End-point assessment plan for Senior Professional Economist apprenticeship standard

Apprenticeship standard number	Level of this end point assessment (EPA)	Integrated
ST0796	7	Integrated degree apprenticeship

Overview

This end-point assessment plan (EPA) accompanies the Senior Professional Economist apprenticeship standard. It is for end-point assessment organisations (EPAOs) who need to know how the EPA for this apprenticeship must operate.

The role of a Senior Professional Economist is to deliver advice and analysis that improves outcomes for internal and external clients. The core responsibilities of a Senior Professional Economist are to design, implement and lead programmes of economic analysis to support decision-making.

Senior Professional Economists work both independently as well as working in, or leading, teams. They will have extensive project management, communication, influencing and leadership skills. Where Professional Economists and Senior Professional Economists work together, the Senior Professional Economist will undertake more complex analytical tasks and play a leadership role, for example designing work programmes, reviewing outputs, and taking responsibility for delivery.

Completion of this apprenticeship will enable individuals to work for employers of professional economists in the private, public and third sectors.

This is an integrated master's degree-level apprenticeship, which incorporates on-programme academic and workplace learning and assessment, with an independent end-point assessment to test the knowledge, skills and behaviours detailed in the occupational standard.

Apprentices must spend a minimum of 12 months on-programme before they reach the EPA gateway, though for this apprenticeship, on-programme will typically last up to 24 months. During that time, they will work towards the occupational standard, with a minimum of 20% off-the-job training.

The EPA must be completed within an EPA period lasting typically 8 months, after the EPA gateway. The awarding EPAO will be responsible for the on-programme and EPA. Performance in the EPA will count towards the overall degree classification. Apprentices cannot successfully complete the master's degree without passing the EPA.

Performance in the EPA will determine the apprenticeship grade of fail, pass or distinction.

The EPA period should only start once the employer is satisfied that the apprentice is consistently deemed to be working at, or above, the level set out in the occupational standard, and once all the pre-requisite gateway requirements for EPA have been met and can be evidenced to the EPAO. All pre-requisites for EPA assessment methods must also be complete and available for the independent assessor as necessary.

Apprenticeship Structure

The master's degree will normally consist of 180 credits or equivalent[1]. All credits will be at level 7, with 120 credits delivered on-programme and 60 through the EPA.

Training providers will design on-programme training and assessment to develop the knowledge, skills and behaviours required in the occupational standard. It is recommended that, when doing so, they work with representative employers. In addition, employers should ensure that the working environment allows the apprentice the opportunity to demonstrate, reinforce and apply their learning.

End-Point Assessment Gateway

The EPA period should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, that is to say they are deemed to have achieved occupational competence. In making this decision, the employer may take advice from the apprentice's training provider(s), but the decision must ultimately be made solely by the employer.

In addition to the employer's confirmation that the apprentice is working at or above the level in the occupational standard, the apprentice must have completed the following gateway requirements prior to beginning EPA:

- Apprentices without Level 2 English and maths on entry will have achieved this level prior to taking the EPA. For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirement is Entry Level 3, and British Sign Language qualifications are an alternative to English qualifications, if this is their primary language.

[1] The example structures are expressed using the traditional credit system that is the industry standard for UK economics master's degrees. Some institutions use different systems. These institutions would not be precluded from delivering this apprenticeship; there would merely be an expectation that the credits would be delivered pro-rata i.e. 33% to be assessed by the EPA with the remainder on-programme.

- The apprentice will have successfully completed the formal academic learning, as defined by the training provider, equating to 120 credits of their master's programme.
- The apprentice will have sufficient evidence, i.e. through the completion of their portfolio and project proposal, consisting of a topic, title and summary, and their performance at work, to demonstrate competence in all knowledge, skills and behaviours.

Although the apprentice should only be recommended for EPA when they are ready, employers and EPAOs should have a remediation processes in place to support any apprentice who fails to meet the eligibility criteria to enter EPA.

The EPA must be completed within an EPA period lasting typically 8 months, after the EPA gateway. The assessment methods can be delivered in any order.

For the work-based project the apprentice will be required to submit:

- The project proposal consisting of a title, topic and summary of the project. This should be agreed between the employer, the apprentice and the EPAO within a week of Gateway. The employer should have the opportunity to influence the choice of topic, however, the content must be sufficient to evidence the apprentice can demonstrate the knowledge, skills and behaviours required as mapped to this assessment method. Therefore the EPAO has the final say on whether the project proposal is likely to be sufficient to meet the requirements of the EPA.

For the professional discussion underpinned by portfolio, the apprentice will be required to submit:

- A portfolio.
  - The format and structure of the portfolio should be agreed between the employer, the apprentice and the EPAO. The content must be sufficient to evidence the apprentice can demonstrate the knowledge, skills and behaviours required as mapped to assessment method.
  - There must be at least one piece of evidence relating to each knowledge, skill and behaviour mapped to this assessment method, with typically ten pieces of evidence permissible. One piece of evidence can be referenced against more than one knowledge, skill or behavioural requirement. The portfolio will evidence all relevant KSBs mapped to the professional discussion assessment method.

- The portfolio should contain written accounts of activities that have been completed and referenced against the knowledge, skills and behaviours, supported by appropriate evidence. Progress review documentation, witness testimonies, and feedback from colleagues and/or clients may be included as evidence. Reflective accounts must not be included as evidence. The apprentice's line manager / mentor will typically support the development of the portfolio in accordance with company and training provider policy and procedures. The evidence provided must be valid and attributable to the apprentice; the portfolio of evidence must contain a statement from the employer and apprentice confirming this.

