

**Foundation Degree in
Data Analytics & Visualisation
2019-20**

Ada, the National College for Digital Skills



**Student
Handbook**

2019-20

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1. Welcome and Introduction

Dear Apprentice,

Welcome to Ada! Congratulations on being offered a role with your new employer and enrolling as a Higher Level Apprentice. The next 24 months as you study your Foundation Degree with Ada and complete your initial employment will be a stretching and testing rollercoaster in which we look forward to pushing you to excel and learn not only to be a highly competent entry-level software engineer but also a rounded, reflective professional well prepared to blaze a trail through your organisation as a digital pioneer.

At Ada we focus on five values: Rigour, Resilience, Creativity, Curiosity and Collaboration. We strive to ensure all our staff, students and apprentices embody these values as well as the employers and other organisations that we work with. Coupled with the mind-sets and skillsets you will learn on your course; we believe that if you can embody these values in your work that you will differentiate yourself as a leader.

As a member of the inaugural cohort of apprentices at Ada, you are in a unique position. It is rare to be involved at the start of something new, the opportunity comes along just a handful of times at most in any person's life. I hope you rise to the challenge of helping us shape and improve the apprenticeship programme for future cohorts - only your feedback can help ensure this is the case so please share it with us, even if it is not what you think we want to hear. You are also a role model to the younger students, many of whom are aspiring to be in the position you are now in, training and learning with your employer. Again, I know you will rise to this challenge just as you will in the future years of your career when you take on more responsibility – I hope you can find time to share your experiences and insights with students and staff as you progress.

Good luck with your studies. This handbook should provide a useful point of reference throughout. Finally, please remember, 'We are not here to be ordinary, we are here to be awesome.'

A handwritten signature in black ink, appearing to read 'MJS', with a long, sweeping horizontal line extending to the right.

Mark Smith

CEO

2. Academic calendar [including term and assessment dates]

Important Training Dates:

Year 1:

- Launchpad training: TBA
- First training week after Launchpad: TBA
- Final training week: TBA

Year 2:

- First training week: TBA
- Final training week: TBA

Important Examination & Assessment Dates:

- Launchpad Module examinations: TBA
- Year 2 Work-based Project Presentation: TBA
- Year 2 Examinations: TBA

3. List of programme directors

Mark Smith, CEO of Ada – Mark@adacollege.org.uk

Tom Fodgen, Dean of Ada – Tom@adacollege.org.uk

Dr. Farhad Keissarian, Head of Degree Programmes – Farhad@adacollege.org.uk

4. List of support staff [technical and administration]

Hazel Colbe, Apprenticeship Programme Manager – Hazel@adacollege.org.uk

Alasdair Blackwell, Lead lecturer- alasdair@ada.ac.uk

Alex Cline, Support Lecturer- casper@ada.ac.uk

5. Name, position and institution of the external examiner(s) involved in the Programme

TBA

6. Introduction to the Programme

A Foundation Degree is a distinctive Higher Education qualification which combines academic and work-based learning and has been designed to meet skill gaps in the industry. The Foundation Degree in Data analytics & Visualisation combines traditional academic learning with work based learning, making it easier to apply new knowledge and skills into the workplace environment. This combination of academic learning with on the job practical training provides a holistic programme of education enabling students to become confident, competent and capable data analytics professionals.

The arrival of the Internet of Things, where billions of internet-connected devices will each generate their own stream of data, only serves to underline this point. According to Cisco, by 2020 there will be 50 billion such devices. But the data is of no value unless there is the analytical capability to extract insights and business value from it.

A recently compiled UK wide report commissioned by SAS Institute UK highlights (1) exponential rise of demand for big data staff within the last 5 years despite the unfavourable economic climate, (2) estimated 56,000 Big Data job opportunities to be created in the UK by 2020, which is a 117% increase on the 47,000 created jobs by 2017 and (3) expected 350% increase in demand for Data Scientists over the next five years.

Sophisticated data analysts are in great demand, and this programme is a response to the great and immediate need for people with data analytics expertise acknowledged by industry and governmental bodies. Furthermore, this programme aims to provide the essential training needed while emphasising the relevant mathematical underpinning. Sectors such as the IT industry, health care, sports, finance, transport and logistics, marketing and sales all need graduates equipped with the skills gained from this course.

The programme brings together a range of techniques that the modern data analyst needs. Students will study modules in statistics, data analysis, machine learning, and computer programming and tackle a variety of interesting and engaging problems from business and industry. The course will also develop key graduate skills such as problem-solving and communication.

The programme includes a work-base project, successful completion of which is mandatory. This will take place in workplace where theoretical skills will be enhanced with practical experience. Students who exit the programme, upon the successful completion of the first year of the studies, will be awarded Certificate of Higher Education.

In addition to the academic work that leads to the award of the Foundation degree in Data Analytics and Visualisation, the apprentice will create a portfolio of evidence which will demonstrate how learning has been applied, their achievements and capabilities. It is a collection of evidence which demonstrates evidence of the skills, knowledge and behaviours an apprentice has acquired against the standard.

The college and the employer work together to support the apprentice and to carry out the end-point assessment (EPA). In accordance with the Apprenticeship Standard, the work-based project contributes to the end-point assessment for the Level 4 Apprenticeship. Both the project outcomes and the associated presentation and interview will be assessed. The project is work-based, is chosen in conjunction with the employer, and is assessed jointly by the College and the employer.

The British Computing Society (BCS), The Chartered Institute for IT carries out the end-point assessment interview. It includes a review of your portfolio, a presentation and synoptic project to make sure you've met the learning outcomes of the programme.

7. Programme Specifications

Please see the full programme specification in the Appendix.

8. Module Specifications

Please see individual module descriptors on VLE.

9. Student support, Guidance and Advice

9.1 Induction

After enrolling and at the beginning of the first session students will complete an induction. The student induction will be arranged with a teaching member of staff. Student induction will include:

- An overview of training facilities
- Discussion of student handbook content
- Introduction to relevant instructors
- Discussion of course outline
- Outline of assessment requirements for the course/training program
- Supply of reading lists/text book references as appropriate

Induction is an important part of commencing a program of study. Students should take this opportunity to satisfy any questions related to the program, student facilities, and access to support services or any other information required.

If you miss the induction for some reason, please speak with your personal tutor to arrange a time to discuss the issues covered.

9.2 Personal Tutoring

The personal tutoring system provides every student with one member of staff who gets to know them as an individual, who keeps an eye on their overall academic progress and who is concerned for their general welfare. On one hand, the pastoral side of the role can often be simply a friendly conversation at the start of the meeting. On the other hand, the academic/developmental aspect of the role offers the chance for students to discuss their development beyond their formal studies. Tutorials can be used by students to sound out their thoughts, ideas and concerns with an experienced professional, who can guide them in the right direction, personally, professionally and academically.

The intention behind the College's Personal Tutoring Strategy is that all students:

- are given the opportunity to reflect on their learning and academic progress and to discuss and formulate appropriate strategies to fulfil their potential during their studies at the College;
- are equipped with a lifelong approach to learning enabling continuing personal and intellectual growth;
- are provided with pastoral support which is tailored to their needs, enabling them to take full advantage of their time at the college to develop and maintain a healthy and happy outlook on life;
- develop an awareness of the need for professional and career development and receive guidance on the planning and recording of skills development throughout their studies in order to realise their career aspirations;
- experience the benefits of working with peers and academic tutors within a supportive atmosphere.

9.3 Role of Personal Tutor

At the beginning of your programme, you will be allocated a personal tutor to act as your adviser throughout your studies; the personal tutor is responsible for facilitating a student's overall development. S/he will meet you at least once in each semester to see how you're getting on and to encourage your academic development. Meetings may be face-to-face, by telephone or over the internet and your personal tutor will keep a record of what is discussed. The personal tutor is the official first point of contact for any student. Personal tutors should:

- Arrange a minimum of 3 formal meetings with their tutees, of which 2 must be one-to-one, with further opportunities for them to drop in
- Take an interest in all their tutees and their activities;
- Be well informed on their academic progress;
- Agree a timetable for seeing each of their tutees on a regular basis;
- Set aside times when their tutees can consult them;

- Provide clear directions for appropriate points of contact in an emergency;
- Ensure that students know the contingency arrangements when personal tutors are absent from College for any length of time.

9.4 Study Skills Support

Good study skills enable you to be better organised, read and take notes effectively, research and produce essays, and be better prepared for exams. In order to help you develop effective study skills, the College offers a wide range of services, including one-to-one support, and the Study Skills Packs. On the VLE, you'll find a series of packs which cover a variety of topics as follows:

Academic Reading and Writing

- Proof reading
- Reading and note-taking
- Writing your assignment
- Scientific report writing
- Business style reports
- Writing your research proposal
- Formatting & writing your dissertation

Research & Referencing

- Harvard referencing
- Critical analysis of a journal article
- Reviewing literature and paraphrasing

Group Work and Presenting

- Working in groups
- Presentation Skills
- IT Skills

Assessment, and Exams

- e-Submission
- Making the most of feedback
- Revision
- Approaching exams
- Time management

9.5 Careers Advice

You may have a very clear idea of the career you want to follow once you graduate. Alternatively, your programme of study may offer a wide range of career options and you haven't made your choice yet. You might not know all the options open to you. The College's Careers Adviser can help you understand your options and offers many ways of helping you to be more successful in landing that graduate job once you've made your choice. The College's Careers Adviser can be contacted by email on ana@ada.ac.uk. The comprehensive package of help the team can offer you includes:

- Careers advice
- Information on job-hunting
- Guidance on creating or improving your CV
- Application and interview skills training
- Regular careers fairs introducing you to local, regional, national and international employers
- Advice and support on paid and unpaid work placements
- Volunteering opportunities
- Self-employment and entrepreneurship support

9.6 Counselling & Student Welfare

Student welfare provides personal and individual learning and welfare support to all students throughout their time at the College. If a student is unhappy or worried, there is always someone who will listen and give support. We aim to ensure that our students' years at the College are happy, fulfilling and successful.

Our counselling service provides confidential counselling for any student who has personal problems affecting their work or well-being. If you have problems of a personal nature, a member of the counselling team will see you so you can talk about whatever is bothering you. It doesn't matter how small or large you think the problem is - the counselling service is there to help you find ways of dealing with it. Everything that is discussed is kept completely confidential. We want you to enjoy your time studying and if at any time you feel that you cannot talk to friends, family or staff concerned with your course, then maybe the counselling service can help you. The counsellor is not able to offer a magic solution, but will listen carefully and help you to arrive at a better understanding of the situation. The process of exploring thoughts, feelings and behaviour will often bring some relief and may enable you to make changes for yourselves. The College's counsellor service can be contacted by emailing mangala@adacollege.org.uk

9.7 Disability Support

Teaching and Learning

The College will endeavour to meet your academic support needs, wherever possible, and has procedures and resources in place to serve this purpose. We aim to provide a high quality service for disabled students and are committed to making all possible reasonable adjustments to prevent disabled students from being placed at a substantial disadvantage.

The College may not always be able to meet every individual's need in every instance, therefore early contact with a learning support adviser is recommended. In summary we can provide advice or make arrangements in the following areas:

- Study related assessment of needs
- Assistive technology and training in the use of this technology
- Exams
- Liaison with the personal tutor and module leader

Learning Support – Disclosure of a Disability

The College is committed to supporting all its students and to taking all reasonable steps to adjust practices, procedures and circumstances that adversely affect students with disabilities. It seeks to foster an inclusive community and to prevent anyone from being marginalised or unable to realise their potential. To this end, it has in place a number of ways to ensure that students with disabilities are not disadvantaged. Often, these meet students' needs as a matter of course (for example, the standard provision of audio aids in the class rooms or the advance posting of course material on VLE). However, while the College attempts to fulfill its duty to anticipate students' needs, there are occasions when the right support and necessary changes can be arranged only if the College is aware of a student's particular situation. For this reason, students are encouraged to disclose any disability to the College. This can be done either:

- by contacting the learning support adviser who will arrange a confidential one-to-one meeting to discuss the issues and possible adjustments to College practices or arrangements. If the student then decides that they would rather keep their circumstances private, the matter will go no further, except that a confidential note will be made that the matter was discussed.

or:

- if a student prefers, they may speak to any member of staff with whom they feel comfortable. If the student then decides that formal disclosure is in their best interest, a confidential meeting with the learning support adviser will be arranged to discuss the issues.

