Act 1982 (as amended) and associated licensing. • Law relating to E. Commerce – the nature and implications of electronic contracts as regulated by the Electronic Commerce Regulations 2002; the Distance Selling Regulations 2000 and the Electronic Commerce Act 2000 and implications of the Privacy in Electronic Communications Regulations 2003 (for spam, cookies and traffic / location data) • The nature of Computer Crime – hacking and associated offences of introducing viruses; on-line fraud, phishing / pharming • Law relating to the essential elements of Data Protection

	<p>– rights and obligations, the principles, security of data and implications of transferring data on an international basis</p> <ul style="list-style-type: none"> • Intellectual Property Rights – specific reference to Copyright and its impact upon information systems – the Directive relating to the Information Age 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Harris (Current Edition) An Introduction to Law, Butterworths • Bainbridge, D. (Current Edition) Introduction to Computer Law, Pearson Financial Times Publishing <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Reed, C. (Current Edition) Internet Law – Text and Materials, Butterworths • Barron, (Current Edition) Copyright Law – Text and Materials, Butterworths • Butterworths Core Text, (Current Edition) Intellectual Property Law, Butterworths • Computer Law & Security Report • Computer Fraud & Security Report • Computer Weekly • Communications Law • Solicitors Journal • New Law Journal • www.hmso.gov.uk • www.courtservice.gov.uk • www.the-times.co.uk • www.silicon.com 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>10 hours</td> </tr> <tr> <td>Seminars</td> <td>15 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>25 hours</td> </tr> <tr> <td>Total hours</td> <td>25 hours</td> </tr> </table>	Lectures	10 hours	Seminars	15 hours	Student Centred Learning	25 hours	Total hours	25 hours
Lectures	10 hours								
Seminars	15 hours								
Student Centred Learning	25 hours								
Total hours	25 hours								
Assessment methods and criteria	<table> <tr> <td>Written Examination</td> <td>2 hours</td> <td>50%</td> </tr> <tr> <td>Phase test</td> <td>1 hour</td> <td>50%</td> </tr> </table>	Written Examination	2 hours	50%	Phase test	1 hour	50%		
Written Examination	2 hours	50%							
Phase test	1 hour	50%							
Language of instruction	English								
Work placements	n/a								

Course unit title	Multimedia 2
Course unit code	BCO305
Type of course unit (compulsory, optional)	Optional
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when	Fourth semester

the course unit is delivered	
Number of ECTS credits allocated	7.5 ECTS
Name of lecturer(s)	Nikolay Raychev
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Identify appropriate information sources. • Understand and use appropriately the principles of digital processing for text, graphics, sound, video and animation for emergent multimedia technologies. • Analyse industry standards for digital capture, processing, compression and delivery • Select appropriate multimedia solutions for specific contexts • Evaluate a range of multimedia hardware peripherals and multimedia production software • Identify and assess the skills-requirements of contemporary commercial multimedia production • Identify and evaluate training and education support for the multimedia industry • Identify and evaluate testing methods for the multimedia industry • Ensure correct use of standards in testing.
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	none
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Principles and industry standards for text, graphics, sound, music, video and animation. • Research into multimedia related hardware. • Media delivery technologies – Internet (including streaming media), DVD, CD, Digital TV, Mobile phones, etc. • Skills required by a range of commercial multimedia production companies: identify production companies; identify products in development; conduct research within the local region; make comparisons with other geographical areas. • Training and education support for the multimedia industry: identify higher education and training provision for a specific geographical region; • Testing methods for the multimedia industry: identify typical production processes; identify where testing might occur; identify testing methods, both formative and summative. • Standards in testing: investigate sets of heuristics; perform comparison of heuristics; identify discounted methods of evaluation

