# Programme Specification for BSc (Hons) Informatics (Validated by Coventry University)

Top-Up Programme to operate at IBA Kolding

2019

#### Introduction

The Informatics degree programme is a third year top up course designed for students to finalise their undergraduate study at IBA. The objective is for students who have already completed the first two years of their undergraduate studies, including from partner organisations, to complete their degree by allowing direct entry to year three of the BSc Honours degree.

IBA's outstanding links with industry and commerce mean that students on this programme get regular opportunities to apply the theoretical knowledge gained in the classroom to real world examples and case studies. This programme is likewise characterised by first class academic and pastoral support, facilitated through the provision of small group teaching and IBA's dedicated student welfare team. The international nature of this programme ensures that graduates are highly attractive to companies seeking to employ staff who possess knowledge and experience of various economic and cultural environments.

The Informatics programme addresses the most recent development in today's web-intensive environment with a focus on topics such as agile application development, web and open source to provide an excellent learning experience and relevance to the subject title. The programme also addresses the social, legal and ethical aspects of the modern computing environment. The programme gives candidates the leading edge skills for 21<sup>st</sup> century Informatics. Career destinations for the graduates of the programme include the IT Security, web and desktop application development, or continue their study on the post-graduate level.

Each student is considered individually and where applicable, their Accredited Prior Learning (APL) is applied to map equivalence to the first two years of a UK Computer degree.

This course is designed around "bring your own devise", hence students are requested to bring their own lap top. This is to reflect real life workplace scenarios where there are no computer labs or similar. In the admission notice, the requirements and specifications are described. They are expected to bring an update and appropriate lap-top.

1 Available Awards and Modes of Study									
Title of Award		Mode	FHEQ Stage*						
BSc (Hons) Informatics	FT	6							
2 Awarding Institution/Body	Coventry Universit	y University							
3 Collaboration	Coventry Universit	y Degree vali	dated at IBA Kolding						
4 Teaching Institution	International Business Academy, Kolding, Denmark								
5 Internal Approval/Review Dates	Date of approval: December 2019 Date for next review: 2026/27								
6 Programme Accredited by	Not applicable								
7 Accreditation Date and Duration	Not applicable								
8 QAA Subject Benchmark Statement(s) and other external factors	The QAA subject benchmark statement which applies the programme can be found at: <u>https://www.qaa.ac.uk/docs/qaa/subject-benchrestatements/subject-benchmark-statement-computing.pdf</u>								

#### Part 1: Programme Specification

9 Date of Programme Specification	November 2019
10 Programme Manager	ТВС

### 11 Educational Aims of the Programme

The Informatics BSc degree programme has been designed with specific subject related modules to address:

- o The most recent development in today's web-intensive environment.
- The relevant social, legal, professional and ethical aspects of the modern computing environment.

Graduates of this programme will be:

- Competent computing professionals, with the ability work effectively in the computing/IT industry worldwide, or as facilitators in any industry requiring computing/IT expertise.
- Able to undertake research at Masters Level, building on the knowledge gained in the specialism.
- o Capable of working in the multicultural environment and project teams

### **12 Intended Learning Outcomes**

This programme satisfies the Computing benchmark statement.

Section 20 maps the learning outcomes described below to the programme's modules (which are identified in Section 19)

Section 21 shows the capabilities that students will be taught, given the opportunity to practice and will be assessed in.

The principal teaching, learning and assessment methods normally used on the programme to achieve these learning outcomes are identified in section 12.5.

# 12.1 Knowledge and Understanding

On successful completion of the programme students should be able to understand:

KU1	Essential facts, concepts, principles and theories relating to computing and computer applications as appropriate to the programme of study including cultural, ethical and social aspects of the IT industry.
KU2	The requirements, practical constraints and characteristics of computer-based systems (this includes computer systems, information systems, embedded systems and distributed systems).
KU3	The requirements and/or the relevant background information required for the development of product in a domain appropriate to their programme of study.
KU4	The criteria and specifications appropriate to specific computing problems. Students should have sufficient knowledge and understanding to plan strategies for their solution.
KU5	Methods and tools: deploy appropriate theory, practices and tools for the specification, design, implementation and evaluation of computer-based systems.