10. Opportunities for Personal Development Planning

Personal Development Planning (PDP) is 'a structured and supported process undertaken by an individual to reflect upon their own learning, performance and / or achievement and to plan for their personal, educational and career development' (Quality Assurance Agency (QAA), 2009a, p.2).

PDP at Ada, National College for Digital Skills is 'an inclusive process, open to all learners at all levels. Effective PDP improves the capacity of individuals to review, plan and take responsibility for their own learning and to understand what they learn and how they learn it. Engaging in the process of PDP helps learners to articulate their learning and achievement more explicitly and supports learning as a lifelong and life-wide activity (QAA, 2009a).

The primary objective for PDP is to improve the capacity of individuals to understand what and how they are learning, and to review, plan and take responsibility for their own learning and to enhance their knowledge of what they learn and how they learn it.

PDP is:

- Concerned with learning in a holistic sense (in academic, personal and professional contexts)
- Based on reflection and planning skills which are integral to knowing how to learn in different contexts and knowing how to apply learning in different contexts.
- Something that an individual does with guidance and support. Support decreases as personal capability is developed so that the process of PDP becomes self-sustaining.
- Intended to improve the capacity of individuals to communicate their learning to others (for example, academic staff and potential employers).
- A process that involves self-reflection; the creation of personal records; and planning and monitoring progress towards the achievement of personal objectives. (QAA, 2009a)

The process of PDP involves students reflecting on learning and achievements in their academic, personal, and work life and making plans for their educational, personal and career development.

Engaging in the process of PDP enables students to:

- Become more effective, independent and confident self-directed learners;
- Understand how they are learning and relate their learning to a wider context;
- Improve their general skills for study and career management;
- Articulate personal goals and evaluate progress towards their achievement;
- Develop a positive attitude to learning throughout life.

The introduction of PDP will make it explicit that dialogue between tutor and tutee supports not only the student's deepening understanding of their subject, but also the student's growing ability to think critically about their own performance and how to improve it. This is already made explicit within the curriculum, where modes of study or assessment involve challenging students as individuals to develop a piece of work over time and/or to undertake a process within which progress is reviewed continually. Examples include:

- Formative assessments
- Independent research projects
- Group projects
- Assessed seminar presentations
- Reflective commentaries / logs
- Portfolio-based assessment

Your Degree in Data Analytics & Visualisation: Making It Work!

A comprehensive guide for PDP is provided at the end of this booklet and it can also be found on the college's VLE. Use these resources to help you develop as a professional and access the career you want.

The materials available are designed to help you:

- Link your work placement and academic study

- Be aware of skills gained through specific study activities, and how they are relevant elsewhere
- Improve planning, problem-solving and presentation skills
- Think actively about your personal and academic development, in relation to your future as a professional in computing
- Record concrete examples you can use in applications for jobs, placements or further study
- Gain experience in applying these skills in different situations, through paid or placement opportunities
- Broaden your career options by providing information, case studies, contacts and resources

The PDP resources/materials include the following tasks/activities:

- Charting your progress so far
- Subject-based Skills: Computing
- Your work-based learning – seeing its value
- Project and assignment planning
- Problem-solving and decision-making
- Presenting your work and results to others
- Critical reflection on events
- Collecting your personal evidence – to demonstrate your strengths and skills
- Drafting and Refining your CV
- Researching and evaluating possible career options
- Listening to the experience of working graduates
- Gathering inside information on graduate opportunities

11. Facilities & Services

Ada, The National College for Digital Skills provides a range of learning and information services that include e-learning content, electronic diagnostic tools as well as books, e-books and e-journals. All students receive a Facilities, Library, E-library and IT induction upon enrolling at the College.

11.1 Library Resources:

Ada's collection of collated online material is accessed through the Google Apps for Education VLE. All HE students will have access to our growing collection of quality online resources that are handpicked by course lecturers, skills coaches and other relevant members of staff. These include:

- Full text academic journals
- Subject specific databases
- Electronic books
- Databases of images, maps, datasets, statistics and other resources

a) MyiLibrary:

All HE students will have access to MyiLibrary – an industry leading e-content aggregation platform for public, academic and professional libraries around the world. This unique platform offers users the ability to acquire and access digital content on an individual title, publisher-specific or subject collection basis, based on their unique requirements and resources.

With nearly 250,000 titles currently available, covering all major academic disciplines and an additional 5,000 titles being added monthly, MyiLibrary is one of the fastest-growing and most comprehensive online e-content platforms on the market with publishers including: Encyclopedia Britannica, Taylor Francis, McGraw-Hill, Wiley, Oxford University Press, Cambridge University Press, Harvard University Press and Springer and Elsevier.

b) GitHub

All students will create a new Ada specific Github account when they enroll in their digital skills course. Millions of developers use GitHub to build personal projects, support their businesses,

and work together on open source technologies. Github is a vital online repository for Ada students and a source of inspiration as well as collaboration.

c) Physical Resources

The College commits to providing adequate copies of core textbook and supporting material as specified in its degree programme specification to support students to learn onsite at the College, using physical resources as well as e-resources. In addition, the College, as it matures and grows, will provide an ever-growing bank of physical resources related to its programmes of study. These will include books, magazines and journals.

d) Proximity to the British Library

Given the College's physical proximity to the British Library (20 mins door to door), all students will be encouraged to join the British Library and access its vast collection of physical and electronic resources and to consider it as place of study beyond the College.

11. 2 Computing Facilities:

- All students will be provided with a unique user login and free wifi access.
- All students will have volume-defined printing permissions.
- All students will have access to a 2016 desktop computer for their labs based classes and seminars. These include a high-powered graphics card for more complex activities, particularly those using dynamic VFX.
- All students will have access to a laptop through Ada to continue their studies outside of their formal learning environment.
- All students will have the ability to BYOD and connect to the College's network using a secure password.

SmoothWall will monitor all students' internet access. Where concerns are raised about a student's online activity the College will be able to view the individual's recent browsing history to check for

unusual behavior. If any such behavior is identified, then it will be referred using the appropriate channels to relevant SafeGuarding and prevent Agenda designated officers.

Technical Support and Helpdesk:

The College offers a technical support helpline to its IT support partner – European Electronique (EE). They will provide high quality, on-going remote support. This is complemented by the support of an on-site technician once-a-week. This is further complimented by an emergency response service should there be a network or administrator issue that interrupts student and staff connectivity for more than 2 hours. Students will receive an IT induction upon their enrolment at the College.

11.3 Catering Services:

The College offers a kitchen area for the preparation of hot and cold food with fridges and cupboards for storage purposes and a sink for the washing of dishes and food preparation.

A boiling water tap as well as a water cooler is provided. A snacks and a drinks vending machine are provided offering a range of healthy (and not so healthy) snacks and drinks. Students are able to access a wide variety of cafes, supermarkets and convenience stores within 5 minutes walk of the College building.

11.4 Multimedia:

The College has a BOYD policy that allows students to gain wifi access on any enabled device free of charge. Every classroom contains a TV screen that can be easily connected to using an HDMI cable. There are also a number of moveable screens capable for use in a range of settings.

The main collaboration space for the College has a projector, screen and sound system to allow for presentations and other large group activities The College also has a large number of fixed TV screen around the building to make students aware of key messages and opportunities for them along with noticeboards.

11.5 Specialist Accommodation and Equipment:

As outlined previously, students will have access to high specification desktops and laptops for their work that has sufficient capacity to handle all the course content of the degree programme. These are provided in dedicated HE learning labs.

11.6 Equipment required to be provided by the student:

Students are able to BYOD should they wish. However, there is no need for this as the College can provide both desktops and laptops for study on site at the College. Should a student wish to continue their studies away from the College campus then they will need to do so on their own device.

Should the student not be able to access a device they can approach the College for additional support. The College commits to consider each student's case on an individual basis and may award discretionary allocation of laptops to students based on their personal circumstances if deemed necessary to be successful on their course of study.

12. Assessment & Progression Regulations

12.1 Assessment

Throughout your programme of study you will be required to complete assessments to demonstrate your learning of subject knowledge and transferable key skills. You will experience a range of different types of assessment during your programme which will include some of the following:

- Written examinations
- Presentations
- Coursework projects
- Practical assessments
- Group work
- Computer programming
- Reports

The forms of assessment and its weighting and timing, and the ways in which the learning outcomes are to be demonstrated through assessment, are set out in the module and programme specifications. The method and volume weighting of assessment for individual modules are given in this section of the Handbook.

12.2 Submission of Assessed Work

Assessments are normally submitted online through VLE. Exceptionally, due to the nature of the assessment, it may be necessary for your work to be submitted offline. Your module leader will inform you what method you must use to submit your work for assessment. Instructions for submitting work via Turnitin are available on College's VLE. In case of an off-line submission, students are required to provide the module leader with the softcopy the assessment (e.g.; report, code-listing, etc.) within seven working days following the submission date for plagiarism check purposes. If you are in any doubt about the requirements for assessment submission, you should consult the relevant module leader.

The deadline for any assessment submission is 4.00pm (UK time) on the specified day. Whether online or offline, it is your responsibility to ensure that work is submitted successfully and that the correct version has been submitted. Once work has been submitted, whether online or offline, it cannot be amended or re-submitted. In the case of online submission, you must ensure that work is submitted to the correct Turnitin

folder or equivalent. You should take particular care to ensure that you do not upload the final version of your assessment into a draft submission folder.

12.3 Assessment Scores

All assessments are awarded a mark on a percentage scale of 0-100%. The pass mark is set at 40% and the scale score is:

% Scale Score	Performance Standard
70+	Distinction
60-69	Merit
40-59	Pass
0-39	Fail

The final grade for an individual assessment component will be determined after completion of a quality assurance process (e.g. moderation, remarking). Where the result of the assessment calculation creates a mark of 0.5% or greater this will be rounded up to the next full percentage point (e.g. 69.5% is rounded to 70; 59.5% to 60%; and so on). Where the calculation creates a mark below 0.5% this will be rounded down to the next full percentage point (e.g. 69.4% is rounded to 69%; 59.4% to 59%; and so on). For the purposes of rounding up or down, only the first decimal place is used.

12.4 Rules governing extension to submission deadlines

If you have a good reason for not submitting work or not attending an assessment you should use the Personal Mitigating Circumstances (PMC) procedure to make a claim to have these circumstances taken into account. As a result, you may be granted a replacement assessment opportunity. If you do not submit/attend an assessment in your final year, this may mean that you will not be able to graduate as the rest of your cohort, even if you have an accepted PMC claim. There is further information about Personal Mitigating Circumstances (PMC) later in this handbook.

12.5 Penalties for late submission or non-submission of work

You should always aim to submit your assessments on the published submission date. Where coursework is submitted after 4.00pm on the specified deadline day, and there are no accepted personal mitigating circumstances, it will be penalised in line with the following tariff:

Submission within 6 working days: a 10% reduction for each working day late down to the 40% passes mark and no further. Submission that is late by 7 or more working days: submission refused, mark of 0.

The consequences of non-submission may be significant. If you do not submit a piece of assessed work or do not attend a timetabled assessment such as an examination, you will fail that assessment and you may not be entitled to compensation for a failed module.

12.6 Re-sits & Compensation

Where a student fails a module, the following may apply in the first instance:

- 1) Re-sit: a second attempt at an assessment component following a failure at first attempt.
- 2) Compensation: the award of credit by the Board of Examiners for a failed module(s) on account of good performance in other modules at the same credit level where the learning outcomes have been met.

12.7 Re-sit provision

Re-sit provision is subject to all the following conditions:

- (a) A student may re-sit the failed assessment components of a module only once. Where there are extenuating circumstances, the Board of Examiners has discretion to decide whether a further assessment opportunity shall be permitted.
- (b) A student who does not complete the re-sit by the date specified shall not progress on the programme, except in cases where the process for allowing extenuating circumstances has been followed.
- (c) Resits can only take place after the meeting of the Board of Examiners or following agreement by the Chair and the External Examiner of the Board.
- (d) A student who successfully completes any required re-sits within a module shall be awarded the credit for the module and the result capped at the minimum pass mark for the module.

12.8 Compensation

Compensation will be applied when the following conditions are met:

- (a) No more than 20 credits can be compensated in any one stage of the programme.

- (b) It can be demonstrated that the learning outcomes of the qualification level have been satisfied.
- (c) A minimum mark of no more than 5 percentage points below the module pass mark has been achieved in the module to be compensated.
- (d) Taking the module mark to be compensated into account, an aggregate mark of 40% has been achieved for the qualification level of the programme
- (e) No compensation shall be permitted for any core project/dissertation module, as defined in the programme specification.
- (f) A student who receives a compensated pass in a module shall be awarded the credit for the module. The original component mark(s) (i.e. below the pass mark) shall be retained in the record of marks and used in the calculation of the aggregate mark for the stage or qualification.

12.9 Progression Regulations

The degree programme consists of two stages, namely level 4 and level 5. In order to complete and pass a stage of a programme, a student must acquire a total of 120 credits at each level for the award. Progression between levels takes place at the end of first academic year. In order to graduate with a Foundation degree, you must accumulate 240 credits over the whole programme.

Determining module outcomes

The credit value of each module contributing to a stage determines its weighting in the aggregation of credit for a stage. The overall module mark or grade shall be determined as set out in the assessment strategy detailed in the module specification (see Appendix 1). A student who passes a module shall be awarded the credit for that module. Modules may include more than one component of assessment and your overall module mark is calculated from the component marks. Sometimes these assessments contribute equally to your overall module mark, sometimes one assessment is worth more than the other.

12.10 Safeguards for Fair & Consistence Marking of Assessments

The College uses a number of different safeguards to ensure that your work is marked fairly and consistently. All written examinations are marked anonymously. All work is moderated internally. This means that samples of marked work are checked by someone else, to ensure work has been assessed fairly and in accordance with the agreed criteria. In addition, independent external examiners are appointed to the programme. It is their responsibility to check that assessment processes are fair. They also sample assessed work to ensure that internal marking has been carried out fairly and consistently and is of an appropriate standard in line with national academic standards and expectations for that subject discipline.

12.11 Getting Feedback on Student's Work

You are entitled to have feedback on all your assessed work – that includes written examinations, coursework assignments, performance and practical assessments. The purpose of the feedback is to enhance your learning and help you to improve. Feedback on assessed work should be provided to you through Moodle within 15 working days of the published submission deadline (i.e. normally three weeks, not counting days when the College is closed).

In the case of written examinations and larger pieces of assessed work feedback should, as a minimum, constitute an individual unratified mark or grade and an opportunity for you to view your annotated examination script/dissertation/project and/or electronic feedback sheet. An unratified mark is one which has yet to be confirmed by a Module Board of Examiners and could therefore be changed. For more information, please refer to the policy on Assessment and Feedback for the Degree programme on the college's website:

If you are entitled to collect any pieces of assessed work from the College, it is your responsibility to ensure that you collect them at the time you are informed they will be available. Student work will not be kept indefinitely.

12.12 Referencing

Referencing your assessments properly is a requirement and good practice in referencing reduces the risk of committing academic misconduct. The Harvard (APA 6th) style for referencing is used and a comprehensive guide to using Harvard (APA 6th) style referencing is available in the study skills package.

12.13 Personal Mitigating Circumstances

The College recognises that students may suffer from a sudden illness, or other serious and unforeseen event or set of circumstances, which adversely affects their ability to complete an assessment, or the results they obtain for an assessment.

Personal Mitigating Circumstances are situations or circumstances of a serious nature (i.e. not day-to-day minor illnesses or circumstances you could have easily avoided through prior planning). If you believe that they have adversely affected your ability to submit coursework on time or to submit it at all or to attend an exam, then you may wish to bring them to the attention of the examiners. The circumstances might include

serious illness, bereavement or any personal issue that has affected you for a significant period of time during your studies and/or during the examination period and has had a recognisable effect on your studies and assessments.

PMC requests can only be submitted for:

- Late submission
- Non-submission
- Non-attendance at an exam or similar type of assessment

Normally PMC requests cannot be submitted because you feel that your mitigating circumstances have affected the standard of work you have already submitted or your performance in an exam you have already sat.

In the normal course of your studies you should talk to your personal tutor about problems that are affecting your studies and/or your life at home. You may wish the College to take account of these circumstances in a formal way when a Board of Examiners is making decisions about your progression or award. If so, it is *your* responsibility to complete a Personal Mitigating Circumstances (PMC) form to explain the nature of your circumstances and how these have affected your assessments.

You must submit a PMC form together with relevant evidence (Medical evidence submitted in support of a claim for extenuating circumstances should be provided by a qualified medical practitioner) before the published deadline for the assessment submission or the date of the examination within 7 calendar days, whichever is sooner. If a student fails, without good cause, to provide the College with information about mitigating circumstances within the timescales specified above, the College has authority to reject the request on those grounds. Before submitting a PMC form, please make sure you understand the procedure properly. Guidance notes are available on the PMC form.

PMC requests are considered by the Teaching, Learning and Assessment Committee (TLAC) who will verify the authenticity of any evidence submitted and decide whether your PMC will be accepted or rejected. The TLAC will then make recommendations to the Academic Board, which in turn, will then decide what action to take.

Upon receipt of recommendations from the TLAC for investigating mitigating circumstances, the Academic Board will decide whether to:

- a) provide a student with the opportunity to take the affected assessment(s) as if for the first time i.e. a 'sit' or 'submit', allowing them to be given the full marks achieved for the examination or assessment, rather than imposing a cap;
- b) waive late submission penalties;
- c) determine that there is sufficient evidence of the achievement of the intended learning outcomes from other pieces of assessment in the module(s) for an overall mark to be derived;
- d) note the accepted extenuation for the module(s) and recommend that it is taken into account at the point of award and classification.

PMC Procedure is available on the VLE.

12.14. Academic Appeals

As a student of the College, you have the right to appeal against any decision made by the Academic Board. As a consequence of a successful appeal there may be a change to a decision taken by the Academic Board. Appeals will be considered under the procedures described below. If an appeal is deemed to be a complaint, the College may then deal with it under appropriate complaints procedures. You can only appeal about your entitlement:

- To undertake further assessment,
- To progress to another stage of the academic programme
- To remain registered as a student of the College.

Grounds for Appeal

The only grounds for appeal that will be considered are that:

- i. The decision was unreasonable because it did not adequately take into account all the factors affecting the student's performance,
- ii. The decision was procedurally incorrect, or
- iii. The decision has been taken in the absence of all the relevant information (for example, the existence of a medical condition).

Appeals will not be considered on grounds that academic performance was adversely affected by factors such as ill-health if there is no independent, medical or other evidence to support the application. The evidence must cover the time period you say your performance was affected. You may only appeal on the grounds set out above.

You may not use the appeal procedure simply to dispute the academic judgement of examiners and you may not appeal against marks awarded for individual modules or individual pieces of work (although you may raise any queries about marks with your module leader in the first instance if you wish). If you decide to appeal against the decision of the Academic Board, you should complete the Appeal Form (available on VLE) and submit it by the relevant deadline. You must also attach any relevant supporting evidence.

12.15 Academic Misconduct

The College takes a serious view of all acts of academic misconduct. Such acts are considered dishonest and as attempts to gain unfair advantage. Acts of academic misconduct can take many forms. They are likely to fall into one or more of the following categories:

- Plagiarism - taking the work of another person or source and using it as if it were one's own
- Self-plagiarism (or double submission) – resubmitting previously submitted work on one or more occasions (without proper acknowledgement) including work submitted for credits at a previous institution
- Collusion - working with others on tasks that should be carried out on an individual basis
- Falsifying experimental or other investigative results
- Taking unauthorised material (including electronic devices) into an examination
- Contracting another person to produce a piece of assessed work
- Producing a piece of assessed work for another person
- Copying from, or communicating with, another examination candidate during an examination

As a student of the College, you should ensure that you know and understand what is meant by academic misconduct and the requirements for referencing and citation. Your personal tutor will provide you with detailed advice and training about good academic practice (i.e. how to avoid academic misconduct) at the start of the academic year and during modules. In addition, you can seek further guidance about what constitutes

good academic practice from your module tutors. Study skills information about academic misconduct and referencing are available on this handbook as well as the College website.

When submitting each assignment, you will be required to complete a declaration confirming that the work submitted is your own, with all sources duly acknowledged. Where assessments are submitted electronically, this declaration is completed online. If academic misconduct is suspected, the College may use facilities such as the Turnitin originality report as part of their investigations.

If you are found guilty of academic misconduct, the College will impose a penalty as described in the Academic Misconduct Procedure, available on the VLE: The College has based its penalties for academic misconduct on the work undertaken by plagiarismadvice.org and the AMBeR project. Penalties relate to a points-based tariff system to ensure consistency and fairness in the handling of academic misconduct.

12.16 Provisions for students with special needs

If you are a disabled student and you have an extension to your deadline recommended in your student support plan, you will be entitled to use this if you need it. If you are struggling to meet a deadline or to submit your work within an extended deadline if you have one, and this is for disability-related reasons, please contact student learning support adviser at least three days before your work is due. An adviser will discuss your options. Extensions to deadlines for student with a student support plan do not apply to resubmitted work.

You must request an extension before the original submission date. You cannot submit assessed work after the expiry of your extension and you will not be permitted to submit a PMC for late submission. If you have mitigating circumstances which affect you during this stage of your programme, you may submit a PMC form for non-submission, which, if accepted would give you a new deadline for submission of your work.

13. Work-based Project

The work-based project is a substantive piece of work requiring research, design and implementation, undertaken in the second year of the Foundation Degree programme. The project will provide substantive evidence from a work-related project to demonstrate the application of skills and knowledge.

The work-based project provides a vehicle for students to put their level 5 skills into practice during the work placement. Students will work with an employer to examine possible projects that have the potential to enhance the business and carry out a theoretical analysis of these projects and potential solutions. Eventually, they will settle on a project, in conjunction with the employer and academic team. This should be a significant piece of work that will require the management of multiple resources. Students will devise and follow a project plan, incorporating a personal development plan. Upon conclusion of the project, the student will be able to critically evaluate the project from an academic and commercial standpoint.

The project deliverable may be:

- A substantial software implementation
- A physical computing system
- Results and analysis of a programme of research
- A combination of research and software or physical implementations.

Due to the significant of the work, the employer and the college should work together with the student to agree a project that is achievable within the employer's business constraints and that meets the requirements of the standard.

Employers should make suitable allowance for the project to be undertaken, both in terms of time and resources. However, there are some elements such as the writing of the report, particularly in its reflective aspects that may be undertaken outside of normal work. This should be agreed between student, employer and the college such that students are not disadvantaged in any way from completing the work placement and meeting the requirements of the project.