Recommended or required reading	Recommended Reading/Learning Materials <ul style="list-style-type: none"> • Chapman, N, Chapman, J, “Digital Multimedia”, John Wiley and Sons Ltd, (Current Edition). • Cunliffe, D, Elliott,G, “Multimedia Computing”, Crucial, Learning Matters, (Current Edition. • R.Streinmetz, K.Nahrstedt, “Multimedia: computing, Communications and Applications”, Prentice Hall, (Current Edition • B.Furth, S.W.Smoliar, H.Zhang,”Video and Image Processing in Multimedia Systems”, Kluwer Academic Publishers, (Current Edition • www.howstuffworks.com (and other similar websites) • E. England, A. Finney, Managing Multimedia, Addison-Wesley (Current Edition. • Faulkner, X. Usability Engineering, (Current Edition, Palgrave. • Wise R. (ed) Multimedia: A critical introduction (Current Edition, Routledge; • www.useit.com/alertbox (and other similar websites) 								
Planned learning activities and teaching methods	<table> <tr> <td>Learning</td> <td>24 hours</td> </tr> <tr> <td>Tutorials</td> <td>24 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>152 hours</td> </tr> <tr> <td>Total hours</td> <td>200 hours</td> </tr> </table>	Learning	24 hours	Tutorials	24 hours	Student Centred Learning	152 hours	Total hours	200 hours
Learning	24 hours								
Tutorials	24 hours								
Student Centred Learning	152 hours								
Total hours	200 hours								
Assessment methods and criteria	<table> <tr> <td>Coursework</td> <td>3000 words</td> <td>50%</td> </tr> <tr> <td>Examination</td> <td>3 hours</td> <td>50%</td> </tr> </table>	Coursework	3000 words	50%	Examination	3 hours	50%		
Coursework	3000 words	50%							
Examination	3 hours	50%							
Language of instruction	English								
Work placements	n/a								

Course unit title	Information Systems Security
Course unit code	BIS143
Type of course unit (compulsory, optional)	Optional
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Fourth semester
Number of ECTS credits allocated	7.5 ECTS
Name of lecturer(s)	Vasil Donev
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Plan a framework for network security. • Identify threats to network security. • Analyze security risks.

	<ul style="list-style-type: none"> • Design security for physical resources and computers. • Design security for accounts and services. • Design security for authentication. • Design security for data and data transmission. • Design security for network perimeters. • Design an incident response procedure. • Designing an acceptable use policy. • Designing policies for managing networks. • Designing an operations framework for managing security. 								
Mode of delivery (face-to-face, distance learning)	Face-to-face								
Prerequisites and co-requisites	Computer Hardware and Software Fundamentals, Data Communications and Networks, Enterprise resource planning applications, Information and Communication Infrastructure, Technical and human aspects of IT Security								
Recommended optional programme components	n/a								
Course contents	<ul style="list-style-type: none"> • Introduction to Designing Security • Creating a Plan for Network Security • Identifying Threats to Network Security • Analyzing Security Risks • Designing Physical Security for Network Resources • Designing Security for Network Hosts • Designing Security for Accounts and Services • Designing Security for Authentication • Designing Security for Data • Designing Security for Data Transmission • Designing Security for Network Perimeters • Responding to Security Incidents • Designing an Acceptable Use Policy • Designing an Operations Framework to Manage Security 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • Tony Northrup; Designing Security for a MS Win2003 Network: Microsoft Official Academic Course (Paperback); Microsoft Press <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Byron Wright; MCSE Guide to Designing Security for Microsoft Windows Server 2003 Network (Paperback); Course Technology; 1 edition 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>20 hours</td> </tr> <tr> <td>Seminars</td> <td>25 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>45 hours</td> </tr> <tr> <td>Total hours</td> <td>90 hours</td> </tr> </table>	Lectures	20 hours	Seminars	25 hours	Student Centred Learning	45 hours	Total hours	90 hours
Lectures	20 hours								
Seminars	25 hours								
Student Centred Learning	45 hours								
Total hours	90 hours								
Assessment methods and criteria	<table> <tr> <td>Continuous Written Tests</td> <td>2 tests in 1 hour each</td> <td>40%</td> </tr> <tr> <td>Final Written Examination</td> <td>3 hours</td> <td>60%</td> </tr> </table>	Continuous Written Tests	2 tests in 1 hour each	40%	Final Written Examination	3 hours	60%		
Continuous Written Tests	2 tests in 1 hour each	40%							
Final Written Examination	3 hours	60%							

