Skills & Education Group Access

Access
Recognised by QAA

Access to HE Diploma (Data Science)

Diploma Guide

Valid From August 2025
Learning Aim Code: 40014678

skillsandeducationgroupaccess.co.uk
0115 854 1620
@SEG_Access

Table of Contents

Access to HE Diploma Background and Aims 3

Diploma development 3

Diploma Specification 4

About this qualification 4

Intended Progression Routes 5

Access to HE Diploma provider assessment strategy advice 6

Rules of Combination 7

Appendix 1 - Units of Assessment – Access to HE Diploma (Data Science) 8

Grading Standards (Applied to all graded units) 8

Access to HE Diploma Background and Aims

The Access to Higher Education Diploma is a full Level 3 UK qualification. It is regulated by the Quality Assurance Agency for Higher Education (QAA) which licenses Access Validating Agencies (AVAs) to accredit and award the Access to Higher Education Diploma in the UK.

Access to Higher Education Diplomas enable students to acquire the knowledge and skills necessary to progress to higher education. They are key to widening participation from groups traditionally underrepresented at higher education institutions and are therefore aimed particularly, though not exclusively, at adults without traditional qualifications.

The aims of the Access to HE Diploma are to:

- prepare students who are returning to education for progression to Higher Education, further training in a related vocational or occupational area.
- help students develop the skills and knowledge they need to achieve on their chosen HE course or career pathway.
- familiarise students with the teaching and learning methodologies and assessment strategies found in Higher Education Institutions (HEIs).
- help students to gain confidence in their abilities, to review and monitor their own progress and to become independent students.
- develop students' research, planning, analytical and evaluation skills.
- enable students to make informed choices about future progression routes.

Diploma development

Skills and Education Group Access has worked with curriculum specialists and higher education colleagues to develop the Access to HE Diploma (Data Science). Every Diploma is validated by the AVA through a robust and rigorous peer panel process which then recommends approval to the AVA's Access to HE Committee. By taking into consideration the views of Further and Higher Education practitioners, the AVA ensures that the Diploma meets all QAA requirements and that it enables students to complete a planned, balanced and coherent programme of study, through which they have been able to acquire a subject knowledge and develop academic skills which are relevant to the intended progression route(s).

LC 50a: This QAA recognised Access to HE Diploma is validated for delivery within the UK by a provider with a main base in the UK (including the Channel Islands and the Isle of Man) only.

LC 50c: Only students with a UK address (including BFO) can be registered for an Access to HE Diploma.

Diploma Specification

The QAA Diploma Specification states that the Access to HE Diploma is a:

- unitised qualification, based on units of assessment which are structured in accordance with the Access to HE unit specification
- credit-based qualification, operated in accordance with the terms of the Access to HE credit specification
- graded qualification, as determined by the Access to HE Grading Scheme.

About this qualification

AVA Diploma Access to HE Diploma	Main Classification (Sector Subject Area)	Sub-Classification
(Data Science)	6 – Information and Communication Technology	6.1 – ICT for Practitioners

This Diploma specification is valid from: 01/08/2025
Diploma revalidation date: 31/07/2029

The Access to HE Diploma (Data Science) provides students with a thorough understanding of data science and its various components. This course is designed to prepare students for Higher Education study leading to careers in data analysis, machine learning, and related fields. Students will acquire essential knowledge, specific skills, and transferable skills necessary for success in these areas.

A. Key Knowledge:
1. Data Science and Analytics:

- Understanding the fundamentals of data science and data analytics.
- Knowledge of data visualisations and how to interpret and create them.
- Insights into the basics of machine learning and its applications.

2. Programming and Technology:

- Introduction to Python programming, including data structures and functions.
- Proficiency in using Python for data analytics.
- Understanding of artificial intelligence, machine learning, and deep learning concepts.

B. Subject-Specific Skills:
1. Analytical Techniques:

- Skills in statistical analysis and data interpretation.
- Competence in applying methods and models of machine learning.
- Experience in working on a machine learning project, from planning to execution.

2. Technical Proficiency:

- Proficiency in information and communication technology (ICT) tools.
- Skills in using spreadsheets for data organisation and analysis.
- Development of safe and ethical practices in the use of generative artificial intelligence.

C. Transferable Skills:

1. Academic and Professional Skills:

- Enhanced skills in writing and studying academic texts.
- Development of planning and assignment writing skills.
- Improved ability to organise and present data-driven findings.

2. Communication and Ethical Awareness:

- Strong communication skills for presenting data visualisations and analytical results.
- Awareness of ethical considerations in data science, including responsible use of AI technologies.
- Ability to collaborate effectively on data science projects

Intended Progression Routes

LC 61a and 61b: Access to HE Diplomas are intended to provide a preparation for study in UK higher education, but the award of a Diploma does not provide guaranteed entry to UK higher education programmes.

The following progression routes were agreed at the point of validation as being appropriate choices for students who achieve the Access to HE Diploma (Data Science), subject to the course entry requirements and application process.

- Data Science
- Data Analytics
- Data Technology
- Artificial Intelligence

It is essential that providers delivering this Diploma consult receiving HEIs themselves to ensure that suitable and relevant progression opportunities are sound. Evidence of HEI consultation and progression possibilities will be identified in the provider's Programme Submission Document.