Any issues with confidentiality and/or security will also be addressed between the college, employer and student allowing for projects of business value to be undertaken using real data.

Supporting Arrangement for the Synoptic Projects

- Specification of what has to be delivered on completion of the project – must include the output, documented project plans etc. This should be presented in the form of a **formal proposal**
- College will work with the employer and student to approve the submitted proposal for the project to be undertaken.
- Agreement will be made between student, employer and college on what systems, tools and platforms will be required to complete the task and how these will be made available.
- A suitable project environment should be provided ensuring access to all required tools, systems etc. This may be the apprentice's normal workstation or may be another environment as appropriate to the nature of the project.
- Terms of reference will be developed by the student and agreed by the college and employer early in the project.
- Suitable time will be set aside by the employer for the apprentice to plan, undertake and write up their project.
- The project will be typically undertaken at the employer's premises as agreed with the employer.
- The project will be set and completed in the second year of the programme.
- The College provides clear project assessment criteria including terms of reference, approach to the problem, the design of the solution, the implementation of the solution, the final report and presentation etc, through a handbook.
- The college project tutor will oversee and provide support to the apprentice.

14. Determination of Results

14.1 Rules for determining the degree classification

Classification of the degree will be based on the average mark across all modules. The class of degree is determined by the programme mark as shown below.

Mark	Class of degree
70% - 100%	Distinction
60% - 69%	Merit
40% - 59%	Pass

14.2 How results are communicated

Examination results and final degree classifications will be made available on your online student records page as soon as is feasible after the meetings of the Boards of Examiners.

14.3 The Role of External Examiners

External examining is the main mechanism used to demonstrate that academic standards in the UK are met. External examiners are independent of the College and are appointed by The Open University. The External Examiners is an independent evaluators of quality of processes of Teaching, Learning and Assessment, but also provide direct input into and feedback on its performance and provide evidence based feedback. They are also suitably qualified and experienced in the subject, or specialism within that subject, that they are appointed to examine. External examiners play a role in the following:

- approval of assessment briefs through the verification process. This process seeks to ensure that the assessment is appropriate, instructions to complete it are clear and the marking criteria to be used is suitable;
- moderating samples of student work to ensure that marking has been undertaken correctly and consistently;
- ratifying module marks at the module exam board. Your marks are not confirmed until they have been through this process and may be subject to change until ratification has taken place
- confirming that College regulations are appropriately applied in relation to progression and award decisions which are made at the programme exam board;

- writing an annual report to confirm that assessment processes are rigorous, have been conducted according to the College's policies and procedures, and that standards are comparable with other UK institutions.
- meeting students to determine academic standards and the quality of the student experience. If you are required to meet with the external examiner you will be given clear guidance as to the scope and purpose of this meeting.
- providing comments to programme teams throughout the year on proposed amendments to programmes and modules.

External examiners' reports are an integral part of the college's quality assurance processes and will be available to all students for the purpose of quality assuring the degree programme. The name, position and home academic institution of the external examiner appointed by the OU can be found on VLE.

15. Other Policies & Regulations

15.1 Procedures for Appeals and Complaints

General

An appeal is a request for a review of a decision of an academic body charged with making decisions on student progression, assessment and awards. A complaint is different, and arises from a specific concern about the adequacy or quality of the provision of a programme of study or related academic service. The College believes that students should be able to raise matters of concern without fear of disadvantage and in the knowledge that their privacy and confidentiality will be respected as will that of members of staff.

How to make an appeal?

You are strongly encouraged to discuss any matters leading you to consider appealing with your personal tutor before submitting a formal appeal. Depending on the circumstances, your personal tutor may be able to help you resolve your concerns in consultation with the Board of Examiners without the need for you to make a formal appeal. If you decide to appeal, you may wish to seek advice on completing the appeal form with your personal tutor.

Timescale for appeals

Your appeal must be submitted in writing to the CEO's Office within one calendar month of the date of the letter notifying you of the decision against which the appeal is directed. The College aims to deal with appeals as quickly as possible. However, you should be aware that it may take some time before your appeal is resolved. You may be asked to provide further information before your appeal can be considered.

Action following appeal procedures

The student will be sent a written statement setting out the decision that has been made and the reasons for reaching that decision, together with any actions required by the student or the College to follow up and implement that decision. The outcome will be either to:

- rescind the original decision, or
- vary the original decision, or
- reject the appeal.

The written statement will also include details of any further right of appeal available to the student if they remain dissatisfied with the final outcome of the College's procedures. This will include, where applicable, the right to appeal to The Open University

Complaints Handling Procedure

The College is committed to providing all its users with high quality services and we aim to do so fairly and efficiently. However, there may be times where a student, feels that his/her expectations have not been met. Where this happens, our procedures aim to make it as easy as possible for users to submit a complaint. The procedures and guides listed describe our complaints procedure and how to make a complaint. You can complain about things like:

- The quality and standard of any service we provide or fail to provide
- The quality of our facilities and learning resources
- The quality and standards of academic services and personal support services available to you
- Failure of the College to follow an appropriate administrative processes
- Unfair treatment or inappropriate behaviour by a student or staff member.

15.2 Equality and Diversity

The College is committed to and strives for equality of opportunity for all its students and staff (existing and prospective) and will recognise and celebrate their diversity. In practice this means that we:

- are committed to providing an environment where all people are respected and treated fairly regardless of irrelevant characteristics or distinctions such as: gender, race, colour, ethnic or national origin, age, disability, socio-economic group / background, religious belief / faith, political belief or affiliation, marital status, family responsibilities and sexual orientation;
- will develop a culture in which diversity is celebrated;
- will not discriminate unfairly or illegally against anyone and will take positive action to
- promote equality and diversity;
- embed equality and diversity at the heart of our mission and values, including action against individuals who behave in a discriminatory manner.

15.3 Data Protection Policy for Students

The Data Protection Act 1998 sets out rules for processing personal information, and it applies to some paper records as well as those held on computer. The Act gives individuals certain rights, and also imposes obligations on those who record and use personal information to be open about how information is used and to follow eight data protection principles. Personal data must be processed following these principles so that data are:

- processed fairly and lawfully and only if certain conditions are met
- obtained for specified and lawful purposes
- adequate, relevant and not excessive
- accurate and where necessary kept up-to-date
- not be kept for longer than necessary
- processed in accordance with the subject's rights
- kept secure
- not transferred abroad without adequate protection

Your rights

You are entitled to have access to information held about you, except where releasing that information would breach another person's privacy. You also have rights to prevent data processing likely to cause unwarranted damage to distress, and to prevent processing for the purpose of direct marketing.

Your responsibilities

Any personal data must be collected, processed and held according to the data protection principles, whether this is on your own behalf or as part of your research or studies. The University and College are responsible for the data collected for their own proper purposes, and if you have access to this information you must follow relevant policy and procedure. If you process data on your own behalf, you are responsible for compliance with the law.

Complaints Procedure

You can make your complaint in writing by completing the complaint form, available on VLE.

We have a **two-stage complaints procedure**. We will always try to deal with your complaint quickly. But if it is clear that the matter will need a detailed investigation, we will tell you and keep you updated on our progress.



Stage 1: frontline resolution

We will always try to resolve your complaint quickly, within five working days if we can.

If you are dissatisfied with our response, you can ask us to consider your complaint at Stage 2.



Stage 2: investigation

We will look at your complaint at this stage if you are dissatisfied with our response at Stage 1. We also look at some complaints immediately at this stage, if it is clear that they are complex or need detailed investigation.

We will acknowledge your complaint within three working days. We will give you our decision as soon as possible. This will be after no more than 20 working days unless there is clearly a good reason for needing more time.

How your data is used by the University and College

Information is shared between the University and College, and is used for a full range of student administration including education, research, support services, statutory returns, alumni relations, accounts, public relations, security and crime prevention. Full details on the University and College notifications with the Information Commissioner are available at: <http://www.dpr.gov.uk/search.html>)

15.4 Health and Safety

The College recognises and accepts its responsibility to ensure the health and safety of its students whilst at the College, as well as its obligations to employees, contractors and visitors. The College's Health and Safety Policy Statement, along with procedures, guidance and forms are available on the website:

16. Student Participation and Feedback

The College aims to ensure that students have a voice at all stages of the decision-making process, that they have direct input in formulating learning and teaching policy and practice, and that their views are the primary evidence on which the quality of learning and teaching is assessed.

We seek to maintain and improve the quality of our teaching wherever possible by obtaining feedback from students about individual modules and also about the degree programme as a whole.

16.1 Module Evaluation Questionnaires

The College has a standard set of core questions in module evaluation questionnaires which will ensure an effective process for obtaining student feedback on modules. Comments from you help us improve our practice. To make sure that we get the greatest benefit from your experience of our modules, module evaluation questionnaires are made available (either in hard copy or on VLE) at the end of each module. We take your feedback very seriously – it is considered by the Module Leader, the Staff-Student Consultative Committee and our Learning and Teaching Committee. We thank you for taking the time to complete these questionnaires.

16.2 National Student Survey (NSS)

As its name suggests, the Student Completion Survey will be distributed to all students near the end of their degree studies. It seeks feedback on your satisfaction with various aspects of your College experience, including teaching and learning quality, student support and college facilities. This survey helps us place the quality of your experience over your degree course into context with all other UK institutions of higher education. We aim to provide you with the best possible learning and teaching experience

16.3 Student/Staff Liaison Committee (SSLC)

The Student/Staff Liaison Committee provides an important forum for students and staff to jointly discuss problems that arise during a module, and to consider future changes in module content and structure. Students may volunteer to represent the views of your class. The Committee meets twice during the semester and once at the beginning of the semester to review the previous modules. Before each meeting, student representatives will often have the opportunity at the start or end of a lecture to speak to fellow

students. A similar opportunity will be available after the meeting for the representatives to feed back any information from the meeting.

It is a good idea to mention any difficulties to the Module Leader before the meeting so that issues can be thought through carefully. If problems are resolved at the SSLC meeting, they will be referred to the Learning, Teaching and Assessment Committee or discussed at a Staff meeting.

16.4 Learning and Teaching Review

The Learning and Teaching Review process engages with the Student: Staff Liaison Committee (SSLC) as a method of obtaining student feedback. The student members of the SSLC are invited to contribute to the review process by producing a document detailing any issues of which they would wish the Review Panel to be aware. The form in which this is presented is for the SSLC to decide, but might be, for example, a list of bullet-points or a Minute of the discussion of such issues at the SSCC. The Panel meets with student representatives during the Learning and Teaching Review. A student is also included as a full member of the Review Panel for the Learning and Teaching Review.

16.5 Committee Representation

Students are represented on relevant school committees, Safety Health Committee, Planning and Resources Committee, and Student: Staff Liaison Committee. Students are also members of committees relating to the University's regulatory framework including the Academic Appeals Panel, and Discipline Committee.

17. Work-based Learning

17.1 Framework:

Work-based learning (WBL) is an integral part of the programme and enables you to take on appropriate role(s) within the workplace, giving the opportunity to learn and apply the skills and knowledge you have acquired as an integrated element of the programme. It is a two-way process, where the learning in one environment is applied in the other. Work-based Learning and engagement with employers have been embraced accordingly in this programme through a number of modules but principally in the Level 5 Work-based Project module and Level 4 Project module.

WBL operates a blended learning and teaching approach in line with the College's Learning, Teaching and Assessment strategy. The following methods are offered to enable you to develop your knowledge and understanding:

- Induction workshops
- Formative feedback on work from the student's workplace mentor
- Tutor-led face to face and online discussion/meeting
- Student-led interaction via online discussion forums
- Student-led interaction with workplace colleagues
- Self-directed learning facilitated by programme handbook and other learning materials

17.2 Academic Support

- Ada College, will appoint a link tutor to oversee the delivery of the programme and training delivered within the workplace.
- Similarly, the employer will appoint a supervisor, who will work closely with the College Link Tutor, to oversee delivery and evidencing of relevant training delivered in the workplace via a learning log, in agreement with the College.
- The College provides extensive support to help students develop their academic learning skills. Study skills are embedded within taught modules, however Students can also make use of a wide range of one-to-one, group and eLearning resources on topics such as; reading and writing, IT and digital skills, referencing, group work and presentations research skills, assessment, revision and exam support.