Language of instruction	English
Work placements	n/a

Course unit title	Professional and Ethical Issues in Information Systems
Course unit code	BCO303
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Third year
Semester/trimester when the course unit is delivered	Fifth and sixth semester
Number of ECTS credits allocated	10.0 ECTS
Name of lecturer(s)	John Jamieson, Nicolay Raychev, Vassil Donev
Learning outcomes of the course unit	<ul style="list-style-type: none"> • Identify the main characteristics of a contract of service (employee) and a contract of services (independent contractor) within the Information Systems environment, and appreciate the implications of each. • Distinguish between the major forms of equality rights available to information systems personnel. • Appreciate the impact of technology on personal privacy, and evaluate the concept of employee monitoring, and the perceived need for its use by organisations, taking account of part played by relevant legislation in both areas. • Identify the social and professional responsibilities of those involved in the management and development of computer based information systems. • Understand the ethical concerns associated with information privacy, accuracy, property and accessibility, and understand the role of the Data Protection Act (1998) in regulating these aspects both nationally and internationally. • Identify the ethical dimensions that would apply to the design, construction and use of information systems. • Critically assess the practice of outsourcing information systems services, taking account of the relevant legislation that protects personal privacy and commercial practice in this area. • Understand how concerns of privacy and trust may affect the uptake of e-commerce applications. • Appreciate the impact of technology on employment and the skills portfolio required of employees
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-	None

requisites									
Recommended programme components	n/a								
Course contents	<ul style="list-style-type: none"> • Employment of Information Systems Personnel • Employee Monitoring • Data Sharing • Outsourcing • Corporate Ethical Policies • Ethical dimensions in Systems Development • Technology Trends that Raise Social, Moral and Ethical Issues • Professional Codes of Conduct • E-commerce – the social and political considerations • Internet challenges to privacy 								
Recommended or required reading	<p>Recommended Reading</p> <ul style="list-style-type: none"> • Ayres, R (Current Edition) The Essence of Professional Issues in Computing. Prentice Hall • Quinn, M (Current Edition) Ethics for the Information Age. Pearson Publishers. 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>24 hours</td> </tr> <tr> <td>Seminars</td> <td>24 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>152 hours</td> </tr> <tr> <td>Total</td> <td>200 hours</td> </tr> </table>	Lectures	24 hours	Seminars	24 hours	Student Centred Learning	152 hours	Total	200 hours
Lectures	24 hours								
Seminars	24 hours								
Student Centred Learning	152 hours								
Total	200 hours								
Assessment methods and criteria	<table> <tr> <td>Coursework</td> <td>3000 words</td> <td>50%</td> </tr> <tr> <td>Examination</td> <td>3 hours</td> <td>50%</td> </tr> </table>	Coursework	3000 words	50%	Examination	3 hours	50%		
Coursework	3000 words	50%							
Examination	3 hours	50%							
Language of instruction	English								
Work placements	n/a								

Course unit title	Software Development Fundamentals
Course unit code	BIS011
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	First year
Semester/trimester when the course unit is delivered	First semester
Number of ECTS credits allocated	7.5 ECTS
Name of lecturer(s)	Todor Balabanov
Learning outcomes of the course unit	At the completion of this course students will be able to describes fundamental concepts of programming languages by presenting design issues of the various language constructs, explain the design choices for these constructs in a few

