Programme Specification

Award and Title:

BSc (Hons) Computing for Industry (Level 6 direct entry)

School: Subject area:	London Computer Science
Entry from academic year:	2025/26
in the month(s) of	September and February
Awarding institution:	York St John University
Teaching institution:	York St John University
Delivery location:	YSJU London
Programme/s accredited by:	Not applicable
Exit awards:	
UCAS code / GTTR / other:	Not applicable
Joint Honours combinations:	Not applicable
QAA subject benchmark statement(s):	Subject Benchmark Statement for Computing (March 2022) BSc (Hons) Degree Characteristics (February 2020)
Mode/s of study:	Full time (12 months)
Language of study:	English
Paired with Foundation Year	No
Study abroad opportunities:	No
Opt-in YSJU Placement Year opportunity:	No

Introduction and Special Features

This programme is intended especially for students who want to advance their computing skills and have already obtained a relevant Level 5 certification or have an associate degree in Computing. With the foundation of industry-relevant curriculum knowledge and assistance, the programme will help you build a variety of independent thinking and planning skills that will enable you to complete an extensive research project.

This programme has been created and aligned with the industries' requirements which will help you gain the information and abilities required for postgraduate studies in the UK and/or professional capabilities for employment.

This programme develops hands on practical experience in computer science, business intelligence and analytics using industrial standard tools. You will address and access the latest research and IT trends, with the curriculum designed in an accessible and inclusive manner to support widening application in software and the IT industry. Application of knowledge is key to employment. Guest talks during seminars from various industrial organisations will form a part of the programme delivery.

You will engage in blended learning via a mixture of lectures, small group seminars and pre-recorded online content. The focus will be on applied learning through a flipped classroom and scenario based pedagogical design. Thus, bridging a connection between lectures and seminar activities to stimulate active learning and engagement for both modes of delivery. Upon completion of the programme, you will be well-prepared to pursue a career across various industries, utilising effective processes to specify, design, deploy, verify, and maintain applications and information systems. You will also be equipped to handle technical uncertainties and manage risks associated with a diverse range of professional activities.

Admissions Criteria

You must meet the University's general entry criteria for postgraduate study. In addition, you must have:

- 1. A relevant Level 5 certification or have an associate degree in Computing, from an approved university or institution or:
- 2. Current or recent work experience (within the last two years) appropriate to enable contribution to the programme.

If your first language is not English, you need to take an IELTS test, or an equivalent qualification accepted by the University (see <u>https://www.yorksj.ac.uk/international/how-to-apply/english-language-requirements/</u>).

If you do not have traditional qualifications, they may be eligible for entry on the basis of Recognition of prior learning (RPL). York St John University also considers applications for entry with advanced standing.

Programme Aim(s)

The aim of the BSc (Hons) in Computing for Industry is to give you a comprehensive understanding of computing and its applications across a range of sectors. The overall aim of the programme is to develop critical understanding and self-awareness to cultivate cutting edge skills and knowledge, enhancing individual and organisational potential.

Programme Learning Outcomes

Upon successful completion of the programme students will be able to:

- **6.1** Critically apply skills, techniques, and knowledge from a range of data analysis methods and algorithms for enhancing and solving problems in various domains.
- **6.2** Develop abstract thinking and design ability to analytically demonstrate concepts relating to data science and cyber security.
- **6.3** Use research-based knowledge for the design of experiments, analysis, and interpretation of data to provide valid results.
- **6.4** Critically evaluate and analyse advanced computer science topics, and concepts, and implement them in workplace.
- **6.5** Identify and implement appropriate programming and software tools in AI and Generative AI to solve real word problems.
- 6.6 Critically examine and implement the security and cryptographic concept in blockchain.
- 6.7 Scrutinise and implement smart contracts and its application in blockchain system.
- **6.8** Critically analyse the data and apply predictive modelling technique in the field of Machine Learning and Artificial Intelligence.
- **6.9** Design, execute, critically analyse, and effectively communicate an independent research project, applying advanced methodologies and reflective practices from inception to completion.

Programme Structure

Full Time Programme Structure (12 months)

					Module status	
Code	Level	Semester	Title	Credits	compul sory (C) or optional (O)	non- compensatab le (NC) or compensatab le (X)
LDC6001M	6	1	Problem Solving Through Programming	20	С	Х
LDC6002M	6	1	Cyber Security and Blockchain	20	С	Х
LDC6003M	6	2	AI, Fintech, and Generative Technologies	20	С	Х
LDC6004M	6	2	Mobile Application Development	20	С	Х
LDC6005M	6	1/2 /3	Individual Research Project	40	С	NC

Learning, Teaching and Assessment

The learning, teaching and assessment philosophy is based on the principles of learner-driven pedagogy, integrative curriculum design, and sustainable assessment, to develop the innovative professional and reflective practitioner. The programme is focused on developing an array of desirable graduate attributes, through inclusive and equitable teaching and assessment practices, that prioritise your experience and leaders of tomorrow. As a result, there are several tenets that underpin the programme's design including:

- The use of active learning approaches, which are practical, authentic, and experiential in nature;
- Develop levels of responsibility, accountability, and autonomy over time;
- · Focusing on holistic competence, as well as programme content;
- Encouraging reflection as an aid to learning.

The programme recognises that you are likely to bring significant experience and knowledge, that can be shared, and subsequently shape the learning environment. Therefore, the programme's pedagogy is divergent, rooted in project-based and inquiry-led learning. You may not have engaged in conventional education for some time or may never have formally studied computer science at undergraduate level. Thus, support with study skills, conventions of academic analysis and scholarly writing will be available throughout the duration of the programme.

All modules are designed and delivered utilising a range of blended teaching, learning and assessment techniques, including (online/video) lectures, workshops, seminars, debates, discussion forums and tutorials. By utilising a range of assessment practices, the programme will ensure an inclusive and individualised experience, through mechanisms such as portfolios, presentations, vivas, and project-based research. Each Module Directors will provide formative assessment opportunities and feedback/forward, to inform your work prior to submission. You will benefit from a variety of feedback modes (as appropriate to the method of assessment), encompassing verbal/audio, written/rubric, live/in-person and via individual and/or group coaching techniques. Feedback received will detail how you can develop areas of research, subject knowledge, and professional practice.

Progression and Graduation Requirements

The University's <u>general regulations for</u> undergraduate awards apply to this programme. Any modules that must be passed for progression or award are indicated in the programme structure section as non-compensatable.

Internal and External Reference Points

This programme specification was formulated with reference to: • <u>University mission and values</u>

- University 2026 Strategy
 QAA subject benchmark statements
- Frameworks for Higher Education Qualifications

Date written / revised: 11 Oct. 24 Programme originally approved: