Institute for Apprenticeships & Technical Education

Higher technical qualification submission form

Awarding body information

Awarding body information

What is the name of the awarding body?
Leeds City College

Is the awarding body a higher education provider?
No

Is the awarding body on the Ofqual register?
Yes

Qualification information

Qualification information

You can only submit one qualification for each form. If you are submitting multiple qualifications you must start a new form for each qualification. Please include the name of the qualification as it appears on Ofqual register or UCAS. Include the size of the qualification. e.g. award, certificate, diploma

What is the name of the qualification?
Foundation Degree in Computer Science

Is the qualification on the Ofqual register?
No

If the qualification is not regulated by Ofqual, the organisation owning the qualification must be OfS regulated. This is typically the case of qualifications from Higher Education Providers. For organisations which are Ofqual regulated, the specific qualification must be on the Ofqual register for the application to be progressed. The form will not prevent continuing if this is not completed, but your application cannot be progressed by the approval managers following submission if the awarding organisation is regulated by Ofqual but the qualification is not.

What is the level of the qualification?
Level 5

Route and occupational standards

Route and occupational standards

Awarding bodies must demonstrate that a qualification will enable a person to demonstrate that they have attained as many of the knowledge, skills and behaviours set out in the standard as may be reasonably expected by undertaking a course of education.

Please note:

- Qualifications will only be considered for approval against occupational standards approved by the Institute.

If qualifications have optional units or pathways, we will only approve qualifications where every possible combination of units/ pathways ensures that a learner achieves competence in at least one occupation for which there is a standard. Qualifications with optional units that do not ensure this should be redesigned or remove optional units that do not align to occupations.
Awarding bodies must fill out all sections of this form. They must also submit supporting documentation to provide evidence of the following:

- The content of the qualification (for example, the specification of content)

- Evidence of employer engagement in the development and validation of the qualification (for example this could be within the qualification design and validation documentation that was used through the development of the qualification which evidences where and how employers were involved)

Which route does the qualification fall under?
Digital

Which occupational standards are aligned to the qualification?
Data analyst/Level: 4

Attach documents

Please attach the following documents:

- The content of the qualification (for example, the specification of content)

- Evidence of employer engagement in the development and validation of the qualification (for example this could be within the qualification design and validation documentation that was used through the development of the qualification which evidences where and how employers were involved)

Data analyst

Data analyst

Knowledge, skills and behaviours coverage within the qualification

Please identify which knowledge, skill and behaviour statements from the occupational standard are covered within the qualification.

Where knowledge, skill and behaviour statements are covered, please provide a reference to the qualification content. This should be a unit or module reference along with associated page/paragraph/line numbers (as appropriate) in the attached specification. Please be as specific as possible which content in the qualification aligns to the statement in the standard.

Where knowledge, skill or behaviour statements are partially covered or not covered, you will be asked to provide a rationale for the exclusion of this content from the qualification. The employer engagement evidence provided should support this rationale.

The following questions assess how knowledge, skill and behaviour statements from the occupational standards are covered within the qualification.

This page has automatically generated an item for each knowledge, skill and behaviour statement (KSB) contained within the chosen standard. So please do not remove or add any further KSBs, as it requires the exact number.

KSBgenerator

KSB

KSB 1

K1 Current relevant legislation and its application to the safe use of data.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Cyber Security

Level 4 Module Specification - Principals of Databases
Level 5 Module Specification - Statistics for Computing

KSB 2

K2 Organisational data and information security standards, policies and procedures relevant to data management activities.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 5 Module Specification - Data Analysis and Modeling

KSB 3

K3 Principles of the data life cycle and the steps involved in carrying out routine data analysis tasks.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 4

K4 Principles of data, including open and public data, administrative data, and research data.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 5

K5 The differences between structured and unstructured data.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 6

K6 The fundamentals of data structures, database system design, implementation and

maintenance.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 7

K7 Principles of user experience and domain context for data analytics.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Data Analysis and Modelling
Level 5 Module Specification - Software Development

KSB 8

K8 Quality risks inherent in data and how to mitigate/resolve these.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 9

K9 Principal approaches to defining customer requirements for data analysis.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Software Development

KSB 10

K10 Approaches to combining data from different sources.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 5 Module Specification - Statistics for Computing

KSB 11

K11 Approaches to organisational tools and methods for data analysis.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 4 Module Specification - Principles of Programming
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 12

K12 Organisational data architecture.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 13

K13 Principles of statistics for analysing datasets.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 14

K14 The principles of descriptive, predictive and prescriptive analytics.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 15

K15 The ethical aspects associated with the use of and collation of data.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 4 Module Specification - Professional Development
Level 5 Module Specification - Project

KSB 16

S1 Use data systems securely to meet requirements and in line with organisational procedures and legislation, including principles of Privacy by Design.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 5 Module Specification - Project

KSB 17

S2 Implement the stages of the data analysis lifecycle.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Data Analysis and Modelling
Level 5 Module Specification - Project

KSB 18

S3 Apply principles of data classification within data analysis activity.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Principles of Databases
Level 5 Module Specification - Data Analysis and Modelling

KSB 19

S4 Analyse data sets taking account of different data structures and database designs.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 20

S5 Assess the impact on user experience and domain context on the data analysis activity.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Project

KSB 21

S6 Identify and escalate quality risks in data analysis with suggested mitigation/resolutions as appropriate.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 22

S7 Undertake customer requirements analysis and implement findings in data analytics planning and outputs.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

KSB 23

S8 Identify data sources and the risks, challenges to combination within data analysis activity.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling
Level 5 Module Specification - Project

KSB 24

S9 Apply organizational architecture requirements to data analysis activities.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

KSB 25

S10 Apply statistical methodologies to data analysis tasks.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 26

S11 Apply predictive analytics in the collation and use of data.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling

KSB 27

S12 Collaborate and communicate with a range of internal and external stakeholders using appropriate styles and behaviours to suit the audience.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

KSB 28

S13 Use a range of analytical techniques such as data mining, time series forecasting and modelling techniques to identify and predict trends and patterns in data.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Data Analysis and Modelling
Level 5 Module Specification - Project

KSB 29

S14 Collate and interpret qualitative and quantitative data and convert into infographics, reports, tables, dashboards and graphs.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Statistics for Computing
Level 5 Module Specification - Project

KSB 30

S15 Select and apply the most appropriate data tools to achieve the best outcome.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Data Analysis and Modelling
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

KSB 31

B1 Maintain productive, professional and secure working environment

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Professional Development
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

KSB 32

B2 Shows initiative, being resourceful when faced with a problem and taking responsibility for solving problems within their own remit.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Professional Development
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

KSB 33

B3 Works independently and collaboratively.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

KSB 34

B4 Logical and analytical.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Professional Development
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

KSB 35

B5 Identifies issues quickly, enjoys investigating and solving complex problems and applies appropriate solutions. Has a strong desire to push to ensure the true root cause of any problem is found and a solution is identified which prevents recurrence.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 4 Module Specification - Professional Development
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

KSB 36

B6 Demonstrates resilience by viewing obstacles as challenges and learning from failure.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

KSB 37

B7 Demonstrates an ability to adapt to changing contexts within the scope of a project, direction of the organisation or Data Analyst role.

Is the statement covered within the qualification?
Fully covered

Where within the qualification is the statement covered?
Level 5 Module Specification - Employability Skills
Level 5 Module Specification - Project

Additional occupationally relevant content

Additional occupationally relevant content

Item 1

As well as the content aligned to the knowledge, skills and behaviours in the occupational standard, the qualification can include additional occupationally relevant content which is deemed of value to employers. Awarding bodies are asked to justify any content that does not directly align to the occupational standard, using evidence from employers.

Content should be identified at a unit or modular level and each item should be added separately by using the Add Item button. If the qualification does not include any additional content, please leave this section blank.

