Actuary

Assessment Plan

Level 7

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Actuarial Assessment Plan

Introduction

This Assessment Plan has been designed by a broad spectrum of insurance companies, actuarial consultants and other employers of actuaries, working closely with the Professional Body and tuition provider. The plan is relevant for a wide range of roles across the sector in both large and small organisations.

For those without any relevant, prior learning, this is a 3-4 year apprenticeship and therefore needs a robust process to ensure that the apprentice remains on track towards the end-point assessment. This final assessment will examine holistically the knowledge, skills and behaviours detailed in the standard, but the robust nature of the on-programme assessment should not be underestimated. The end-point assessment will be conducted by an independent End-Point Assessment Organisation (EPAO). EPAOs must be on the Education and Skills Funding Agency’s (ESFA) Register of End-point Assessment Organisations for this standard.

Overview of Apprenticeship Programme

Registration

Apprentice registers for the programme with the employer and becomes a student member of the Professional Body.

On-programme Learning & Assessment

Apprentice builds the knowledge, skills and behaviours detailed in the standard through on-the-job learning and off-the-job training. Achieves Mathematics and English Level 2 (if not already achieved) and the mandatory qualification as outlined in the standard. Prepares a portfolio of evidence to be submitted before the EPA Interview.

Assessment Gateway

The employer decides if the apprentice is ready for the end-point assessment (EPA) and notifies the EPAO.

EPA – two components

1. Case Study
2. Portfolio-based Interview

Aim for these to be completed within the final 3-6 months of the apprenticeship.

Apprentice confirmed as competent by the EPAO

Certification
Summary of Assessment

This section gives a brief summary of the assessment elements of the apprenticeship. Further details of all the assessment elements are given in the following sections.

On-programme Learning and Assessment

Before passing through the assessment gateway, the apprentice needs to pass, or gain exemptions from the examinations required for Associateship Membership of the Professional Body. This includes completing the Personal and Professional Development requirements for Associateship. The apprentice also needs to compile their portfolio of evidence covering the KSBs examined by the portfolio-based interview. Employers will also be recommended to use regular internal performance appraisals to review the apprentice’s progress against the standard and plan future development.

End-point Assessment

The End-point assessment (EPA) will ensure that the apprentice can demonstrate their ability holistically across the standard. It has two components, which should be attempted once the apprentice has completed the on-programme assessment and reached the assessment gateway. The components have equal weighting but will be used together to holistically assess each apprentice’s competencies against the Standard.

The components are:

1. A Case Study
2. A portfolio-based Interview

Each element will be assessed by the EPAO who will be registered on the Education and Skills Funding Agency’s Register of End-point Assessment Organisations.

<table>
<thead>
<tr>
<th>Assessment Method</th>
<th>Area Assessed</th>
<th>Assessed by</th>
<th>Grading</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Study</td>
<td>See Appendix</td>
<td>EPAO</td>
<td>Distinction/Pass/Fail</td>
<td>50%</td>
</tr>
<tr>
<td>Portfolio-based Interview</td>
<td>See Appendix</td>
<td>EPAO</td>
<td>Distinction/Pass/Fail</td>
<td>50%</td>
</tr>
</tbody>
</table>

On-programme Learning and Assessment

The on-programme learning and assessment will enable the apprentice to develop and evidence the knowledge, skills and behaviours set out in the standard and prepares the apprentice to attempt the end-point assessment. It will include the following:
examinations which will be set and marked by the relevant Professional Body
- work-based Personal and Professional Development.

The combination of which will be required for Associateship Membership of the Professional Body.

**Assessment Gateway**

The judgement on whether the apprentice is ready for the end-point assessment is taken by the employer who may consult with the Education and Skills Funding Agency approved apprenticeship training provider. Prior to attempting the end-point assessment, the apprentice will need to have:

- achieved Level 2 Maths and English
- completed the mandated qualification
- compiled their portfolio of evidence.

Due to the nature of the actuarial profession and the requirement to hold a professional qualification, all apprentices passing through the gateway will have been robustly assessed and evidenced that they meet the Knowledge and Skills set out in the Standard. The employer must still be satisfied that the apprentice is ready to attempt the end-point assessment, which is a holistic assessment of the knowledge, skills and behaviours detailed in the Standard.