17.3 Support in your Workplace

- At your workplace, you will be supported by your employer. Exact arrangements and terminology are the responsibility of the employer, but typically, you will be supported as follows, where the roles may be combined in one person;
- A Mentor/Supervisor designated by the employer to provide vocational and pastoral support for individual students, who may or may not be your line manager. In particular support will be provided for work-based learning assignments and the final year project.
- An Employer Apprenticeship Liaison Manager who manages the relationship between the programme (via the College Link Tutor) and the employer.
- The College and the employer are bound by contract to work together to support you as an apprentice. This will include quarterly meetings between the College, the student, and the employer.
- You will also be allocated an **Apprenticeship Link Tutor**. Your Apprenticeship Link Tutor will manage the relationship between each employer, the students working for that employer, and the College.
- If you or the workplace mentor have any questions concerning the programme relating to the work based competencies, then they should be initially addressed to the Apprenticeship Link team.

17.4 Roles and Responsibilities

Students are required to :

- Engage fully during planned Work-based Learning program in order to achieve the stipulated learning outcomes;
- Inform the Link Tutor or of any issue which is likely to affect the achievement of the agreed learning outcome for the WBL programme;
- Conform to the regulations and policies of the placement organisation;
- Maintain the confidentiality of any sensitive information concerning the organisation and its business;
- Notify the mentor of the placement organisation and University, in advance where possible, of any absences or lateness from scheduled work hours in line with the University protocol;
- Complete the WBL portfolio and evaluation form following completion of the placement experience;

- Submit the portfolio within the specified deadline;
- Be an ambassador of the College when gaining the WBL experience;

The employer is required to :

- Define clearly the types and nature of placement learning opportunities available in the organisation;
- Induct, support and provide learning opportunities to meet the WBL needs of the students;
- Review and assess the students' progress during the placement learning episode;
- Provide relevant and organisation specific information on regulations, health & safety policies and the nature of the business;
- Enable the student to gain a fair, safe and equitable WBL opportunities;
- Advise the Link Tutors of any issues which may affect the students' experience and outcome during a planned WBL Practice;
- Conduct the WBL assessment in line with the agreed assessment process and criteria;
- Assist and guide the student in the development and completion of the WBL e-Portfolio in accordance with the stipulated guidelines;
- Work in partnership with the College in the maintenance and enhancement of the quality of the WBL opportunities;

The Link Tutors are required to:

- Visit the students at the placement setting and monitor achievement of learning outcomes, compilation of evidence and completion of stipulated learning outcomes;
- Provide guidance and support on request and act as the initial university contact for students experiencing difficulties during WBL;
- Respond to student queries/concerns related to the WBL experience and assessment process;
- Provide feedback to link areas on student evaluations of their experience;
- Ensure that mentors return all assessment forms in due time;

17.5 Commitment statement

The apprentice shall:

- Attend training sessions, either on- or off-the-job, as and when required;
- Liaise with the link tutor and the employer, as applicable, in relation to any reviews, monitoring, or audits required for the apprenticeship, including providing information for, and access to, all documentation relevant to the apprenticeship on request;

The employer shall

- Provide a safe and supportive environment for the work-based elements of the apprenticeship;
- Ensure that the apprentice's roles at work allow him/her to gain the wider employment experience required by the programme and the apprenticeship framework;
- Ensure that the apprentice is given sufficient time to enable him/her to complete all elements of the work-based learning elements of the programme within his/her contracted working hours;
- Allow the apprentice to attend all agreed off-the-job learning and shall continue to pay the apprentice during such time, where it falls within normal working hours;

The College shall

- Deliver the academic learning elements of the programme and establish and/or deliver on- and off-the-job learning to meet the needs of the apprenticeship, the apprentice and the employer;
- Monitor the apprentice's progress in liaison with the employer, and the link tutor shall keep the employer informed of the apprentice's progress, including any disciplinary issues;
- Monitor the quality of learning delivery to ensure that it meets the required standards, including liaising with both the employer and the apprentice;

18. General Reading List

Books

1. **Database systems: a practical approach to design, implementation and management** (5th edition) Connolly, Thomas M. and Carolyn E. Begg 9780321523068 Addison-Wesley 2009
2. **Introduction to Statistics and Data Analysis**, Heumann, Christian, Schomaker, Michael, Shalabh, 2016
3. **Introduction to Statistics: Fundamental Concepts and Procedures of Data Analysis**, Howard M. 2014, Reid, SAGE ISBN-13: 978-1452271965
4. **Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython**, McKinney, Wes, O'Reilly Media 2012
5. **Data Visualization: a successful design process**, Andy Kirk, 2012, Packt Publishing Ltd
6. **Ethical Reasoning in Big Data: An Exploratory Analysis**, Jeff Collmann, Sorin Adam Matei, Springer, 2016

Appendix : Programme Specifications

1. Overview/ factual information

Programme/award title(s)	Foundation Degree in Data Analytics & Visualisation
Teaching Institution	Ada, the National College of Digital Skills
Awarding Institution	The Open University (OU)
Date of first OU validation	
Date of latest OU (re)validation	N/A
Next revalidation	TBA
Credit points for the award	240
UCAS Code	TBA
Programme start date	January 2019
Underpinning QAA subject benchmark(s)	Foundation Degree Qualification Benchmark (2015)
Other external and internal reference points used to inform programme outcomes	Level 4 Apprenticeship Standards for Data Analyst https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/510127/Standard_Data_Analyst.pdf
Professional/statutory recognition	
Mode(s) of Study (PT, FT, DL, Mix of DL & Face-to-Face)	FT
Duration of the programme for each mode of study	Two Years
Dual accreditation (if applicable)	N/A
Date of production/revision of this specification	TBA

Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided.

More detailed information on the learning outcomes, content, and teaching, learning and assessment methods of each module can be found in student module guide(s) and the student's handbook.

The accuracy of the information contained in this document is reviewed by the University and may be verified by the Quality Assurance Agency for Higher Education.

2.1 Educational aims and objectives

The general educational objectives of the programme are to:

- Provide knowledge and understanding in the theory, practice of statistics as well as the use of statistical software and programming skills to allow students to gain employment as a data analytics job.
- Foster knowledge and understanding of a modern range of data visualisation and analytics topics, techniques and skills, enriched by the expertise of a broad staff base and industrial links.
- Provide an awareness of the power, breadth, range of applications and limitations of data visualisation and analytics concepts.
- Produce graduates able to efficiently communicate the results of whatever analysis they perform, to various audiences.
- Develop students' abilities to apply independent critical thinking, communication skills and self-management skills to identify problems in their organisations and formulate and implement effective solutions.
- Equip students with the ability to apply methods of statistics that are fundamental to Data Analytics.

2.2 Relationship to other programmes and awards

(Where the award is part of a hierarchy of awards/programmes, this section describes the articulation between them, opportunities for progression upon completion of the programme, and arrangements for bridging modules or induction)

N/A

2.3 For Foundation Degrees, please list where the 60 credit work-related learning takes place

Please see Section 6

2.4 List of all exit awards

Certificate of Higher Education (CertHE)

3. Programme structure and learning outcomes

Foundation Degree in Data Analytics & Visualisation			
YEAR 1	Data Analysis Concepts	Essential Statistics for Data Analysis	Data Analysis in Practice (project)
	Data Analytics with Python (I)	Database Systems	The Ethics of Data Analytics
<i>Certificate of Higher Education (CertHE)</i>			
YEAR 2	Data Analytics with Python (II)	Data Visualisation	Data Warehousing
	Data Analytics & Business Insight	Work-based Project	Artificial Intelligence
<i>Foundation Degree</i>			

Programme Structure - LEVEL 4					
Compulsory modules	Credit points	Optional modules	Credit points	Is module compensatable?	Semester runs in
1. Data Analysis Concepts	20	None	N/A	No	Semester 1
2. Essential Statistics for Data Analysis	20				Semester 1
3. Data Analysis in Practice (project)	20				Semester 1
4. The Ethics of Data Analytics	20				Semester 1
5. Database Systems	20				Semester 2
6. Data Analytics with Python I	20				Semester 2

Programme Delivery Structure: Block Weeks				
Level	Module Title	Delivery Pattern	Method of Delivery	Method(s) of Assessment
LEVEL FOUR	Data Analysis Concepts	January-February 2019	Block release (Launchpad)	Written Examination 50 % Practical Assignment 50%
	Essential Statistics for Data Analysis	January-February 2019	Block release (Launchpad)	Written Examination 50 % Practical Assignment 50%
	Data Analysis in Practice (project)	January-February 2019	Block release (Launchpad)	Report & Presentation 100%
	Data Analytics with Python I	January-February 2019	Block release (Launchpad)	Computer-based Exam 100%
	Database Systems	May 2019	Block release	Written Examination 50 % Practical Assignment 50%
	The Ethics of Data Analytics	July 2019	Block release	Written Essay 100%
	Evidencing Work Based Learning	Year Long	Blended learning	Portfolio (not assessed)
Students exiting at this point with 120 credits would receive a CertHE				

Intended learning outcomes at Level 4 are listed below:

Learning Outcomes – LEVEL 4

3A. Knowledge and understanding

On successful completion of the level, a student should be able to demonstrate knowledge and understanding of:

Learning outcomes:	Learning and teaching strategy/ assessment methods
A1: How data is collected, managed and stored for data analysis. A2: Principles and techniques of statistics, analytics and calculus. A3: The essential background theory, needed to understand data visualisation and analytics concepts and techniques. A4: The strengths and weaknesses of selected statistical/data analytics software and selected programming languages and their use to extend capabilities for data analysis and visualisation.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): <ul style="list-style-type: none">• lectures (A1-A5)• seminars (A1-A5)• directed reading (A1-A5)• use of the VLE (A1 – A5)
A5: The professional, legal & ethical responsibilities of personnel within the organisational, technical and global contexts in which data analytics is applied.	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): <ul style="list-style-type: none">• examinations (A1-A3)• coursework design and implementation (A4)• coursework essays (A5)

3B. Cognitive skills

On successful completion of the level a student should be able to:

Learning outcomes:	Learning and teaching strategy/ assessment methods
B1: Identify the essentials of data visualisation and analytics Problems. B2: Analyse, categorise and interpret data and information statistical models. B3: Apply analysis, design and development concepts with guidance, using given principles. B4: Utilise analyses to plan and develop further investigations.	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none">• lectures (B1-B4)• seminars (B1-B4)• directed reading (B1-B4)• use of the VLE (B1 – A4)
	<p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none">• examinations (B1-B2)• coursework design and implementation (B2-B3)• coursework essays (B1-B4)

3C. Practical and professional skills

This level provides opportunities for students to:

Learning outcomes:	Learning and teaching strategy/ assessment methods
C1: Retrieve, select and evaluate information from a variety of sources. C2: Apply methods of statistics that are fundamental to Data analysis. C3: Plan and generate visualisations from data using programming language. C4: Design and implement databases using a query language. C5: Work in small teams to solve simple development problems.	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none">• lectures (C1-C4)• seminars (C1-C4)• group exercise (C1-C5) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none">• coursework design and implementation (C1-C5)• reflection (C1-C5)

3D. Key/transferable skills

This level provides opportunities for students to:

Learning outcomes:	Learning and teaching strategy/ assessment methods
D1: Demonstrate an ability to work to deadlines, both individually and in groups and to show evidence of planning within both time and personal constraints.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): <ul style="list-style-type: none">• seminars (D1-D4)• directed reading (D1-D4)• use of the VLE (D1 – D4)
D2: Communicate effectively through graphical presentations, the spoken word and written reports.	
D3: Work as an individual to seek solutions to problems, with minimal guidance.	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): <ul style="list-style-type: none">• coursework design and implementation (D1, D4)• coursework essays (D3)• presentations (D2)
D4: Work ethically in teams to seek solutions to problems, with minimal guidance.	