For the test there are no specific gateway requirements.

Length of end-point assessment period

The EPA must typically be completed within 8 month(s) of the apprentice passing the EPA gateway. Any supporting material required for the EPA (i.e. portfolio) should be submitted at the gateway. The project proposal should be submitted at Gateway, and agreed within a week of submission. Any EPA assessment that is resat or retaken remains outside of the EPA period and in-line with the requirements set out in this EPA. The EPAO will have a policy to deal with extenuating circumstances, such as illness.

End-point assessment methods

The EPA consists of three assessment methods, which can be taken in any order:

- work-based project
- professional discussion underpinned by portfolio
- test

Annex A details which method should be used to assess each knowledge, skill and behaviour in the standard.

Work-based project

Rationale for this assessment method

This occupation involves the practical delivery of economic advice at senior levels within an organisation. Senior Professional Economists will draw on a range of complex analyses over time in order to deliver economic solutions for a range of business reasons. This would be difficult for an independent assessor to naturally observe in its entirety.

The work-based project will offer flexibility to the apprentice to demonstrate the KSBs (as listed in Annex A) that would naturally occur in their organisation, where they will be working on challenging economic problems that could, for example, influence strategic decision-making within an organisation.

The work-based project will deliver a relevant output, such as a report plus any supporting materials that Senior Professional Economists will regularly demonstrate in their role, where they frequently need to present complex information to a range of audiences through various modes.

The work-based project is the best approach to assessment of competence. To try to replicate the working environment in a valid way would take too long to observe and would not be practicable or cost effective; a project is a reasonable substitute.

Time

The project is compiled after the apprentice has gone through the EPA Gateway. The apprentice will conduct their project and submit it to the EPAO no later than 28 week(s) of the EPA start date. A typical project will be relevant to the workplace and therefore the employer should make time available to complete the project. However it is likely that the apprentice will be required to carry out other projects and non-project activities related to their current role during the EPA period. The EPA project will be a complex piece of analysis and will not be swift to conclude. Employers must allow the apprentice sufficient time to complete the project during the EPA period.

The work-based project will be the apprentice’s own work. The independent assessor will mark the work-based project. The independent assessor will have the final say on all marking.

Detailed requirements

The work-based project should be designed to ensure that the apprentice's work meets the needs of the business; is relevant to their role; and allows the relevant KSBs to be demonstrated for the EPA. The project's subject, title and scope will be agreed between the employer and the EPAO.

The employer will ensure it has a real application to their workplace and the EPAO will ensure it meets the requirements of the EPA (including suitable coverage of the KSBs assigned to this assessment method).

The EPAO will provide guidance to the employer and apprentice regarding what constitutes suitable project topics for the work-based project. The EPAO will provide detailed specifications and suggested project titles to enable the employer to select a project that will meet the requirements of the EPA. In which case, the employer should choose a project which is relevant and worthwhile for their workplace, or propose an alternative which the EPAO **must** agree.

The EPAO will liaise with the employer and apprentice to agree a suitable project topic, title and summary for the work-based project to be undertaken. These will be submitted at Gateway and agreed within one week of submission. The 500 word summary should cover: a) the aims of the project, b) how the project will meet the Knowledge, Skills and Behaviours to be tested using this assessment method and c) an initial plan, setting out tasks and timescales, for agreement by the employer and independent assessor. The independent assessor will ultimately confirm the suitability of the project. The summary is not an assessed component of the work-based project and EPA.

Apprentices will present the outcome of their project in the form of a report, with any supporting materials including, for example, appendices, excel workbooks, model runs, system maps, references and diagrams.

The employer will ensure the apprentice has sufficient time and the necessary resources to plan and undertake the project.

The project must entirely be the apprentice's own work; however, the apprentice should have access to a work-based mentor and academic supervisor, appointed by the employer and HEI respectively. Whilst completing the work-based project, the apprentice should be subject to the supervision arrangements outlined below:

- The work-based mentor will ensure the apprentice has access to the resources they need to complete the project;

- The academic supervisor will supervise the project from an academic awarding perspective and will also allow access to the HEI’s resources to complete the work-based project.

The work-based project should be in the form of an electronic written report. The work-based project may be based on any of the following:

- a specific problem
- a recurring issue
- an idea/opportunity
- specific piece of analysis relevant to the workplace

As a minimum all work-based projects must include:

- Non-Technical Executive Summary
- Introduction
- Aims, objectives and project scope
- Literature review or state of the prior art
- Research methodology
- Research and findings
- Project outcomes
- Recommendations and conclusions

The work-based project will have a word limit of 8,000 with a tolerance of plus or minus 10% (at the apprentice’s discretion). Appendices, references, diagrams etc. will not be included in this word count. The non-technical executive summary is included in the word count. The work-based project must map, in an appendix, how it evidences the relevant KSBs for this assessment method.

The project will reference things such as:

- The approach to planning and completion of the work-based project, including what will be delivered on completion of the work-based project.
- The application of the knowledge, skills and behaviours to meet the outcomes in the occupational standard.
- Evidence of learning and of clear outcomes for the apprentice and their organisation.
- The scope and context, supportive background research, results and analysis, conclusions and recommendations.