**Administering the End-point Assessment**

The end-point assessment is triggered by the employer when the gateway requirements have been met and after determining the readiness of the apprentice. Delivery of all training, development and review activities up to the endpoint are considered as being on-programme. The EPAO must not have been involved in the on-programme training and development.

At the conclusion of the end-point assessment, the EPAO determines whether the apprentice has passed (with a pass or distinction) or failed. For final certification, the apprentice must have passed all components of the endpoint assessment in order to achieve an overall pass.

**End-point Assessment**

The end-point assessment will comprise two components and will be assessed by an organisation selected from the ESFA's Register of End-point Assessment Organisations. This will ensure independence and consistency, and provide reliable and accurate judgements. The components are given equal weighting and both components must be passed to achieve an overall pass. The components are:

1. **A Case Study** that demonstrates the capability of the apprentice to deliver the core functions of the role and covers a variety of requirements from across the standard.
2. **A portfolio-based Interview**, reviewing the skills, knowledge and behaviours developed throughout the apprenticeship, focussing particularly on the remaining areas of the standard not evidenced by the Case Study.

The role of an actuary is very broad and the end-point assessments have been designed to ensure that each Apprentice is given equal opportunity to demonstrate and evidence that they meet or exceed the standards expected of them. It will give assessors a holistic view of the apprentice, and allow them to assess to what extent the apprentice meets or exceeds the Apprenticeship Standard.

## Case Study

Given the diverse nature of job roles taken by actuaries, it is inevitable that some apprentices will have more exposure to certain areas of the Apprenticeship Standard than others. In order to provide all apprentices with an opportunity to demonstrate that they meet or exceed the standards expected of them, they are required to complete a case study.

The case study will be developed by an independent EPAO, and will assess the areas of the standard as indicated in the Appendix. Different case studies will be developed for the different areas of work, namely:

- Life and Health Insurance
- General Insurance
- Pensions
- Risk and Investment.

The EPAO will start with at least two case studies in each area of work. The number of apprentices reaching the gateway in the first two years of implementation is likely to be very small (less than ten per annum). As the number of apprentices reaching gateway increases, it is anticipated that the EPAO will develop a bank of at least 3 case studies in each area by the third year and at least four in Life and Health and in Pensions by the fourth year. Apprenticeship numbers in these areas of work are expected to be higher than others. The number of case studies required in the General Insurance and Risk and Investment areas will be reviewed annually considering the apprenticeship numbers working in each area.

All case studies will be reviewed for quality and accuracy at least once every 12 months. Each individual case study will form part of the pool for no more than 3 years, and at least 1 or 2 case studies in each area of work will be renewed each year. The pool will also be expanded further if the number of apprentices exceeds initial expectations. The EPAO will select a case study from the area of work most closely matched to the specific job role of the apprentice.

Each case study will pose questions and problems about the scenario presented to them and require the apprentice to develop solutions and produce written documentation, including an audit trail, explanation of the methods used and a presentation of the results for the assessor. As part of the case study, each apprentice will need to develop one or more models, using for example a spreadsheet or other suitable software, and they will include their model(s) as part of the submission, along with the written element, which is likely to be presented in MS Word or equivalent software.

To ensure a fair and consistent application of the case study assessment, the case studies will be designed to be of a similar length and complexity and assess a selection of the Knowledge, Skills and Behaviours mapped in the
appendix. The total written element of the case study will be of between 1,500 and 2,000 words. This will exclude required elements of the model such as the audit trail and model documentation.

Through the case study the apprentice will have the opportunity to demonstrate their ability to apply the skills, knowledge and behaviours expected of an actuary.

The apprentice will have two weeks to work on the case study, which is expected to contain two working days away from their day-to-day responsibilities. The employer will be responsible for ensuring the work produced is the apprentice’s own and will be asked to sign a declaration to confirm this.

The case study will be submitted to the Independent EPAO for assessment at least 2 weeks before their expected interview date. The independent assessor will review the submission and assign a score for this element of the end-point assessment, according to the grading structure below.

If the apprentice fails to achieve at least a pass in the case study, they will not be permitted to attend the interview. After receiving feedback on their case study, they may resit the same case study within one month of receiving their feedback.