# 12.2 Cognitive Skills

On successful completion of the programme students should be able to carry out:

CS1	Computational / Algorithmic thinking - including contextualisation and appreciation of the relevance of logical thinking to everyday life.
CS2	Critical evaluation and testing: analyse the extent to which a computer-based system meets the criteria defined for its current use and future development.

CS3	Reflection and communication and present succinctly to a range of audiences (orally, electronically or in writing) rational and reasoned arguments that address a given information handling problem or opportunity. This should include assessment of the impact of new technologies.
CS4	Professional considerations and recognise the professional, economic, social, environmental, moral, legal and ethical issues involved in the sustainable exploitation of computer technology and be guided by the adoption of appropriate professional, ethical and legal practices.

### 12.3 Practical Skills

On successful completion of the programme students should be able to:

PS1	Apply theories in the modelling and design of computer-based solutions - for the purposes of comprehension, communication, prediction. Students should be able to demonstrate an understanding of the trade-offs required in a commercial or public environment.
PS2	Specify, design and construct computer-based systems, which show consideration of modern security aspects.
PS3	Deploy effectively the tools used for the construction and documentation of computer applications, with particular emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems.
PS4	Operate computing equipment effectively, taking into account their logical and physical properties within appropriate professional, ethical and legal practices.

### 12.4 Transferable Skills

On successful completion of the programme students should be able to:

TS1	Communicate in English, both in written form and orally; Communicate effectively using appropriate media and technologies and demonstrate professional and ethical practice related to their field of study.
TS2	Demonstrate an ability to learn independently, to assess personal learning needs and to articulate achievements, including the production of a plan for learning and skills development leading to graduate employment or further studies.
TS3	Demonstrate an ability to work effectively as part of a group.
TS4	Demonstrate skills of project management, time and resource management within a technical role.

Transferable/key skills are generally incorporated within modules (see section 20) and related to relevant assessments as appropriate. Self-directed learning forms an element of all modules and the necessity to work within tight deadlines is an essential requirement across the curriculum. The ability to communicate orally and in writing will be developed across the range of modules.

A range of assessment techniques will ensure that students are given every opportunity to demonstrate their skills in these areas.

#### 12.5 Teaching, Learning and Assessment Methods

A variety of teaching and learning methods is used, as described in various module descriptors, as appropriate to the module learning outcomes. The modes of learning support given have been selected so as to be appropriate to the material presented and skills to be developed. Generally, lectures are used for teaching theoretical and factually based materials. The preferred method of assessment for these type of skills are unseen examinations, either in a formal, end of session format or as on-line, in-class tests. Practical and skills related outcomes are usually learned in a laboratory environment and assessed using practical assignments, which may occur as 'coursework' or as in-class, unseen, time limited assignments or portfolio construction. The

top-up programme includes a substantive, product based project, which acts as an integrative study and provides students with the opportunity to demonstrate the practical and personal skills necessary for professional practice in the field of Informatics.

#### **13** Programme Award Requirements

The study programme consists of six modules, each module being of 20 CATS/10 ECTS in credit value.

The conditions given below are specific regulations for an Honours degree in the BSc Informatics course. They are in addition to University Academic Regulations.

For the BSc Informatics degree a student enrolled in the programme must have passed or been credited with all modules and 360 CATS / 180 ECTS equivalent (240 CATS/ 120 ECTS from their previous institution and 120 CATS / 60 ECTS credits from IBA).

#### **Conditions for Awards**

• BSc Informatics Classification is calculated per the set of Coventry University regulations approved for IBA Kolding. All six modules must be passed.