The apprentice will be required to document their assumptions and to highlight the consequences of those assumptions, enabling them to demonstrate their understanding of economic theories, and the application of their thinking and problem-solving skills.

Input from the employer and EPAO will be limited to guidance in terms of project topic, broad methods, scope, and recommended reading. When the report is submitted, the employer and the apprentice should verify the submitted work is that of the apprentice.

The project must include a plagiarism statement where the apprentice confirms that this report is their own work, is not copied from any other person's work (published or unpublished) and has not previously been submitted for assessment anywhere. They must confirm that they have read and understood the EPAO's regulations on plagiarism.

The independent assessor will ensure that reasonable adjustments are made for those who require them.

Marking

The independent assessor will review and mark the project in a timely manner, as determined by the EPAO, and without extending the EPA unnecessarily. Similarly, all quality control processes will also be conducted in a timely manner, as determined by the EPAO.

Required supporting material

EPAOs will produce the following material to support this assessment method:

- Outline of the assessment method's requirements
- Marking materials
- Examples of projects

Professional discussion underpinned by a portfolio

This assessment will take the form of a professional discussion, which must be appropriately structured to draw out the best of the apprentice's competence and excellence and cover the KSBs assigned to this assessment method. It will involve the questions that will focus on coverage of prior learning or activity.

Rationale for this assessment method

A professional discussion underpinned by a portfolio will allow those KSBs which may not naturally occur in every workplace or within a project, to be assessed. The independent assessor will be provided with a portfolio to review in advance of the professional discussion. This will allow questions to be formed and tailored to the evidence presented. Thereby provide a two-way professional discussion to bring out the level of detail required within the KSBs; for the apprentice to defend their own work; and to draw out the best of the apprentice's competence and excellence.

Time

The professional discussion will last for 60 minutes. The independent assessor has the discretion to increase the time of the professional discussion by up to 10% to allow the apprentice to complete their last answer. Further time may be granted for apprentices with appropriate needs, in-line with the EPAOs Reasonable Adjustments policy.

The Independent Assessor

There will be one independent assessor appointed by the EPAO. They will be responsible for assessing and grading the professional discussion. In addition there will be one technical expert present, whom must be either a practising or retired senior professional economist with experience in applying economics in the work place. The Independent Assessor will be developed and trained by the EPAO in the conduct of professional discussion and reaching consistent judgement. The EPAO must provide training to the technical expert in questioning techniques. The technical expert is not involved in grading decisions, but their questions will help the apprentice demonstrate how they have applied the KSB's in the workplace.

Detailed requirements

The professional discussion is a structured discussion between the apprentice and an independent assessor (with support from a technical expert), covering the KSBs stated in Annex A. The technical expert may ask questions of the apprentice in order to authenticate the apprentices evidence, experience and competence, The portfolio must be submitted no later than 2 weeks after the gateway. The professional discussion must not take place earlier than 4 weeks after the portfolio is submitted to ensure that it is fully considered and forms the basis for a well-informed discussion. The portfolio will assist the assessor with creating appropriate questions. In doing so they will be guided by example questions, developed by the EPAO.

The independent assessor and technical expert will receive the portfolio 2 weeks after the gateway. The independent assessor will ask the apprentice a minimum of five open and holistic questions relevant to the portfolio. The independent assessor and technical expert may ask any number of follow up questions within the time permitted for the professional discussion to delve deeper into the apprentice's answers if this is necessary. The apprentice may refer to their portfolio during the professional discussion should they wish to. The portfolio supports the professional discussion but will not be assessed or graded during the end-point assessment. Questions and responses must be recorded by the independent assessor.

Alternative communication methods such as video conferencing can be used to conduct the professional discussion, but the EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided in any way.

The independent assessor must use the assessment tools and procedures that are set by the EPAO to record the professional discussion.

The independent assessor will make all grading decisions.

Venue

The professional discussion should take place in a quiet room, free from distractions and influence. The professional discussion can take place in any of the following:

- a suitable venue selected by the EPAO (e.g. a training provider's premises)
- the employer's premises

Other relevant information

Example questions must be developed by EPAOs. The ‘example questions’ must be of sufficient size to prevent predictability and reviewed regularly (and at least once a year) to ensure that it, and its content, are fit for purpose. Example questions relating to the underpinning knowledge, skills and behaviours must be varied yet allow assessment of the relevant KSBs. Independent assessors must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

EPAOs will produce the following material to support this assessment method:

- Outline of the assessment method’s requirements
- Marking materials
- Example question bank

Test

Rationale for this assessment method

Some of the theory the apprentice will have learned may not be directly relevant to their current roles. This means that they would not have an opportunity to demonstrate that knowledge in either their work-based project or the professional discussion. The test allows them to demonstrate their understanding of the knowledge as set out below.

Time

Apprentices must have 120 minutes to complete the test.

The test will be set by the EPAO and will be invigilated by an appropriate invigilator. The invigilator may be the independent assessor or another external person employed by the EPAO or specialised (proctor) software, if the test is computer based.

Detailed requirements

The test can be computer based or paper based. It will consist of 10 questions. In terms of marking, all questions will have equal weight and are graded against the grading descriptors set out in this EPA plan. These questions will consist of:

- Open questions requiring short, structured answers: there will be three macro and three micro questions. These questions can also cover topics from competing streams of economic thought. In addition, there should be two questions covering non-market valuation techniques and appraisal/evaluation techniques. The questions can involve the interpretation of graphs, tables or diagrams. Questions are required to be structured to elicit answers that will typically be less than 200 words.
- Data analysis questions: There should be a total of two questions involving econometric analysis and data analysis. The questions can involve the interpretation of graphs, tables or diagrams.