<u>Programme Structure - LEVEL 5</u>					
Compulsory modules	Credit points	Optional modules	Credit points	Is module compensatable?	Semester runs in
1. Data Analytics with Python II	20	None	N/A	No	Semester 1
2. Data Visualisation	20				Semester 1
3. Data Warehousing	20				Semester 1
4. Data Analytics & Business Insight	20				Semester 2
5. Work-based Project	20				Semester 2
6. Artificial Intelligence	20				Semester 2

Programme Delivery Structure: Block Weeks				
LEVEL	Module Title	Delivery Pattern	Method of Delivery	Method(s) of Assessment
LEVEL FIVE	Data Analytics with Python II	September 2019	Block release x 2	Programming Assignment 100%
	Data Visualisation	November 2019	Block release x 2	Practical Assignment 100%
	Data Warehousing	January 2020	Block release x 2	Practical Assignment 100%
	Data Analytics & Business Insight	March 2020	Block release x 2	Practical Assignment 100%
	Work-based Project	Semester Long	Blended learning	Report & Presentation 100%
	Artificial Intelligence	May 2020	Block release x 2	Practical Assignments 100%
	Evidencing Work Based Learning	Year Long	Blended learning	Portfolio (not assessed)
Students at this point with 240 credits would receive a Foundation Degree				

Learning Outcomes – LEVEL 5

On successful completion of the level, a student should be able to demonstrate knowledge and understanding of:

3A. Knowledge and understanding

Learning outcomes:	Learning and teaching strategy/ assessment methods
A6: State-of-the-art tools to build useful visualisations for different types of data sets and application scenarios. A7: The business value of data warehousing and business analytics, and how technology can be used to create this value. A8: Principles and techniques of machine learning, and analytics. A9: Advanced programming skills for the management, manipulation, analysis, and visualisation of a broad variety of data formats.	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none">• lectures (A6-A9)• seminars (A6-A9);• directed reading (A7-A8)• use of the VLE (A6 – A9) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none">• examinations (A7-A8)• coursework design and implementation (A6, A9)• coursework essays (A6, A9)

3B. Cognitive skills

On successful completion of the level a student should be able to:

Learning outcomes:	Learning and teaching strategy/ assessment methods
<p>B5: Creatively deploy appropriate tools and techniques for the development of data analytics applications.</p> <p>B6: Appraise data analytics techniques and their range of applicability in different problems areas.</p> <p>B7: Critically evaluate data visualisations based on their design and use for communicating stories from data.</p> <p>B8: Apply appropriate analysis, design and development concepts to problems of intermediate complexity, with minimal guidance.</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none">• lectures (B5-B8)• seminars (B5-B8)• directed reading (B5-B7)• use of the VLE (B5 – B7) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none">• examinations (B6-B7)• coursework design and implementation (B5-B8)• coursework essays (B5-B8)

3C. Practical and professional skills

This level provides opportunities for students to:

Learning outcomes:	Learning and teaching strategy/ assessment methods
<p>C6: Develop and evaluate applications for data problematic domains</p> <p>C7: Perform correctly data visualisation and exploratory analysis techniques using appropriate software.</p> <p>C8: Select and apply appropriate machine learning algorithms.</p> <p>C9: Design a suitable programming workflow to analyse data to provide solutions to problems of intermediate complexity.</p> <p>C10: Apply subject-specific and intellectual skills to provide systematic data analytics solutions to a reasonable range of problems.</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none">• lectures (C6-C10)• seminars (C6-C10)• group exercise (C9-C10) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none">• coursework design and implementation (C6-C10)• reflection (C6-C10)

3D. Key/transferable skills

This level provides opportunities for students to:

Learning outcomes:	Learning and teaching strategy/ assessment methods
D5: Use appropriate specialist software for data visualisation and analytics. D6: Retrieve and manipulate information. D7: Learn independently in contexts of intermediate complexity.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): <ul style="list-style-type: none">• seminars (D5-D8)• directed reading (D7-D8)
D8: Work as an individual to seek solutions to problems, with minimal guidance.	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): <ul style="list-style-type: none">• coursework design and implementation (D5-D6)• coursework essays (D7-D8)

Title of award at Level 5: Foundation Degree

4. Distinctive features of the programme structure

- Where applicable, this section provides details on distinctive features such as:
 - where in the structure above a professional/placement year fits in and how it may affect progression
 - any restrictions regarding the availability of elective modules
- where in the programme structure students must make a choice of pathway/route

The programme extends learning beyond the classroom and into the workplace. The aim is to integrate academic learning at degree level with on-the-job practical training to provide a holistic programme of education and training to meet the skills needs of employers now and in the future. The programme will develop professional practice, contextualised in the workplace using industry standard technologies and approaches that are shaped by modern businesses.

The degree has two stages, each equivalent to a normal academic year. The pattern of study is designed to fit around full-time employment and uses a blended learning approach, which mixes work-based study and attendance at on-campus study days. This approach allows students to be both productive employees, learning relevant skills on the job, and participants in a learning community of students who are broadening and deepening their professional knowledge together.

The programme is 50 weeks' duration per year during Level 4 and Level 5, with 80% of work-based learning and 20% of college study. The first eight weeks of the programme is delivered as "Launch-pad" at the college. The Launch-pad will provide an opportunity for students to consolidate their learning, receive academic tutorial support, allow revision time and provide an introduction to the next unit in the schedule. Furthermore, this is:

- Development of expert data visualisation knowledge and analytics skills, helping Students to stand out to prospective employers.
- Immersion in industry-relevant practical applications and knowledge implementation to a variety of sectors, from banking and finance, to e-commerce, consultancy and government.

- Investigation of a wide range of topics, including Big Data analysis, modern visualization techniques and programming.
- Cultivation of key transferable skills such as using professional software for data modelling and analytics, writing comprehensive reports and creating engaging Presentations.
- Study of optimisation techniques and financial analysis, and exploration and visualisation of the complicated data sets.

5. Support for students and their learning

5.1 Overview

The general approach is predicated on providing a degree that:

- Reflects current professional practice and values that help apprentices to continually develop as world-class professionals.
- Is tailored by consultation with employers.
- Provides a professional approach to the delivery of learning and teaching that is built upon staff professional skills, research-informed subjects and continuous professional development.

The learning, teaching on these degrees provide:

- An emphasis on professional skills development within the workplace and at college that is embedded in the learning, teaching and assessment process.
- A clear structure for Personal Tutoring System. This provides a personal tutor inside the college who is complemented by a work mentor. By establishing a single point of contact for student support in both organisations (college and employer), we ensure a simple model for support that removes barriers and enables all parties to be aware of the other's point of view.
- Alternative modes of learning to support the needs, preferences and abilities of all of our students. A mix of alternative approaches such as lectures, seminars, laboratory classes, simulations, videos and self-directed study will be used.
- Using research-informed teaching as a bridge between research and teaching with an increased emphasis at level 5.

- Use of diagnostic online and in-class testing to identify student progress and individual learning needs. Flexible levels of additional support to challenge exceptional students and support those identified as needing further help to progress.
- The consistent use of a wide range of digital resources including IT equipment, use of a virtual learning environment and digital library resources.
- Working in partnership with students to enhance their experience, including staff-apprentice liaison committee's meetings and regular apprentice surveys of learning, teaching and assessment at a module and programme level.
- Independent Learning and Reflection that requires learners to take responsibility for their own learning by being pro-active in seeking out new learning opportunities.

5.2 Technology-Enhanced Learning

The use of technology-enabled learning materials, allows flexibility in the delivery of the programme, supports independent learning, and aids inclusivity. All units will make extensive use of the College's virtual learning environment (VLE). The VLE is used, not only as a repository for course notes, examples and exercises and a mechanism for making announcements, but also to provide additional learning resources such as videos, links to journal articles, formative quizzes, and a mechanism to submit assessments and return feedback. Students using the VLE will be able to take their learning beyond the classroom. Moreover, students will be provided with their own domain, so they can establish their own online identity, collect their work, create a blog based portfolio, etc.

As part of the introduction to their module, module leaders will introduce students to the classroom site, and how to navigate their way around it and how it will be used on that particular unit. To facilitate remote meetings staff and students may make use of screen sharing technologies and video conferencing software (e.g. Skype™). Employers will not have access to student VLE areas but some form of electronic forum will be used to maintain contact with work mentors.

5.3 Work-related Learning

Most learning is work-related as students are employed and wherever possible assessment is related to work-based activities. The employment of the student is a critical part of the degree. It places the students in a technology-based work environment and therefore gives them the opportunity to relate past and future academic study to the world of work and to make more informed career decisions at the end of their studies. The main aims of the employment perspective are:

- To enable the apprentice to gain a better understanding of the work of a professional with digital skills.
- To promote the apprentice's awareness of the organisational context of a

professional's activities.

- To encourage the apprentice to relate theory to practice and to critically appraise both.
- To gain a better understanding of career opportunities within Data Analytics.
- The workplace also supports a number of general aims, including:
 - The development of apprentices' practical competence in the discipline.
 - The production of graduates who are knowledgeable and skillful in their discipline and can deploy their skills effectively and to good purpose in their working lives.
 - The stimulation of an enquiring, analytical and creative approach in work and thought.
 - The encouragement of independent judgment and critical self-awareness.
 - The development of the ability to view the field of interest and study in a broader perspective.
 - The development of the ability to absorb and apply new ideas and technologies.

5.4. Personal Development Planning

Personal Development Planning (PDP) is designed to help students make the most of their college education and to help plan their career. PDP focuses on helping students to develop a range of academic skills. It also facilitates preparation for their career after graduation. A comprehensive guide for PDP can be found on the college's VLE. Furthermore, the Degree has a mandatory requirement for completion of a portfolio that covers all three years. The portfolio is owned by the student and not embedded in college systems.

Employers are expected to undertake regular reviews of the students' activities and support the setting of professional objectives, as they would for any other employee. The portfolio will be used to document progress towards the personal and professional objectives set within the host company as well as document the students' progress towards mastery of the learning outcomes defined as core within the degree.

The portfolio will:

- Be developed with guidance and support from their personal tutor, which decreases as personal capability is developed so that it becomes self-sustaining.

- Provide a structured process for recording the development of all new skills and knowledge at all levels of the degree within the academic and professional contexts.
- Enable the student to document their experience as learners, the tasks they undertake at work, the connection between units studied and their work experience, and to support a process of self-reflection leading to them being independent, self-managed professionals.
- Support the creation of personal records, and planning and monitoring progress towards the achievement of personal objectives, connected to the review process that their employer conducts.

5.5 Support at Employer Level

In their workplace it is expected that the apprentice would be supported by:

- A 'mentor' designated by the employer to provide vocational and pastoral support for an individual student, who may or may not be their line manager. In particular support will be provided for work-based learning assignments.
- A Link manager, who manages the relationship between the programme via the link tutor and the employer.
- There will be regular liaison between the college and employers to monitor and support individual students jointly.

6. Work-based Learning Framework

Authentic and innovative work-based learning (WBL) is an integral part of Foundation degrees and their design. It enables learners to take on appropriate role(s) within the workplace, giving them the opportunity to learn and apply the skills and knowledge they have acquired as an integrated element of the programme. It involves the development of higher-level learning within both the higher education provider and the workplace. It is a two-way process, where the learning in one environment is applied in the other. Work-based learning and engagement with employers have been embraced accordingly in this programme through a number of modules but principally in the level 5 work-based project module and the level 4 project module.