	common languages, and critically comparing the design alternatives. Students will learn to compare programming languages and those with the ability to program to learn how to choose appropriate languages for certain tasks, increase their abilities to learn new languages, and understand the significance of implementation.								
Mode of delivery (face-to-face, distance learning)	Face-to-face								
Prerequisites and co-requisites	none								
Recommended optional programme components	n/a								
Course contents	<ul style="list-style-type: none"> • Evolution of the Major Programming Languages. • Describing Syntax and Semantics • Lexical and Syntax Analysis • Names, Bindings, Type Checking, and Scopes • Data Types and Abstract Data Types • Expressions and Assignment Statements • Statement-Level Control Structures • Subprograms and Implementing Subprograms • Support for Object-Oriented Programming • Concurrency and Exception Handling • Functional Programming Languages • Logic Programming Languages 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <ul style="list-style-type: none"> • D.E. Stevenson; Programming Language Fundamentals by Example; Auerbach Publications, 2006 • Kenneth C. Louden; Programming Languages: Principles and Practice, Course Technology; 2 edition, 2002 <p>Recommended Reading/Learning Materials</p> <ul style="list-style-type: none"> • Robert W. Sebesta, Concepts of Programming Languages (9th Edition); Addison Wesley 								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>20 hours</td> </tr> <tr> <td>Seminars</td> <td>25 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>45 hours</td> </tr> <tr> <td>Total hours</td> <td>90 hours</td> </tr> </table>	Lectures	20 hours	Seminars	25 hours	Student Centred Learning	45 hours	Total hours	90 hours
Lectures	20 hours								
Seminars	25 hours								
Student Centred Learning	45 hours								
Total hours	90 hours								
Assessment methods and criteria	<table> <tr> <td>Final Course Project Programming Language</td> <td>60%</td> </tr> <tr> <td>Final Written Examination</td> <td>2 hour 40%</td> </tr> </table>	Final Course Project Programming Language	60%	Final Written Examination	2 hour 40%				
Final Course Project Programming Language	60%								
Final Written Examination	2 hour 40%								
Language of instruction	English								
Work placements	n/a								

Course unit title	Systems analysis, development and design
Course unit code	BIS111
Type of course unit	Compulsory

(compulsory, optional)	
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Third semester
Number of ECTS credits allocated	3.5 ECTS
Name of lecturer(s)	John Jamieson, Nicolay Raychev, Vassil Donev
Learning outcomes of the course unit	<ul style="list-style-type: none"> • After completing this module the student should be able to: Describe data analysis techniques; Describe process analysis techniques; Distinguish between the various techniques and identify the purposes for which each is used; Apply appropriate techniques in the analysis and design of small scale systems.
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	None
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Need for systems analysis and design. • The life cycle of a system: the stages, activities in each stage, outputs from each stage. • Data modelling techniques: definition of entities and their relationships, approaches to data modelling, including logical and relational techniques. • Process modelling techniques: use of data flow diagrams to include decomposition, the differences between logical and physical DFD'S, and Entity Life Histories
Recommended or required reading	Required Reading/Learning Materials Lejk, M. and Deekes, (2002, 2nd Edition) An Introduction to Systems Analysis Techniques. Addison Wesley Recommended Reading/Learning Materials Skidmore, S and Eva M. (2003) Introducing Systems Development. Palgrave Macmillan Weaver, Philip L.(2002, 3rd Edition) Practical business systems development using SSADM: a complete tutorial guide - Harlow : Financial Times/Prentice Hall, (Current Edition). Kendall, K, and Kendall, J. (2010, 8th Edition) Systems Analysis and Design, Prentice Hall Curtis, G and Cobham D (2008, 6th Edition) Business Information Systems, Analysis, Design and Practice. Prentice

	Hall Bowman, K .(2003) Systems Analysis a beginner's guide. Palgrave Macmillan Yeates, M. and Wakefield (2003, 2nd Edition) Systems Analysis and Design. Prentice Hall
Planned learning activities and teaching methods	Lectures 15 hours Seminars 15 hours Student Centred Learning 60 hours Total 90 hours
Assessment methods and criteria	Coursework 3000 words 100%
Language of instruction	English
Work placements	n/a