The test is closed book which means that the apprentice cannot refer to reference books or materials. The following equipment is permitted during the test:

- A scientific calculator
- A ruler

Apprentices must take the test in a suitably controlled environment that is a quiet space, free of distractions and influence, and in the presence of an invigilator. The EPAO is required to have an invigilation policy that will set out how the test/examination is to be carried out. This will include specifying the most appropriate ratio of apprentices to invigilators to best take into account the setting and security required in administering the test/examination.

The EPAO is responsible for ensuring the security of testing they administer to ensure the test remains valid and reliable (this includes any arrangements made using online tools). The EPAO is responsible for verifying the validity of the identity of the person taking the test.

The EPAO must verify the suitability of the venue for taking the test.

Marking

Tests must be marked by independent assessor or markers employed by the EPAO following a marking guide produced by the EPAO. Alternatively, marking by computer is permissible where question types allow this. The EPAO will ensure that the test paper is set in line with the regulations of the EPAO, assuring that the paper is valid and reliable. The EPAO is responsible for setting and marking the test paper and construction of the answer marking guide.

Question and resources development

Questions must be written by EPAOs and must be relevant to the occupation. It is recommended that this be done in consultation with representative employers of this occupation. EPAOs should also maintain the security and confidentiality of their questions when consulting employers. EPAOs must develop ‘question banks’ of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they, and the questions they contain, are fit for purpose.

Required supporting material

As a minimum EPAOs will produce the following material to support this method:

- A test specification
- A question bank
- sample tests and mark schemes
- live tests and mark schemes
- analysis reports which show areas of weakness for completed tests/exams and an invigilation policy.

Weighting of assessment methods

All assessment methods will be weighted equally, i.e. 33.3 % each.

Re-sits / re-takes

Apprentices who fail one or more assessment method will be offered the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.
Apprentices should have a supportive action plan to prepare for the re-sit or a re-take. The apprentice’s employer will need to agree that either a re-sit or re-take is an appropriate course of action.
An apprentice who fails an assessment method, and therefore the EPA in the first instance, will be required to re-sit or re-take any failed assessment methods only.

Any assessment method re-sit or re-take does not count towards the typical 8 month EPA period. Re-sits and re-takes are not offered to apprentices wishing to move from pass to distinction. Where any assessment method has to be re-sat or re-taken, the apprentice will be awarded a maximum EPA grade of distinction.

Time spent on either re-sits or re-takes is in addition to the typical EPA period of 8 months.

Overall Grading

Masters degree grading

The degree will be classified in accordance with the EPAO integrated master's degree regulations. Where a pass or above is awarded, the EPA will represent 60 credits out of 180 in total (or equivalent - see footnote 1, page 2) towards the final master's degree classification.

Apprenticeship grading

Performance in the EPA will determine the apprenticeship grade of fail, pass or distinction. Each assessment method will be graded fail, pass or distinction. An apprenticeship pass award represents minimum competence against the standard.

Annex A outlines the grading criteria that will be applied for each assessment method. Detailed guidance will be developed by EPAOs, based on the following principles:

- All pass criteria need to be reached in all three assessment methods; in achieving this, the apprentice will be demonstrating a minimum competence level in all knowledge, skills and behaviours in the standard
- A distinction overall requires apprentices to achieve a distinction in two or more assessment methods.

Individual assessment method grades will be collated using Table 2 below to produce an overall EPA / apprenticeship grade.

Table 2. Combination of individual assessment method grades to determining overall EPA / apprenticeship grades

Test	Work based project	Professional discussion	Overall
Fail	Fail	Fail	Fail
Pass or above	Fail	Fail	Fail
Fail	Pass or above	Fail	Fail
Fail	Fail	Pass or above	Fail
Pass or above	Pass or above	Fail	Fail
Fail	Pass or above	Pass or above	Fail
Pass or above	Fail	Pass or above	Fail
Pass	Pass	Pass	Pass
Distinction	Pass	Pass	Pass
Pass	Distinction	Pass	Pass
Pass	Pass	Distinction	Pass
Distinction	Distinction	Pass	Distinction
Pass	Distinction	Distinction	Distinction
Distinction	Pass	Distinction	Distinction
Distinction	Distinction	Distinction	Distinction

Roles and responsibilities

As this is an integrated master's degree apprenticeship, the EPA will typically be delivered by the EPAO that is awarding the degree. In this context, the HEI delivering the degree may be the EPAO. EPAOs must develop and deliver the EPA as defined in this EPA plan, ensuring independence as described. EPAOs must be approved to deliver the EPA for this standard and be on the Education and Skills Funding Agency Register of End-point Assessment Organisations (RoEPAO). The roles and responsibilities of parties to the EPA are set out below.