6.1 Educational aims of the WBL Framework

The aims of the WBL framework are:

- To enable the College to provide higher education programmes customised to the needs of employer partners.
- To provide accessible and flexible opportunities for the apprentices to gain a

comprehensive range of higher education qualifications at levels 4 to 5.

- To provide a means to recognise and accredit higher-level learning that is specifically achieved in the context of work to promote continuing personal and professional development.
- To enable individuals to recognise their own work-based learning as the subject of higher education study.
- To enable individuals to develop higher-level knowledge and understanding, and cognitive, practical, personal and enabling skills from the study of their own work-based learning.
- To provide the means to construct negotiated work-based projects, in partnership with employers that are designed to meet their development needs.

6.2 Descriptors and Learning Outcomes

Work-based learning framework specify opportunities for students to achieve and demonstrate learning outcomes at appropriate academic levels (4 to 5). The framework includes work-based learning level descriptors that describe learning achievement in four categories at each level:

- Knowledge and understanding
- Cognitive skills
- Practical skills
- Personal and enabling skills

All work-based learning modules specify learning outcomes that appropriately reflect these level descriptors. The work-based learning outcomes describe what students should be able to demonstrate on successful completion of a work-based learning module.

6.3 Learning and Teaching

Work-based learning operates a blended learning and teaching approach in line with the college's learning, teaching and assessment strategy. The following methods are offered to enable students to develop their knowledge and understanding:

- Induction workshops
- Formative feedback on work from the student's workplace mentor
- Tutor-led face to face and online discussion/meeting

- Student-led interaction via online discussion forums
- Student-led interaction with workplace colleagues
- Self-directed learning facilitated by programme handbook and other learning materials

6.4 Assessment

Methods used to assess the apprentice at workplace must be valid and reliable, and allow for the generation of evidence which is sufficient to make judgments about the apprentice's level of knowledge and understanding, skills and competencies. The assessments will result in a portfolio of evidence the 'quality' of which is graded as part of the overall classification of the apprenticeship (i.e. Distinction, Merit, Pass, Fail).

6.5 Portfolio

To successfully complete an apprenticeship, the learners need to demonstrate both knowledge and have the skills of applying that knowledge in the workplace which is demonstrated with work-based 'evidence'. The evidence contained in the portfolio will comprise of complete and/or discrete pieces of work that covers the totality of the Level 4 Data Analysis Apprenticeship Standard.

In the portfolio, apprentices present evidence from real-work projects, illustrating the application of all the knowledge, skills and behaviours set out in the standard. This is produced towards the end of the apprenticeship with evidence from projects that have been completed, usually, towards the end of the apprenticeship. The portfolio is assessed as part of the endpoint assessment, and is not formally assessed whilst on programme. The portfolio is not evidence that the learning has taken place, but is evidence that the apprentice has applied that learning in a holistic and coherent way.

The evidence contained in the portfolio will comprise a small number of complete and/or discrete pieces of work which, together, cover the totality of the standard. It will showcase their very best work, enabling them to demonstrate how they have applied their knowledge and understanding in a real-work environment to achieve real-work objectives. Employers and training providers will assist the apprentice to assemble their portfolio to ensure that the summative portfolio is complete, that it covers the totality of the standard and has been done to a satisfactory level. Wherever possible, this will be an e-portfolio or other electronic platform. The evidence should be based on real work projects or outputs.

Evidence of work-based activities may be in the form of:

- Reports
- Practical exercises

- Projects
- Minutes
- Appraisals against performance objectives
- Development plans
- Records of observation of performance and professional discussions
- Personal reflective log
- Feedback on behaviours via contact with others
- Teamwork - manager's report
- Emails
- Customer comments

The completed portfolio will be assessed against the requirements summarised in the standard and set out in detail in the occupational brief. This is carried out by an independent assessor who makes their own judgement on the quality of the work. The independent assessor may also note particular aspects of the work that they wish to discuss with the apprentice during the interview, either to confirm their judgement and/or provide further information on which to base their grading decisions. The evidence will be assessed against all components of the standard, i.e.:

- Technical competencies
- Technical knowledge and understanding
- Underpinning skills, attitudes and behaviour.

The evidence in the portfolio will be examined for:

- Completeness – the evidence in the portfolio, taken together, must cover the totality of the standard
- Quality – the evidence must at least satisfy the minimum requirements for each area of the standard.

Link tutors will assist the apprentice to develop their portfolio to ensure that it is complete and that it covers the totality of the standard.

6.6 Work-based Project (WBP)

The work-based project (WBP) is a part of the Foundation degree which contributes to the final mark (i.e. classification) of the degree. The details of the assessment are contained in the respective module descriptor as well as the student handbook. The WBP is a substantial piece of work to be undertaken at level 5, during the second year

of the degree.

The project must bring together elements of learning from different parts of the programme and show evidence of accumulated knowledge and understanding of management, and the application of these within their organisation. The project must meet the standards and demonstrate the approach taken to the planning and completion of the project.

Considering the significance of the project, the employer and college must work together with the apprentice to agree on a project that is achievable within the employer's business constraints whilst meeting the needs of the standard. The project should be conducted as part of the apprentice's normal work. The employer should make allowances, in terms of time and resource, for the project to be undertaken. Any elements which need to be undertaken outside of normal work should be agreed between the employer, apprentice and Provider so that apprentices are not disadvantaged in any way from performing their job and meeting the requirements of the project.

The process starts off by apprentices submitting a proposal. Apprentices are strongly advised to consult with their line managers when preparing the proposal, to discuss /consider issues such as ethics, IP, data protection, confidentiality, etc.

The proposal requires approvals of both the college (academic standards) and the employer (workplace standards). This will be finalised through discussion between Ada, the employer and the student. (In some cases the proposal is returned to the apprentice for minor/major changes based on the college/employer feedback). Upon the approval of the proposal, apprentices will settle on their project, in conjunction with the employer and the academic team.

The requirements for the delivery of the work-based project are shown below:

Design

- A specification must be developed to show what has to be delivered on completion of the project - this must include the outputs, project plans etc.
- Terms of reference must be developed by the apprentice and agreed by the college and employer early in the project.
- The college must provide clear project assessment criteria including those for the terms of reference, approach to the problem, solution design and implementation, the final report and presentation.
- Apprentices must document their assumptions and highlight the consequences of these assumptions – enabling them to demonstrate their understanding of commercial pressures and the application of their thinking and problem solving skills.
- Agreement must be made between the apprentice, employer and college on

what systems, tools and platforms will be required (if any) to complete the tasks and how these will be made available.

Delivery

- The College will work with the employer and apprentice to agree on the project title and support arrangements required to enable the project to be undertaken.
- The project should normally be based on an agreed business problem that forms part of the apprentice's role.
- Suitable time should be set aside by the employer for the apprentice to plan, undertake and write up their project.
- The apprentice must first work out what is required and present terms of reference and an initial plan for an agreement with the employer and provider.
- The project should typically be undertaken at the employer's premises.
- The employer and the College must ensure that the apprentice has access to the tools and systems required to complete the tasks within the project.
- The apprentice must provide a signed statement to confirm the project is their own work.
- The project will be set and completed during the second year of the degree.

Project Environment

- A suitable project environment should be provided ensuring access to all required tools and systems. This will be the apprentice's normal place of work.
- Someone responsible for managing the project from the employer perspective must be identified.
- The link tutor from the college must oversee and provide support to the apprentice.
- The work-based project will contribute towards the achievement of the degree.

6.6 Threshold Requirements

The Ada College will take responsibility for the quality of the learning opportunities delivered via work-based learning and will ensure individual and collective responsibilities of students, link tutors and workplace mentors are clearly defined. The following provides an indicative list of what all parties required to do in work-based activities:

Students are required to:

- Engage fully during planned work-based learning program in order to achieve the stipulated learning outcomes.
- Inform the link tutor of any issue that might prevent progress in, or satisfactory completion of the learning outcomes.
- Conform to the regulations and policies of the workplace organisation and expected standards of ethical behaviour.
- Maintain the confidentiality of any sensitive information concerning the organisation and its business.
- Submit the report within the specified deadline.
- Undertake any assessments which may be required to meet the programme learning outcomes.

The link tutors are required to:

- Oversee the assessment of students during the workplace learning period.
- Visit the students at the workplace regularly for assessment and provision of support.
- Oversee the assessment of students during the programme.
- Provide guidance and support on request and act as the initial college contact for students experiencing difficulties during work-based learning.
- Respond to student queries/concerns related to their work-based learning experience and assessment process.
- Provide feedback to link areas on student evaluations of their experience.
- Gather and evaluate feedback from all parties.
- Where applicable, invite the employer's mentor to attend training activities at the college to ensure the employers are able to manage the assessment of students in line with Ada College policies and procedures.

7. Criteria for admission

- Level 3 qualifications (A-Level/BTEC) at Grade C/equivalent or above with at least one qualification being in Mathematics or another mathematically based STEM subject or equivalent work experience.

- Additionally, candidates are normally required to have a grade level 6 (old grade B) or above in GCSE Maths and to have demonstrated ability in Maths in further studies.

8. Language of study

English

9. Assessment Strategy & Progression Rules

The assessment approach has been designed to ensure that students meet the skills, knowledge and behaviour outcomes as defined in the programme. A range of assessment methods will be used which are appropriate to learners who benefit from face-to-face learning opportunities as well as a good quality virtual learning environment (VLE). The Assessments have two purposes:

- To provide learners with feedback about how their work is progressing '*formative*' assessment.
- To measure and record student's achievement of modules towards the qualification '*summative*' assessment.

Given the nature and context of the programme such an approach provides feedback to improve students' achievement and actively involves all students in the teaching and learning process. The teaching team aims to provide timely and constructive feedback to students. Providing timely effective feedback can engage students in more productive learning activities and it enables better monitoring of progress of students.

The programme's formative assessment also plays a fundamental role in maintaining and enhancing learner motivation through the provision of personalised feedback, allowing the individual to reflect on their learning, clarify misconceptions, obtain a sense of the level of competencies attained, and gauge how they are progressing. This feedback will be given both orally and in a written format through the VLE.

The assessment processes incorporate internal moderation and external examiners to ensure independence across the degree programme and between the suggested formative and end-point assessment. The remainder of this section will set out the approach to assessment, including what will be assessed, how it will be assessed and the role of the assessors, employer and apprentice in the assessment process.

9.1 Assessment Overview

The Individual modules will contribute formative assessment to the skills, knowledge and behaviour outcomes en-route to the final project and presentation. Formative assessment methods will include an appropriate mix of essays, reports, practical assignments, written exams and worked-based portfolio. These will be applied to the proposed modules to assess the development of skills, knowledge and behaviours. The endpoint assessment is by a project and presentation.

Practical assignments are used extensively particularly on modules that have programming component. This is the only realistic method for providing formative feedback to students in this area of work. Essay type assignments are used where the nature of the material lends itself to this: for example, essays may be used where a number of different techniques can be compared.

Examinations are used as a summative assessment (though we also use the marks gained in earlier practical assignments and essays to produce final grades in each module). The grades for all modules taken at levels 4-5 are combined to give the final classification. In some modules, we require students to gain at least a certain level in examinations: this is because we are aware that collusion between students can lead to less able students doing better than they could unaided in practical work.

The formative assessment of individual modules will give an ongoing indication of performance against the learning outcomes defined in the programme. Moreover, the formative assessment methods ensure that the student is sufficiently prepared to undertake the endpoint assessment.

9.2 Progression Rules

A student must achieve 120 credit points in the first year of the programme in order to be able to progress to the second year. A total credit of 240 is required to be awarded the Foundation degree at the end of the programme.