Course unit title	Databases development and applications
Course unit code	BIS112
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Second year
Semester/trimester when the course unit is delivered	Third semester
Number of ECTS credits allocated	4 ECTS
Name of lecturer(s)	John Jamieson, Nicolay Raychev, Vassil Donev
Learning outcomes of the course unit	<ul style="list-style-type: none"> After completing this module the student should be able to: Understand the theory underpinning relational database systems and the importance of database design and modelling. Understand and have practical experience of common database management systems. Demonstrate an understanding of various design, implementation and performance issues which affect database systems. Demonstrate understanding of Structured Query Language (SQL) and the ability to formulate complex queries to manipulate large-scale databases. Utilise common programming frameworks to connect to and manipulate databases and create real-world database applications.
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-	None

requisites									
Recommended programme components	optional n/a								
Course contents	<ul style="list-style-type: none"> • Database modelling: entity-relationship model and the relational model. • Client-server model, ANSI-SPARC/3-tier architectures. • Advanced database design and normalisation. • Overview of Structured Query Language (SQL), advanced SQL querying. • Comparing common database systems: Microsoft SQL Server, Oracle, MySQL, PostgreSQL and Microsoft Access. • Designing, administering and manipulating Microsoft SQL Server databases. • Concurrency issues in databases, transaction management. • Object-oriented systems and the Component Object Model (COM). • Connectivity between relational databases and programming frameworks, e.g. ADO and OLE in Visual Basic 2008. • Databases and the Web. • eXtensible Markup Language (XML) and application to databases/data transport. • Advanced entity modelling concepts. 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <p>Connolly, T. M. and Begg, C. E. Database Systems: A Practical Approach to Design, Implementation and Management (5th edition), Addison-Wesley, ISBN: 978-0321523068.</p> <p>Elmasri R. and Navathe S. B. Fundamentals of Database Systems (5th edition), Pearson Education, ISBN: 978-0321415066.</p> <p>Willis, T. and Newsome, B. Beginning Microsoft Visual Basic 2008 (1st edition), John Wiley & Sons, ISBN: 978-0470191347.</p> <p>Patrick, T. Programming Visual Basic 2008 (1st edition), O'Reilly, ISBN: 978-0596518431.</p> <p>MSDN Library (available online: http://msdn.microsoft.com/) – for both Microsoft SQL Server 2000/2005 and Microsoft Visual Basic 2008.</p>								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>15 hours</td> </tr> <tr> <td>Seminars</td> <td>30 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>55 hours</td> </tr> <tr> <td>Total</td> <td>100 hours</td> </tr> </table>	Lectures	15 hours	Seminars	30 hours	Student Centred Learning	55 hours	Total	100 hours
Lectures	15 hours								
Seminars	30 hours								
Student Centred Learning	55 hours								
Total	100 hours								
Assessment methods and criteria	<table> <tr> <td>Coursework</td> <td>5000 words or equivalent</td> <td>100%</td> </tr> </table>	Coursework	5000 words or equivalent	100%					
Coursework	5000 words or equivalent	100%							

Language of instruction	English
Work placements	n/a

Course unit title	Multimedia 3
Course unit code	BIS20
Type of course unit (compulsory, optional)	Optional
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Third year
Semester/trimester when the course unit is delivered	Fifth and sixth semester
Number of ECTS credits allocated	10 ECTS
Name of lecturer(s)	Nicolay Raychev
Learning outcomes of the course unit	<ul style="list-style-type: none"> • After completing this module the student should be able to: <p>Demonstrate an understanding of a complex body of multimedia related knowledge, some of which being in emergent technologies and trends.</p> <p>Use appropriately the principles of digital processing of the various media, to analyse and solve problems in areas of multimedia, especially those relating to their application in Business and Education.</p> <p>Identify and assess the skills-requirements of contemporary commercial multimedia production</p> <p>Select appropriate multimedia solutions for specific contexts</p> <p>Evaluate evidence, arguments and assumptions, and reach sound judgements in areas of Multimedia</p>
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	None
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Digitisation and compression for text, graphics, sound, music, video and animation. • Multimedia delivery technologies – Internet, DVD, CD, Digital TV, Mobile devices, etc. • Research and evaluation of multimedia hardware peripherals and multimedia production software • Research and evaluation e multimedia production and delivery technologies and the companies that produce them.