Role	Responsibility
Apprentice	As a minimum, apprentices should: • participate in development opportunities to improve their knowledge skills and behaviours as outlined in the standard and in line with their commitment statement • meet all gateway requirements when advised by the employer • understand the purpose and importance of EPA and undertake EPA
Employer	As a minimum, employers should: • support the apprentice to achieve the KSBs outlined in the standard and in line with the commitment statement agreed at the outset. • determines when the apprentice is working at or above the level outlined in the standard and is ready for EPA • select the EPAO • confirm all EPA gateway requirements have been met • confirm arrangements with EPAO for the EPA (who, when, where) in a timely manner • ensure apprentice is well prepared for the EPA • Should not be involved in the delivery of the EPA
EPAO	As a minimum EPAOs should: • understand the occupational role • appoint administrators/invigilators and markers to administer/invigilate and mark the EPA • provide training and CPD to the independent assessor and technical expert they employ to undertake the EPA • provide adequate information, advice and guidance documentation to enable apprentices, employers and providers to prepare for the EPA • deliver the end-point assessment outlined in this EPA plan in a timely manner • prepare and provide all required material and resources required for delivery of the EPA in-line with best practices • use appropriate assessment recording documentation to ensure a clear and auditable mechanism for providing assessment decision feedback to the apprentice • ensure that staff responsible for making assessment decisions on EPA have no direct connection with the apprentice, their employer or training provider i.e. there must be no conflict of interest • maintain robust internal quality assurance (IQA) procedures and processes, and conducts these on a regular basis

	• conform to the requirements of the nominated external quality assurance body • organise standardisation events and activities in accordance with this plan’s IQA section • organise and conduct moderation of independent assessors’ marking in accordance with this plan • have, and operate, an appeals process • arrange at gateway for the provision of mandatory apprentice certificates with the relevant training provider/employer and arrange for EPA certification with IFA
Independent assessor	As a minimum an independent assessor should: • understand the standard and assessment plan • deliver the end-point assessment in-line with the EPA plan • comply to the IQA requirements of the EPAO • be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest • satisfy the criteria outlined in this EPA plan • have the capability to assess the apprentice at this level • attend the required number of EPAOs standardisation and training events per year (as defined in the IQA section) • in the first instance they must be sourced from another HEI; if this isn’t possible they must be sourced from another department within the same HEI. • Experience of teaching and examining on similar undergraduate or post-graduate programmes, using a range of assessment methods, examining dissertations, interviewing students and running a board of examiners expected
Training provider (HEI)	As a minimum the training provider should: • ensure appropriate supervision of the project, whilst ensuring it remains the apprentices own work. • ensure that all HEI staff in training or related provision play no part in assessment decisions in the EPA • work with the employer to ensure that the apprentice is given the opportunities to develop the KSBs outlined in the standard and monitor their progress during the on-programme period in line with the commitment statement • advise the employer, upon request, on the apprentice’s readiness for EPA prior to the gateway
Technical Expert	As a minimum, the technical expert should • be a practicing or retired senior professional economist with experience in applying economics in the work place. Hold or held a senior professional economist role or equivalent, with

	experience of appraising and / or appointing early career professional economists • understand the standard and assessment plan • review the portfolio • may advise the independent assessor on questions to be asked in the professional discussion • support the professional discussion by asking follow-up questions. • play no role in grading. • be trained by the EPAO in questioning techniques needed for the Professional Discussion. • be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest • satisfy the criteria outlined in this EPA plan
Work based mentor	• play no role in grading • ensure the apprentice has access to the resources they need to complete the project .
Academic Supervisor	• provide guidance on the project from an academic awarding perspective and will also allow access to the training provider/HEI's resources to complete the work-based project play no role in grading

End-point Assessment Organisation – Internal Quality Assurance Requirements

EPAOs must:

- Develop and provide end-point assessment guidance to apprentices, employers and on-programme EPAO personnel in relation to the EPA requirements.
- Develop detailed marking criteria for assessment methods, in-line with Annex A.
- Appoint Independent Assessors and Technical experts in line with the Roles and Responsibilities section of this EPA plan.
- Provide training for EPA personnel in terms of requirements of the operation and marking of the assessment methods and in undertaking fair and impartial assessment.
- Monitor and support EPA personnel where required, to ensure consistent assessment.
- Develop and provide documentation for recording assessment decisions.

- At least once per year, hold standardisation events for EPA personnel to ensure consistent application of the guidance. These should include discussion of assessment materials e.g. test questions.
- Provide guidance around when end-point assessments need to be halted due to unforeseen circumstances e.g. apprentice illness.
- Ensure EPA personnel undertake regular continuing professional development.
- Work collaboratively with other EPA assessment organisations for this standard, to ensure consistency in EPA delivery and sharing of good practice. This could include discussion of appropriate assessment materials e.g. test questions.
- Appoint independent assessor(s) who are competent to deliver the end-point assessment as described in Table 3.
- Provide training for independent assessor(s) in terms of good assessment practice, operating the assessment tools and grading.
- Have robust quality assurance systems and procedures that support fair, reliable and consistent assessment across the organisation and over time
- Operate induction training and standardisation events for independent assessors when they begin working for the EPAO on this standard and before they deliver an updated assessment method for the first time.
- Ensure independent assessors attend standardisation events at least once a year.

External quality assurance

As this is an integrated masters degree apprenticeship, external quality assurance (EQA) of EPAOs will be delivered by the usual post-graduate quality assurance process.

Professional body recognition

Professional body recognition is not relevant to this occupational apprenticeship.