Unit or module containing additional content

Please give a short description of the additional content

Where within the qualification is the additional content covered?

Please provide an explanation of how the content is relevant to the occupation, including evidence from employers that supports its inclusion in the qualification.

Assessment methods

Assessment methods

Please confirm that the assessment covers all of the content relevant to the knowledge, skills and behaviours in the occupational standard.
Yes

Please outline the methods used to assess the content and provide a rationale for why these methods are valid for the qualification.
Employability is built into the programme in core modules. Future employment is entrenched within the programme and practical modules are very much focused on the development of professional portfolio pieces that can support progression in to employment.

Wider technical employability skills are embedded in practical modules, the assessments have been selected to reflect industry practice. These projects will focus on solving identified business problems with a technical solution that is relevant to the specific programme discipline.

 Small team projects have been designed to simulate industry practice in the development of team based business solutions. Identifying roles and undertaking these roles in a team setting are essential skills and key to the overall teaching strategy, in respect of preparing students for employment.

There is also opportunity for interdisciplinary work to take place with collaboration between Computer

games students a possibility. The L5 project module is also part of the Computer Games courses and is planned to at the same time as the project module on the Computing courses.

A broad range of skills and knowledge are needed in the Cyber Security and digital sectors and assessments are tailored to the particular task being undertaken. Assessed tasks include the development of computing solutions for real-world problems, the application of theory to problem solving and practical problems, team work, project work and the communication of ideas and concepts through reports and presentations. The assessment of these tasks are guided by programme and module learning outcomes.

Each module will have two assessment components. Programme learning outcomes will be assessed twice giving ample opportunity for students to meet the specified learning outcomes of each task and will also ensure that module learning are only assessed once.

Assignments tasks will be managed across the academic year ensuring there is sufficient time between assessments to support the completion of the programme.

The course promotes independent learning through the promotion of CPD when learning new software and when researching and applying new theories and concepts. Students are encouraged to adopt an analytical approach to their engagement with Cyber Security, transitioning from user to developer and analyst by applying a critical eye to key computing skills development and independently applying new found approaches to their own computing solutions and concepts. Greater autonomy is expected as students move from L4 to L5 of the programme and this is supported through the exploration, experimentation, development and application of key theories and practice in their coursework.

Formative assessments usually carry no weighting but are critical for the student's development and can be useful preparation for the related summative assessment. Formative assessment can take the form of a group or individual critique, and informal peer assessment through peer group discussions.

Formative assessment is a part of the individual tutorial system, featured in every module, and feedback is given verbally or in written format depending on the module. Each assessment is aligned with its intended learning outcomes and learning activities, so it is clear what is being assessed.

Formative assessment is a key feature of the first year and will be the focus of group tutorials during the induction period to familiarise students with the formative feedback strategy.

Summative feedback will be given in written format using standard programme feedback forms. The feedback will discuss the final grade decision and how it was reached and also offer feedforward style feedback that will identify areas for improvement and suggest approaches that can be adopted in future assessments. This will help students to identify areas for improvement, and of current strengths which are to be developed.

All feedback will be presented in line with the institution's policy ensuring timely feedback is given to students for each assessment.

Employer engagement
Employer engagement

Please describe how employers and industry practitioners were consulted throughout the development of the qualification, including:

- the process of identifying and recruiting relevant employers

- how employers were involved in the development, review and validation of the qualification materials.

Please describe how employers and industry practitioners were consulted throughout the development of the qualification.

Consultation with employers and industry practitioners is an essential requirement in the development of all of our higher education qualifications. This starts in the planning phase as demonstrated in the s3 of the programme proposal document (attached). The course team must demonstrate that the content and assessment methods are current, forward looking and reflect the needs of employers. The course team consulted with employers regarding the structure and content of the course including which skills employers were looking for.

As part of the validation process we also have an external employer and external academic on the validation panel (see attached Validation Minutes). We find that this externality is invaluable in the development and approval of our awards as it ensures that they are industry fit and also meeting academic standards.