#### 14 Support for Students and their Learning

Student support mechanisms are as detailed in the IBA Student Handbook. In addition, students will be supported by the following means:

- The course induction will include details of course administration and management, course ethos, learning styles, how to use the VLE, reflective learning, assignment preparation, rules and regulations and social time to aid cohort bonding.
- Students experiencing social, health or other personal issues are referred to an IBA Student Counsellor.
- Provision of a student handbook and module guides.
- Online support via the course, subject and module VLE pages.
- Peer support.
- Allocation of a project supervisor.
- The BSc Programme Manager and Programme Administrator.
- Support from IBA Erhverv (employability, CV writing, job database etc.)
- A team of Faculty Registry Administrators to support the students' academic journey advising on all Regulatory matters
- Study facilities including access to well-equipped teaching rooms, study compartments, quiet Wi-Fi work areas, computer suites, student bar and social areas.

All support mechanisms are consistent with IBA Principles and Values. Reasonable adjustments can be made to the teaching, learning assessment and support of course to maximise accessibility to students with disabilities. Students may discuss their needs with the Programme Manager and any other member of staff with whom they feel comfortable.

The main services located in the Centre are listed below. Full information on these services can be found on the IBA web site at <a href="http://www.iba.dk/international">http://www.iba.dk/international</a> and in the IBA Study Handbook.

- IBA Erhverv/Careers and Employability
- Counselling
- International Office

## 15 Criteria for Admission

Candidates for admission to the BSc Informatics require:

240 credits (APL with 120 credits at level 4 and 120 credits at level 5) obtained in an IT related area.

Careful monitoring of applications to ensure that applicants are suited to the programme takes place. Where necessary, applicants are interviewed, especially those who do not appear to meet standard admissions criteria. Where deemed appropriate, a written exercise is administered to establish suitability.

- Non-standard applications (for example, when a student does not come from a related discipline), must be approved by the Link Tutor.
- All applicants must demonstrate an adequate proficiency in English must be demonstrated with a minimum IELTS score of 6.0 or its equivalent.
- Accreditation for prior learning is in accordance with the Danish International Study Handbook (updated regularly by the Danish Immigration Office).

### 16 Method for Evaluating and Enhancing the Quality and Standards of Teaching and Learning

IBA Kolding is regularly evaluated/reviewed on an institutional basis as well educational basis by the Danish Ministry of Education (EVA).

The Programme is managed by IBA Board with the purpose of securing and assessing the quality/procedures in the Programme as well as in the coordination of lecturers, IBA programme management and EEC. This board will meet three times annually (August, January, April) and consist of at least:

- Dean and Head of Education at IBA.
- Associate Deans FT BSc.
- Assistant Professor of Computing

The Board will focus on subject quality and assessment as well as lecturing performance and thereby the overall quality of the program.

IBA are introducing a number of procedures to secure the correct flow and documentation. The main focus is on establishing the right procedures for:

- Producing coursework exam/papers.
- Marking coursework/exam papers.
- Internal IBA registration/documentation.
- IBA and CBS examination boards.
- Academic level quality in each module.

An Examination Board held at IBA Kolding, comprising relevant academic staff that contribute to the programme, Coventry University representative(s) and an External Examiner, will be responsible for considering the progress of all students and making awards in accordance with both the University and course-specific regulations.

The assurance of the quality of modules is the responsibility of Coventry University, with moderation of assessments and student work by Faculty of Engineering Environment and Computing internal moderator and external examiners.

The Link Tutor at Coventry is the main conduit for the successful collaboration between Coventry University and IBA Kolding in relation to management of the programme. The Link Tutor presents a Collaborative Course Quality Enhancement and Monitoring (CCQEM) report to the Faculty Collaborative Provision Committee (FCPC), or equivalent, as part of the quality assurance process.

External Examiners appointed and approved by Coventry University report annually on the programme and their views are considered as part of the Coventry University Learning and Quality Committee monitoring process.

At Kolding IBA student views are also sought through module and course evaluation questionnaires. Each module will be assessed

by the students (anonymously) by the end of each module and any students can ask for a personal discussion with an Associate Dean of the Programme.

Quality Assurance of on-line teaching material used in any blended learning delivery is the responsibility of the Programme team at IBA Kolding.

## **17** Regulation of Assessment

IBA Kolding adheres to the approved Regulations for the delivery of Coventry University Undergraduate awards at International Business Academy for assessments. Coventry University policy requires the internal moderation of all assessments.