Affordability

Affordability of the EPA will be ensured by using at least some of the following practices:

- online testing
- assessing multiple apprentices simultaneously (for the test only)
- using employer's premises and online meeting software

Reasonable adjustments

The EPAO must have in place clear and fair arrangements for making reasonable adjustments for this apprenticeship standard. This should include how an apprentice qualifies for reasonable adjustment and what reasonable adjustments will be made. The adjustments must maintain the validity, reliability and integrity of the assessment methods outlined in this assessment plan.

ANNEX A - Grading criteria by assessment method

Table 4 details the grading criteria for the three assessment methods. It is based on the following principles for each assessment method:

- The distinction grading descriptors build on what is set out in the pass grading descriptor;
- To achieve a pass for an assessment method: pass or above must be demonstrated for every KSB under that assessment method.
- To receive a distinction for an assessment method:
    - For the project 6 out of 9 distinction grading descriptors must be met.
    - For the professional discussion 11 out of 15 distinction grading descriptors must be met; and
    - For the test: 6 out of 8 distinction grading descriptors must be met;

Table 4. Grading descriptors

High level KSBs	Individual KSBs (with related duties in brackets)	Fail	Pass	Distinction
WORK-BASED PROJECT				
Applied economic analysis	S1 Apply micro-economic and macro-economic theories and modelling, including econometric, to inform a range of business and policy decisions. S2 Convert the policy or other question into a tractable appraisal, evaluation or other analysis drawing on the most appropriate analytical method, including non-market valuation methods. Analysis considers, inter alia: the counterfactual, opportunity cost, risk and uncertainty and how to estimate discount rates and costs of capital. S3 Critically assess available information	The minimum pass criteria as defined in this table are not met.	• Apply their economic knowledge to inform a range of business and/or policy decisions. • Assess and argue what an appropriate method and data sources (s) are and identifies any limitations in the policy/business situation. • Give a clear explanation of the assumptions made in their analysis and argue effectively for why these are appropriate. • Choose a presentation style and data visualisation tools that effectively describe the analysis and draw out recommendations for policy/business decisions.	• Evaluate how limitations in the method/data selected could be improved upon and judge what the risks are for the project's conclusions. • Explore a range of ways to improve their assumptions through new analysis and create convincing arguments to support their judgements. • Make predictions of the likely impact of their recommendations on the business/policy situation.

	sources and judge validity and usefulness for the issue at hand; clean and manipulate data; be aware of data limitations and explain them; clearly describe and present data using data visualisation techniques; and draw out and explain policy and business implications to clients		• Identifies data relevant to the issue and the limitations of that data when judging validity and usefulness	
Project management and planning	S5 Scope areas of work identifying: objectives, analytical methods, resources required and potential delivery risks. Able to recognise when complementary expertise is required e.g. scientists, other social scientists and data specialists.	The minimum pass criteria as defined in this table are not met.	• Set out a clear project scope and had the correct resources to deliver the requirements of the project. • Understood the risks to the project and set out evidence of how these were mitigated during the project. • Have, where required, drawn on other sources of expertise and opinion to inform their results and ensure maximum impact.	• Demonstrate how the learning they have generated during the project could be used to inform future projects and/or the wider workplace. • Devised processes for interdisciplinary working or tools to improve the effectiveness of inter disciplinary working.
Effective communication	S7 Clearly communicate economic principles and concepts to non-economists; present trade-offs and	The minimum pass criteria as defined in this	• Communicate complex economic ideas to a non-economist audience.	• Demonstrates that they can tailor their communication

	uncertainties and articulate these clearly; frame advice, drawing on knowledge of stakeholders' positions, for maximum impact	table are not met.	• Explore options and trade-offs. • Set out key uncertainties. • Frames advice showing awareness of how stakeholders will react to analysis or recommendations.	approach to the needs of different audiences.
Horizon scanning	S6 Use horizon scanning methodologies to anticipate new trends, opportunities and challenges that may influence outcomes of interest to client.	The minimum pass criteria as defined in this table are not met.	• Show how trends, future opportunities and future challenges will affect their analysis.	• Demonstrate how their conclusions are resilient to future events or represent least regret solutions.
Maintaining quality standards	S8 Design Quality Assurance processes and implement these, following organisational best practices, and drawing on sources of external expertise; critically assess economic analysis and improve it. B1 Ethical conduct: analyst attributes sources and ideas to their originator; provides honest advice on all relevant aspects to an issue; avoids bias.	The minimum pass criteria as defined in this table are not met.	• Devise a robust quality assurance process for their work to ensure that analysis and written outputs are accurate and error free. • Clearly set out and reference all the sources they use, including both data sources and the source of ideas. • Selected the appropriate level of detail necessary to achieve the required output. • Compare their results with results from other methods	• Draw on new sources of expertise that are external to their organisation which substantially improve the robustness of, or insight from, findings. • Challenge conventional wisdom and/or existing approaches in a sensitive and effective way.