	<ul style="list-style-type: none"> • Research human and professional skills required by a range of commercial multimedia production companies: identify production companies; identify products in development • Evaluate market trends in multimedia products and multimedia authoring and editing software 								
Recommended or required reading	<p>Required Reading/Learning Materials</p> <p>Vaughn, T, “Multimedia: making it work” McGraw Hill Osborne, (2007)</p> <p>Chapman, N, Chapman, J, “Digital Multimedia”, John Wiley and Sons Ltd, (2009).</p> <p>E. England, A. Finney, Managing Interactive Media: Project Management for Web and Digital Media, Addison-Wesley (2007).</p> <p>Cunliffe, D, Elliott, G, “Multimedia Computing”, Crucial, Learning Matters, (2005).</p> <p>Mayer, E. Richard, Multimedia Learning, Cambridge University Press (2009)</p> <p>www.useit.com (and other similar usability websites)</p> <p>www.microsoft.com, www.adobe.com, www.corel.com, and other websites of companies that produce multimedia products and technologies</p> <p>www.jpeg.org, www.mpeg.org and other similar websites</p>								
Planned learning activities and teaching methods	<table> <tr> <td>Lectures</td> <td>24 hours</td> </tr> <tr> <td>Seminars</td> <td>24 hours</td> </tr> <tr> <td>Student Centred Learning</td> <td>152 hours</td> </tr> <tr> <td>Total</td> <td>200 hours</td> </tr> </table>	Lectures	24 hours	Seminars	24 hours	Student Centred Learning	152 hours	Total	200 hours
Lectures	24 hours								
Seminars	24 hours								
Student Centred Learning	152 hours								
Total	200 hours								
Assessment methods and criteria	<table> <tr> <td>Coursework</td> <td>3000 words</td> <td>50%</td> </tr> <tr> <td>Examination</td> <td>3 hours</td> <td>50%</td> </tr> </table>	Coursework	3000 words	50%	Examination	3 hours	50%		
Coursework	3000 words	50%							
Examination	3 hours	50%							
Language of instruction	English								
Work placements	n/a								

Course unit title	Data security and forensics
Course unit code	BIS22
Type of course unit (compulsory, optional)	Optional
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Third year
Semester/trimester when the course unit is delivered	Fifth and sixth semester
Number of ECTS credits allocated	10 ECTS
Name of lecturer(s)	Vasil Donev

Learning outcomes of the course unit	<ul style="list-style-type: none"> • After completing this module the student should be able to: <ul style="list-style-type: none"> Critically evaluate current methods of encryption and decryption in terms of resource implications, effectiveness and security. Appraise storage strategies and technology. Critically consider and compare systems for confidentiality and authentication in commercial transactions Evaluate techniques for intrusion. Assess the link between system failure and human error / responsibility Evaluate procedures for secure Email and Internet Use Critically consider Access Control Management practices Assess methods for Monitoring Information Security Evaluate the methods by which digital evidence is preserved, prepared and presented in court
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	None
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • The nature of data • Types of encryption; key selection and transfer. Weaknesses • Commercial systems; SSL, TSL, PGP • Techniques for recovery of data • Data storage; techniques and strategies; performance and security of data • E. Security; Misuse of the Internet and Intranet and Acceptable Use Policies • Access Control Policies and User Access Management • Management of Incidents and Controls for Legal Admissibility • Presenting Forensic Evidence for trial
Recommended or required reading	<p>Required Reading/Learning Materials</p> <p>Davis, C.; Philipp, A. & Cowen, D. (2004) Hacking Exposed: Computer Forensics (Secrets & Solutions) McGraw Hill</p> <p>Marcella, J. (2007) Cyber Forensics, Auerbach Publications</p> <p>Sammes, A. & Jenkinson, B. (2007) Forensic Computing: A Practitioners Guide, Springer Publications</p> <p>Journals and Websites:</p> <p>International Journal of Electronic Security & Digital Forensics</p>