External Examiners are appointed for all named Coventry University awards. The role of the External Examiner at module level is to ensure that academic standards are in line with national norms for the subject. External Examiners undertake the moderation of examination papers and view representative samples of work for the modules for which they have responsibility. At programme level, External examiners help to ensure fairness in the consideration of student progression and awards. They have the right to comment on all aspects of the assessment system and participate as full members of the assessment boards.

#### **18 Indicators of Quality and Standards**

The following are key indicators of quality and standards:

- Review and approval by the Danish Evaluation and Accreditation Institute every three years.
- Relevance by emphasis on Innovation and Entrepreneurship across all educational offerings
- Retention of students through focus on engagement and involvement of students in pedagogical planning and building strong relationships between teaching staff and students
- Efficient organization by exploiting resources effectively using synergy and best practice within teaching, administration and service.
- IBA has excellent links with local employers.
- External Examiner reports point to the quality of the course and identify no problem areas.
- IBA's focus on developing employability skills across all taught programmes
- IBA's systematic evaluation and improvement of teaching via student feedback and follow-up.
- IBA's internal teaching staff development programme and adjunct approval process.
- Digitalisation and building digital skills are integrated part of learning, teaching and administration at IBA

IBA achieved "Positive Institutional Accreditation" June 2018 by the Danish Accreditation Board and confirm that IBA:

- IBA Kolding has a coherent and well-functioning quality-control system.
- IBA has provided concrete and ambitious objectives for their work around ensuring consistently high quality, along with various indicators to ensure that these objectives are reached.

#### **19 Additional Information**

Key sources of information about the course and student support can be found on the IBA Kolding system:

Key sources of information about the course and student support are available online as follows:

- Course material which will include:
  - Course Handbook.
  - Syllabus for various modules.
  - Teaching plan.
  - Student Handbook
- Module material which will include:
  - Detailed module contents and other details of the modules.

- Detailed teaching and learning information on the assessment.

Study Support material which will include modules and descriptions on IBA Kolding system as well as lectures on oral presentations in connection with coursework and examinations.

# 20 Modules

Module Code	Module Title	Credit (CATS/ECTS)
KOL304CEM	Web API Development	20 CATS/ 10 ECTS
KOL304KM	Information Technology and Global Development	20 CATS/ 10 ECTS
KOL302CEM	Agile development	20 CATS/ 10 ECTS
KOL304CR	Games and AI	20 CATS/ 10 ECTS
KOL3389COM	Open-Source Development	20 CATS/ 10 ECTS
KOL300COM	Individual Project	20 CATS/ 10 ECTS

		Intended Learning Outcomes														
	Kn Un	owled Idersta	ge anding	and	Cognitive (Thinking) Skills					Practical Skills				Transferable Skills		
Module codes	КU 1	KU2	KU3	KU4	CS1	CS2	CS3	CS4	PS1	PS2	PS3	PS4	TS1	TS2	TS3	TS4
KOL300COM	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	x
KOL304CEM	Х	Х	Х			Х		Х	Х	Х	Х			Х	Х	X
KOL304KM	х		Х	Х		Х	Х	Х		х	Х	Х	Х	Х	Х	x
KOL389COM	х			Х	Х	Х	Х	Х	Х	Х	Х	Х		Х		X
KOL304CR	х	Х			Х	Х	Х	Х	Х		Х	Х	Х	Х		x
KOL302CEM	х		х	х		х		х	х	х			х	х	х	x

# 21 Capabilities (Skills) Map

Module codes	Learning	Working	Problem	Nume-	IT and	Commu-	Career	Information	Personal
	to Learn	with	Solving	racy	Online	nication	Management	Management	Developmen
		others	and		Learning				t Planning
			Innovation						
KOL300COM	Р		ТРА	TPA	Р	Р	Р	PA	Р
KOL304CEM	Р	Р	TPA	Р	Р	Р		TPA	
KOL304KM	TPA	Р	TPA	Р	ТР	Р		TPA	
KOL389COM			TPA	Р	Р	Р		TPA	
KOL304CR			TPA	PA	Р	ТРА		Р	
KOL302CEM	Р	Р	ТРА	TPA	Р	Р			Р