	B4 Rigour: demonstrates a commitment to detail.		or studies to check validity of results and conclusions. • Describe the steps taken to ensure that their analysis is free from bias. • Ensure that inconvenient facts or analyses that do not fit their argument are addressed.	
PROFESSIONAL DISCUSSION UNDERPINNED BY PORTFOLIO				
Maintaining quality standards	K7 Quality assurance techniques and sources of risks to quality of analysis	The minimum pass criteria as defined in this table are not met.	• Explain how they appraise risks to quality of analysis and take steps to mitigate these; and explain the possible impacts of risks that cannot be mitigated. • Explain how they design and implement a robust quality assurance process for their work. Describe the steps taken to ensure that outputs are error free.	• Build upon and improves the quality assurance process used by their organisation. • Show how they have drawn on new sources of expertise that are external to their organisation which substantially improve the robustness of, or insight from, findings.
Project management and planning	K8 Team's capacity to deliver - organisation specific processes for: securing additional	The minimum pass criteria as defined in this	• Explain how they apply project management processes, either generic	• Explain how they show adaptability and flexibility in designing

	resource from within and without the organisation; work planning and associated risk management techniques; and the demands from clients. S4 Prioritise scarce resources, including own time, and focus work on areas of greatest impact; deploy project management techniques; negotiate for additional resources where appropriate; manage delivery risks; build and maintain relationships with colleagues and clients and develop and utilise internal and external networks	table are not met.	or employer specific, to deliver the task. • Explain how they ensure that contributors to projects are informed of changes and kept on side. • Explain how they allocate responsibilities and manage risks at each stage of a project. • Describe how they negotiated for additional resources, if appropriate, and the steps they took to integrate these into the project. • Describe the steps they took to build successful relationships with stakeholders, including colleagues and clients. • Describe how they secured stakeholder buy-in to any changes in project scope or approach.	projects to reflect stakeholder needs. • Describe how they have taken appropriate steps to get the project back on track when facing delivery challenges.
Effective communication	K9 The wider context affecting the work area and how changes might affect clients and analysis.	The minimum pass criteria as defined in this table are not met.	• Give examples of how they selected different communication styles/presentation	• Describe how they experimented with several techniques for the same audience and evaluated the

	K10 Different communication styles and techniques; stakeholder theory; different ways of presenting data.		methods based on the needs of the audience; • Describe how the wider work context influenced the selection, and conduct, of their analysis; • Describe the impact of the analysis on the employer or clients.	effectiveness of these and explain why they worked or not. • Demonstrates how they have adapted to a change in work context and the lessons they draw from the experience. • Draw appropriate lessons to judge how impact can be improved through modifying or using different communication methods.
Horizon scanning	K11 Techniques to assess how future political, economic, social, technological, legal and environmental developments could affect organization, work programmes or clients	The minimum pass criteria as defined in this table are not met.	• Describe how they have used horizon scanning to justify opportunities to deploy economic analysis for clients and other stakeholders. • Describe the wider context in which they work and describe how work might	• Describe how their active horizon scanning of the risk environment feeds into planning and decisions. • Explain how they have evaluated trends and changes in policy or business priorities and adapted work to be

	K12 Understand high level business objectives and strategy in order to anticipate demands for economic analysis		be affected by new trends or drivers. • Explain these new trends and their impacts to their colleagues and to their broader stakeholders. • Describe possible responses to these trends and risks associated with them.	more relevant to changed environment. • Describe how they influence decision makers to include new areas for economic analysis through their anticipation of future trends.
Leadership	B2 Proactive: seeks opportunities to apply analysis to policy and business problems; seeks ideas for improvements, such as new approaches and/or methods; willing to look beyond the narrow confines of a problem or opportunity when producing analysis; is a passionate advocate for analysis; uses professional judgement and reaches conclusions even when evidence is incomplete. B5 Leadership: is willing to lead others, including outside organisational structures, to deliver outcomes.	The minimum pass criteria as defined in this table are not met.	• Assess client's analytical requirements and how they proactively went about establishing these requirements, taking account of the bigger picture. • Describe how they use judgement where there is uncertainty and incomplete evidence and the factors they consider. • Describe how they lead people to deliver client outcomes by arguing for a course of action. • Describe improvements made to improve the utility of analysis to clients.	• Analysis is an improvement on existing techniques and / or is novel and improves client outcomes. • Describe how they overcome leadership challenges to deliver client outcomes.

Effective collaboration	B3 Collaborative: understands others point of view and willing to adapt approach or ask; seeks to reconcile different views; builds trust with colleagues and clients; willing to share ideas and work with other professionals; respects and appreciates diversity; listens to others' points of view, however challenging; invites and considers feedback; aware of the impact of language and non-verbal behaviour on others.	The minimum pass criteria as defined in this table are not met.	• Systematically identify the key internal and external stakeholders that they need to consult (e.g. through use of engagement models). • Actively seek out, take on board and reconcile the views of a diverse range of contributors through formal and informal feedback. Adapts use of language and non-verbal behaviour to the circumstances. • Develop and maintain professional on-going relationships with stakeholders/clients and own external network of contacts. • Work with other professionals and recognises the value they bring.	• Explain how they have managed analytical aspects of external relationships, acting as an ambassador for their organisation. • Explain how they actively promote the economics profession to a wider audience in their organisation and beyond. • Describe how they initiate the exchange of ideas between economists and others, including other specialists.
TEST				