Access to HE Diploma provider assessment strategy advice

QAA states that the Access to HE Diploma provides *'HE progression opportunities for adults who, because of social, educational or individual circumstances may have achieved few, if any, prior qualifications'. They also state that, 'Students who are awarded the Diploma will have completed a planned, balanced and coherent programme of study, through which they have been able to acquire subject knowledge and develop academic skills which are relevant to the intended progression route(s)'.* Therefore all approved providers need to develop diploma assessment strategies which outline what assessment activities the students will undertake, how they will be used and why they have been chosen in order to achieve the learning aims:

1. **What** is the aim of the diploma assessment strategy?
2. **How** will it be achieved?
3. **Why** has this approach been chosen?

Assessment design:
Access to HE Diplomas should be assessed using innovative and contemporaneous methods, tailored to prepare students studying at Level 3 for study at Higher Education. Assessment design should be holistic, ensuring students can demonstrate attained knowledge, skills and behaviours in and across units and assessments should reflect those likely to be encountered on Higher Education courses in the same field of study. Specific assessment guidance should be provided for each unit to ensure consistency and fairness across all student achievements.

In addition, providers must ensure that assessment methods are chosen which afford students opportunities to demonstrate the requirements of the three Grading Standards; Knowledge and Understanding, Subject Specific Skills and Transferable Skills.

Assessment design should comply with the requirements of the QAA Grading Scheme (2024) and also be aligned to the principles of assessment: Validity, Authenticity, Reliability, Currency and Sufficiency (VARCS).

Assessment guidance specific to this diploma:
Further to the guidance above tutors could also consider the following methods of assessment:

1. Emphasis on practical applications to assessment
2. Use of Viva Voce style assessment
3. Time constrained assessments and tests
4. Open book test style approaches
5. Use themes and scenario-based tasks

LC 50g: Tutor/Assessor qualifications and experience specifically required for delivery and assessment of this diploma:
Generally, and as a minimum, it is expected that provider staff teaching on the Diploma have the required professional competence and skills necessary for the

mode(s) of delivery to be used, and the level of subject expertise necessary to teach and assess the units available on the Diploma.

Rules of Combination

Where options are available within a single set of rules of combination, which allow alternative requirements for the achievement of a named Diploma, the alternatives permitted by the options are consistent, in terms of academic challenge and demand, and will require equivalent standards for achievement, whenever and wherever it is delivered.

Access to HE Diploma (Data Science)	
Credit Value of the Diploma:	**60**
Students must achieve all the units within the Diploma.	
All Diplomas are 60 credits, irrespective of the place, subject or mode of study. Of the 60 credits 45 must be from graded units concerned with academic subject content, with the remaining 15 credits to be achieved from ungraded units. In addition, all students must study a minimum of **ten 3 credit units** and at least **one 9 or 6 credit unit up to a maximum of 30 credits**, which may or may not be graded.	
Students can achieve up to a maximum of 30 credits at Level 3 through credit transfer and the award of credit through the recognition of prior learning.	
Students undertaking any Access to HE Diploma, whatever their mode of study, must be: **a)** registered and certificated for units to a maximum value of 60 credits **b)** registered for units to the value of 60 credits no later than 84 days from the start date of their Access to HE course, or before the student makes a formal application to a higher education course through UCAS or any other application process, whichever date occurs first.	

Appendix 1 - Units of Assessment – Access to HE Diploma (Data Science)

For every unit included in the table, further information is included in the Unit Specifications, including learning outcomes and assessment criteria.

Grading Standards (Applied to all graded units)

1	**Knowledge and Understanding of the Subject**	**KU**
2	**Subject Specific Skills**	**SS**
3	**Transferable Skills**	**TS**

Students must study a minimum of TEN, 3 credit units and at least ONE 6 or 9 credit unit up to a maximum of 30 credits.

Graded Units (All units are mandatory)

Unit Title	National Code	Level	CV
Python and Data Analytics	CK3/3/AA/04G	Three	3
Methods and Models of Machine Learning	CK5/3/AA/04G	Three	3
Data Science Fundamentals	CM4/3/AA/02G	Three	3
Introduction to Data Visualisations	CX8/3/AA/01G	Three	3
Fundamentals of Data Analytics	CX8/3/AA/02G	Three	3
Introducing Python	CK3/3/AA/02G	Three	6
Python Data Structures and Functions	CK3/3/AA/03G	Three	6
Machine Learning Project	CK5/3/AA/05G	Three	6
The Basics of Machine Learning	CK5/3/AA/06G	Three	6
Statistics and Data	RB7/3/AA/08G	Three	6

Optional Ungraded Units. Choose 15 credits from:

Unit Title	National Code	Level	CV
Use of Information and Communication Technology	CN1/3/AA/01U	Three	3
Using Spreadsheets	CP3/3/AA/01U	Three	3
Artificial Intelligence, Deep and Machine Learning	CK5/3/AA/02U	Three	3
The Safe and Ethical Use of Generative Artificial Intelligence	CK5/3/AA/01U	Three	3
Writing and Studying Academic Texts	HC7/3/AA/14U	Three	3
Planning and Writing an Assignment	HC7/3/AA/15U	Three	3

There are no barred units in this Diploma.