	European Journal of Scientific Research Journal of Digital Forensic Practice www.opsi.gov.uk www.silicon.com www.the-register.co.uk www.computerweekly.com
Planned learning activities and teaching methods	Lectures 24 hours Seminars 24 hours Student Centred Learning 152 hours Total 200 hours
Assessment methods and criteria	Coursework 3000 words 50% Examination 3 hours 50%
Language of instruction	English
Work placements	n/a

Course unit title	Network and Internet Security
Course unit code	BIS21
Type of course unit (compulsory, optional)	Optional
Level of course unit (e.g. first, second or third)	First
Year of study (if applicable)	Third year
Semester/trimester when the course unit is delivered	Fifth and sixth semester
Number of ECTS credits allocated	10 ECTS
Name of lecturer(s)	Vasil Donev, Todor Balabanov, Luben Boyanov
Learning outcomes of the course unit	<ul style="list-style-type: none"> • After completing this module the student should be able to: Have an in-depth knowledge of error detection systems Appreciate forward error control and its limitations Appreciate the need for different methods of data compression Appreciate the security aspects of various different methods for data encryption Explain the considerations and requirements in planning, providing and managing networked computing services. Discuss the various processes involved in managing an IT services department. Describe the components and paradigms used in constructing personnel systems. Discuss IT strategy from various perspectives. Apply appropriate IT services management techniques in non-trivial situations

Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites	None
Recommended optional programme components	n/a
Course contents	<ul style="list-style-type: none"> • Local Area Network Technologies : • Error detection and correction methods : Parity, Block Sum Check, Polynomial codes, Hamming codes • Data compression methods : Huffman encoding, Run length encoding, Arithmetic encoding, Dictionaries • Network security and authenticity • Encryption methods : Fixed, Random and Algorithm mapping, XOR key, Public and Private key pairs, RSA with key transfer • Managing the network: systems and database administration, client/server, open systems, high performance machines • Concept of networked services and support: implementation, development and maintenance. • IT services and project management, quality and help desks, contingency planning, disaster recovery, audits • ergonomics, health and safety. • Managing the department: organisational and control mechanisms, personnel/expert systems, ergonomics, health and safety • Formulating an IT strategy: documenting, monitoring implications of the strategy. • The technical, financial and communicational skills: cost/profit centre, budgets, planning and resource allocation, procurement/tendering, marketing, negotiation, contracts, customer liaison, training courses, reports and software guides.
Recommended or required reading	<p>Required Reading/Learning Materials</p> <p>“Foundations of Service Level Management”, R. Sturm, W. Morris, M. Jander, SAMS, (2000) ISBN 0 672 31743 5</p> <p>“IT Service Management – Case Studies”, HMSO, (1996) ISBN 0 11 330676 8</p> <p>“IT Services, costs metrics, benchmarking & Marketing”, (2000)A. Tardugno, T.R DiPasquale, R.E. Matthews, Prentice Hall,ISBN 013 019195 7</p> <p>“IT Problem Management”, G. Walker, Prentice Hall, (2001) ISBN 013 030770 X</p> <p>“Computer Networks”, A.S. Tanenbaum, Prentice Hall (2002, 4th Edition)</p>

	“Data Communications and Computer Networks”, C. White, Addison Wesley (2008)		
Planned learning activities and teaching methods	Lectures		24 hours
	Seminars		24 hours
	Student Centred Learning		152 hours
	Total		200 hours
Assessment methods and criteria	Coursework	3000 words	50%
	Examination	3 hours	50%
Language of instruction	English		
Work placements	n/a		