Applied Econometrics and data	K1 Applied econometric techniques, including micro-econometric techniques, time series and panel data, including limitations thereof. K3 Understanding the robustness and quality of economic statistics, model generated data and external information; data cleaning; hypothesis testing; the most relevant software and programming techniques; main requirements for successful survey design.	The minimum pass criteria as defined in this table are not met.	• Assess the suitability of different econometric techniques to investigate economic issues, including pros and cons of different methods. • Interpret estimated results of econometric models and comment on their economic implications. • Assess the quality of data and show understanding of methods and techniques for improvement.	• Identify where econometric results are biased or unreliable (e.g. omitted variable bias) and can take appropriate corrective action. • Formulate a policy or business hypothesis and critically assess the practical implications relating to a given estimated econometric model. • Derive a model from theory and use that to test hypotheses. • Judge and justify where data driven biases may occur.
Advanced economic theory	K2 Applications of micro-economic and macro-economic theory in a range of policy and business contexts. K5 Non-market valuation techniques including willingness to pay/accept. K4 Appraisal and evaluation techniques, including cost-benefit	The minimum pass criteria as defined in this table are not met.	• Apply micro and macro models and appraise their suitability to policy and business issues. • Show knowledge of the main methods for non-market valuation. • Show knowledge and understanding of at least two appraisal and evaluation methods and	• Select an appropriate theoretical economic framework to analyse an issue and justify the choice in terms of its advantages and limitations. • Select and justify the most appropriate non-market valuation methods in test.

	analysis, multi-criteria decision analysis, real options and least regrets; and the underpinning tools that are required to conduct appraisals e.g. asset pricing models.		are able to apply these in an example. • Show knowledge and understanding of different schools of thought on economic issues and are able, in a question, to apply these to a context (e.g. a business problem, a policy topic).	• Critically describe the main reasons for differences in results from different appraisal and evaluation methods. • Describes the assumptions of different schools of thought on economic issues and show how these lead to different conclusions in a policy or business example.
	K6 Topics from competing streams of economic thought and the implications they have for policies, e.g. market failures, rationale for intervention, and business strategies.			

Mapping of knowledge, skills and behaviours (KSBs)

Assessment method 1: Work Based Project

Skills
S1 Apply micro-economic and/or macro-economic theories and modelling, including econometric, to inform a range of business and policy decisions.
S2 Where appropriate convert the policy or other question into a tractable appraisal, evaluation or other analysis drawing on the most appropriate analytical method. And, where appropriate, consider: non-market valuation methods, the counterfactual, opportunity cost, risk and uncertainty and how to estimate discount rates and costs of capital.
S3 Critically assess available information sources and judge validity and usefulness for the issue at hand; clean and manipulate data; be aware of data limitations and explain them; clearly describe and present data using data visualisation techniques; and draw out and explain policy and business implications to clients
S5 Scope areas of work identifying: objectives, analytical methods, resources required and potential delivery risks. Able to recognise when complementary expertise is required e.g. scientists, other social scientists and data specialists.
S6 Use horizon scanning methodologies to anticipate new trends, opportunities and challenges that may influence outcomes of interest to client.
S7 Clearly communicate economic principles and concepts to non-economists; present trade-offs and uncertainties and articulate these clearly; frame advice, drawing on knowledge of stakeholders' positions, for maximum impact
S8 Design Quality Assurance processes and implement these, following organisational best practices, and drawing on sources of external expertise; critically assess economic analysis and improve it.

Behaviours
B1 Ethical conduct: analyst attributes sources and ideas to their originator; provides honest advice on all relevant aspects to an issue; avoids bias.

B4 Rigour: demonstrates a commitment to detail.

Assessment method 2: Professional Discussion underpinned by Portfolio

Knowledge
K7 Quality assurance techniques and sources of risks to quality of analysis
K8 Team's capacity to deliver - organisation specific processes for: securing additional resource from within and without the organisation; work planning and associated risk management techniques; and the demands from clients.
K9 The wider context affecting the work area and how changes might affect clients and analysis.
K10 Different communication styles and techniques; stakeholder theory; different ways of presenting data.
K11 Techniques to assess how future political, economic, social, technological, legal and environmental developments could affect organisation, work programmes or clients
K12 Understand high level business objectives and strategy in order to anticipate demands for economic analysis

Skills
S4 Prioritise scarce resources, including own time, and focus work on areas of greatest impact; deploy project management techniques; negotiate for additional resources where appropriate; manage delivery risks; build and maintain relationships with colleagues and clients and develop and utilise internal and external networks

Behaviours
B2 Proactive: seeks opportunities to apply analysis to policy and business problems; seeks ideas for improvements, such as new approaches and/or methods; looks beyond the narrow confines of a problem or opportunity when producing analysis; is a passionate advocate for analysis; uses professional judgement and reaches conclusions even when evidence is incomplete.

B3 Collaborative: understands others point of view and adapts approach or ask; seeks to reconcile different views; builds trust with colleagues and clients; shares ideas and work with other professionals; respects and appreciates diversity; listens to others' points of view, however challenging; invites and considers feedback; aware of the impact of language and non verbal behaviour on others.
B5 Leadership: leads others, including outside organisational structures, to deliver outcomes.

Assessment method 3: Test

Knowledge
K1 Applied econometric techniques, such as micro-econometric techniques, time series and/or panel data, including limitations thereof.
K2 Applications of micro-economic and macro-economic theory in a range of policy and business contexts.
K3 Understanding the robustness and quality of economic statistics, model generated data and external information; data cleaning; hypothesis testing; the most relevant software and programming techniques; main requirements for successful survey design.
K4 Appraisal and evaluation techniques, including cost-benefit analysis, multi-criteria decision analysis, real options and least regrets; and the underpinning tools that are required to conduct appraisals e.g. asset pricing models.
K5 Non-market valuation techniques including willingness to pay/accept.
K6 Topics from competing streams of economic thought and the implications they have for policies, e.g. market failures, rationale for intervention, and business strategies.