9.3 Final Assessment and Grading

Classification of Foundation degree will be based on the average mark across all modules. The class of degree is determined by the programme mark as shown below.

Mark	Class of degree
70% -100%	Distinction
60% -69%	Merit
40% -59%	Pass

10. Information about non-OU standard assessment regulations (including PSRB requirements)

The college and the employer work together to support the apprentice and to carry out the endpoint assessment (EPA). In accordance with the Apprenticeship Standard, the work-based project contributes to the endpoint assessment for the level 4 apprenticeship. Both the project outcomes and the associated presentation and interview will be assessed. The project is work-based, is chosen in conjunction with the employer, and is assessed jointly by the college and the employer.

In addition to the academic work that leads to the award of the Foundation degree in Data Analytics and Visualisation, the apprentice will create a portfolio of evidence which will demonstrate how learning has been applied, their achievements and capabilities. It is a collection of evidence which demonstrates evidence of the skills, knowledge and behaviours an apprentice has acquired against the standard.

Towards the end of the programme, the apprentice will undertake a synoptic project, which will bring together elements of their learning from different parts of the programme and show their accumulated knowledge and understanding of data analytics and its application in their organisation. The EPA is by a robust panel interview, which will include a presentation on the project, review of portfolio evidence, and a question and answer session. This combination will fully test that the apprentice meets all the requirements of the standards. The apprentice must 'pass' the EPA in order to gain their level 4 apprenticeship.

The British Computing Society (BCS), The Chartered Institute for IT carries out the end-point assessment interview. It includes a review of your portfolio, a presentation and synoptic project to make sure the apprentice has met the learning outcomes of the programme.

11. Methods for evaluating and improving the quality and standards of teaching and learning.

The college has a comprehensive quality assurance programme that monitors all programmes through programme review, achievement of performance indicators and observation of teaching and learning. This is also representation and input from employers who will contribute to curriculum development and review. In this provision all module guides are internally verified to ensure that all learning outcomes and grading criteria are met. This programme is externally monitored by external examiners who advise on academic standards and ensure that all learning objectives have been met.

11.1 External Examiner

The role of external examiners is to assure the quality of students' learning experience and ensure that they are assessed fairly in relation to other students on the same

programme and to all students across the College and nationally. External examiner's reports are an integral part of the College quality assurance processes. They form part of the requirements for programme annual review and the programme team must demonstrate how they have responded to the views and comments made by external examiner.

11.2 Indicators of Quality and Standards

Annual Review

The programme will undergo a Programme Annual Review in line with the College processes.

Student feedback

The Programme Team will employ a variety of methods to gain feedback from students on their course, including:

- Two annual student surveys - 'First term' and 'On Exit'.
- Completion of the National Student Survey (NSS) for final year students
- Individual on-line module evaluations.
- Teaching and Learning (T&L) Committee will be held twice a year to facilitate the sharing of good practice and initiatives from internal and external developments.
- T&L committee will consist of the Dean, the Programme Director, members of teaching staff and students' representatives for each cohort.
- On-line Student forums.

Progress indicators

The progress indicators are considered on an annual basis and typically include:

- Student evaluation questionnaires. These are completed by students during in the first term and at the end of the year and (with the NSS) in their final year.
- Module evaluations which determine the students view on the quality of the modules they have studied.
- Independent internal and external reviews including QAA.
- Reviews by external examiners who comment on levels of achievement compared with standards elsewhere.
- Internal progression rates, completion rates, student success indicators.

12. Changes made to the programme since last (re)validation

N/A

Annexe 1: Curriculum map

Annexe 2: Level 4 Apprenticeship Standards for Data Analyst

Annexe 3 - Programme Modules – Level 4 Apprenticeship Standards Matrix

Annexe 4 - Foundation Degree Benchmark Standards

Annexe 5 - Programme Outcomes – FD Standards Matrix

Annexe 1 - Curriculum map (Modules-Programme Outcomes Matrix)

This table indicates which modules assume responsibility for developing (D) and assessing (A) particular programme learning outcomes.

Outcomes		Knowledge and Understanding					Cognitive/Intellectual Skills				Practical/Professional Skills					Key Transferable Skills			
Year	Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	C1	C2	C3	C4	C5	D1	D2	D3	D4
YEAR ONE	Data Analysis Concepts	DA	-	D	-	-	D	D	-	-	DA	-	-	-	D	D	-	D	-
	Essential Statistics for Data Analysis	-	DA	D	D	-	-	DA	-	-	D	DA	-	-	-	-	-	D	-
	Data Analysis in Practice (project)	A	-	A	D	D	A	A	DA	DA	A	A	DA	-	DA	DA	DA	-	DA
	The Ethics of Data Analytics	-	-	-	-	DA	-	-	-	-	D	-	-	-	D	-	DA	DA	-
	Database Systems	DA	-	-	D	-	-	D	DA	-	D	-	-	DA	-	-	DA	D	-
	Data Analytics with Python I	-	-	-	DA		D	DA	DA	-	D	-	DA	-	-	D	-	DA	-

Outcomes		Knowledge and Understanding				Cognitive/Intellectual Skills				Practical/Professional Skills					Key Transferable Skills			
Year	Module	A6	A7	A8	A9	B5	B6	B7	B8	C6	C7	C8	C9	C10	D5	D6	D7	D8
YEAR TWO	Data Analytics with Python II	DA	-	D	DA	DA	A	A	-	-	DA	D	DA	-	DA	D	-	DA
	Data Visualisation	A	-	-	A	-	D	DA	-	-	D	-	-	-	A	DA	-	DA
	Data Warehousing	-	DA	-	-	D	D	-	DA	-	-	-	-	D	-	DA	D	DA
	Data Analytics & Business Insight	-	DA	-	-	DA	DA	-		DA	-	-	-	A	A	DA	D	DA
	Work-based Project	A	-	A	A	DA	DA	A	DA	DA	DA	A	DA	A	A	DA	DA	DA
	Artificial Intelligence	-	-	DA	-	A	-	-	DA	DA	-	DA	-	-	-	-	DA	DA

Annexe 2: Level 4 Apprenticeship Standards for Data Analyst

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/510127/Standard_Data_Analyst.pdf

Technical Competencies (SKILLS)

Be able to undertake the following in line with organisational procedures and under supervision

S1: identify, collect and migrate data to/from a range of internal and external systems

S2: manipulate and link different data sets as required

S3: interpret and apply the organisations' data and information security standards, policies and procedures to data management activities

S4: collect and compile data from different sources

S5: perform database queries across multiple tables to extract data for analysis

S6: perform routine statistical analyses and ad-hoc queries

S7: 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

S8: assist production of performance dashboards and reports

S9: assist with data quality checking and cleansing

S10: apply the tools and techniques for data analysis, data visualisation and presentation

S11: assist with the production of a range of ad-hoc and standard data analysis reports

S12: summarise and present the results of data analysis to a range of stakeholders making recommendations

S13: works with the organisation's data architecture

Technical Knowledge and Understanding (KNOWLEDGE)

- K1:** the range of data protection and legal issues
- K2:** the data life cycle
- K3:** the different types of data, including open and public data, administrative data, and research data
- K4:** the differences between structured and unstructured data
- K5:** the fundamentals of data structures, database system design, implementation and maintenance
- K6:** the importance of the domain context for data analytics
- K7:** the quality issues that can arise with data and how to avoid and/or resolve these
- K8:** the importance of clearly defining customer requirements for data analysis
- K9:** the processes and tools used for data integration
- K10:** the steps involved in carrying out routine data analysis tasks
- K11:** how to use and apply industry-standard tools and methods for data analysis

Underpinning Skills, Attitudes and Behaviours (BEHAVIOUR)

- B1:** Logical and creative thinking skills
- B2:** Analytical and problem-solving skills
- B3:** Ability to work independently and to take responsibility
- B4:** Can use own initiative
- B5:** A thorough and organised approach
- B6:** Ability to work with a range of internal and external people
- B7:** Ability to communicate effectively in a variety of situations
- B8:** Maintain productive, professional and secure working environment

Annexe 3 - Programme Modules – Level 4 Apprenticeship Standards Matrix

YEAR ONE	Level 4 Standards →	Technical Competencies (S)													Technical Knowledge and Understanding (K)											Underpinning Skills, Attitudes and Behaviours (B)							
	Modules	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10	K11	B1	B2	B3	B4	B5	B6	B7	B8
	Data Analysis Concepts	✓	✓		✓		✓		✓							✓	✓	✓	✓	✓	✓			✓									
	Essential Statistics for Data Analysis				✓		✓	✓																			✓						
	Data Analytics with Python I	✓	✓		✓		✓				✓												✓										
	Data Analysis in Practice (project)	✓	✓	✓	✓		✓		✓	✓	✓	✓									✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		
	Database Systems	✓	✓		✓	✓													✓		✓												
	The Ethics of Data Analytics														✓																✓		✓



: Launchpad

YEAR TWO	Level 4 → Standards	Technical Competencies (S)													Technical Knowledge and Understanding (K)											Underpinning Skills, Attitudes and Behaviours (B)							
	Modules	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10	K11	B1	B2	B3	B4	B5	B6	B7	B8
	Data Analytics with Python II	✓	✓		✓	✓					✓												✓										
	Data Visualisation	✓	✓		✓				✓		✓																						
	Data Warehousing	✓	✓		✓	✓		✓		✓													✓										
	Data Analytics & Business Insight				✓																			✓									✓
	Work-based Project	✓	✓	✓	✓					✓	✓	✓	✓	✓								✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
	Artificial Intelligence							✓																		✓	✓						

Annexe 4: Foundation Degree Benchmark Statements (July 2015)

Fd1 - Knowledge and critical understanding of the well-established principles in their field of study and the way in which those principles have developed.

Fd2 - Successful application in the workplace of the range of knowledge and skills learnt throughout

Fd3 - Ability to apply underlying concepts and principles outside the context in which they were first studied, and the application of those principles in a work context.

Fd4 - Knowledge of the main methods of enquiry in their subject(s), and ability to evaluate critically the appropriateness of different approaches to solving problems in their field of study and apply these in a work context.

Fd5 - An understanding of the limits of their knowledge, and how this influences analyses and interpretations based on that knowledge in their field of study and in a work context.

Fd6 - Use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis in their field of study and in a work context.

Fd7 - Effectively communicate information, arguments, and analysis, in a variety of forms, to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively in their field of study and in a work context.

Fd8 - Undertake further training, develop existing skills, and acquire new competences that will enable them to assume responsibility within organisations.

Fd9 - Qualities and transferable skills necessary for employment and progression to other qualifications requiring the exercise of personal responsibility and decision-making.

Fd10 - The ability to utilise opportunities for lifelong learning.

Annexe 5: Foundation Degree Benchmark Statements (July 2015)

Programme Outcomes	Benchmark Statements									
Knowledge and understanding	Fd1	Fd2	Fd3	Fd4	Fd5	Fd6	Fd7	Fd8	Fd9	Fd10
A1	x									
A2	x									
A3	x									
A4					x					
A5		x								
A6										
A7	x									
A8	x									
A9										
Cognitive/Intellectual Skills										
B1	x									
B2										
B3		x						x		
B4			x							
B5										
B6						x				
B7					x	x				
B8			x							

Practical/Professional Skills										
C1	x									
C2			x							
C3										
C4	x		x							
Practical/Professional Skills	Fd1	Fd2	Fd3	Fd4	Fd5	Fd6	Fd7	Fd8	Fd9	Fd10
C5		x								
C6										
C7										
C8	x									
C9			x							
C10			x			x				
Key Transferable Skills										
D1						x	x		x	
D2						x	x		x	
D3		x		x					x	
D4		x							x	x
D5										
D6										
D7		x		x					x	x
D8		x							x	