If, after the second submission, a pass is still not achieved, the apprentice will be allowed to retake, with a new case study, within six months of their previous result and after a period of additional learning. They will again have one opportunity to resit the case study if a pass is not achieved.

The number of retakes permissible is decided by the employer.

Those candidates who need to resit or retake will not be eligible for a distinction, unless it is judged by the EPAO that they failed for exceptional reasons beyond their control.

Portfolio-based Interview
As mentioned above, if the apprentice fails to meet the minimum standard for the case study as indicated above, they will not be permitted to access the interview.

A portfolio of learning and evidence will provide a structure for the interview. The portfolio should contain at least one piece of evidence for each of the twelve KSBs being assessed by the interview, as indicated in the appendix. The employer must be satisfied the portfolio meets this criteria prior to the apprentice commencing the end-point assessment. The Portfolio should be submitted to the End-point Assessment Organisation a month prior to interview.

The evidence submitted could include any of the following or other suitable documents:

- Written reports
- Reflective statements
- Witness testimonies by a line manager or other colleagues
- Extracts from performance-review documents
- Feedback from colleagues or clients
- Examples of work completed
- Records of professional development.

The employer and training provider should review the Portfolio with the apprentice and the employer will make the final judgement on whether it should be submitted or needs revising. The portfolio is not directly assessed; it is used to frame the discussion at the interview, where KSBs are to be assessed.

The assessor must review the portfolio prior to the interview against the KSBs in the appendix and complete a template provided by the EPAO to help prepare for the interview. The template will allow the assessor to record where there is strong evidence of the requirements of a pass or a distinction for each competency to help identify which KSBs to focus the questioning on.

The assessor will prepare questions using the bank of questions for guidance and may write their own questions too.

The purpose of the interview is to:

- Clarify any questions that the assessor has about the evidence submitted in the Portfolio.
- Explore particular areas of work where the assessor requires reassurance that the apprentice meets the standard required for the KSBs assessed by the portfolio-based interview.
- For stronger candidates, confirm that the apprentice exceeds the standards expected of them and is therefore worthy of a distinction.

The chosen Independent EPAO(s) will develop a bank of at least 36 competency-based questions to be drawn from in each apprentice’s interview to ensure consistency. The Assessor will also supplement the set questions with follow-up questions directly related to the portfolio to ensure complete coverage.

The final number of questions in the bank will be determined by the EPAO but will be enough to ensure that new questions are used for each resit. The questions will cover all the competencies required and provide the assessor with alternative but equivalent questions to use. The bank of questions will be reviewed for accuracy, effectiveness and suitability at least once every 12 months.
The interview will typically last 60-75 minutes. It is likely to be carried out face to face, but in some circumstances may be done remotely using e.g. video conference or Skype, depending on numbers and locations of apprentices. This would be mutually agreed between the EPAO and the employer.

After the interview, the assessor will judge the apprentice’s performance and decide a score for this element of the end-point assessment according to the grading structure below.

**Re-sits/re-takes**

A resit is where the apprentice takes the interview again without the need for new learning. A retake is where the employer determines new learning is needed first.

Where an Apprentice fails the interview (scoring below 3), the Independent Assessor will provide advisory comments regarding the reasons for failure. Following a fail, the interview may be resat/retaken. The number of resits/re-takes permissible is decided by the employer. However, a resit/retake can never be offered to an apprentice who has passed and is seeking to increase their grade.

Resits should take place within 4 months of the date of the original interview and the portfolio will not need to be resubmitted for the resit.

Retakes should be within a maximum of 8 months of the date of the original interview. Depending on the comments provided by the previous Independent Assessor, the portfolio may need to be re-worked and resubmitted a month prior to interview. The employer must first be satisfied all required new learning is satisfactorily completed and that the portfolio meets the criteria set out on page 7 of this document.

Anyone needing to resit/retake will not be eligible for a distinction (except in exceptional circumstances beyond the apprentice’s control, and deemed exceptional by the EPAO).
End-point grading and final judgement

Each of the two assessment stages will be graded according to the following model, using the relevant assessment criteria from the Apprenticeship Standard for each assessment method (as outlined in the Appendix).

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant gaps in the apprentice’s ability to meet the standard</td>
<td>Minor gaps in the apprentice’s ability to meet the standard</td>
<td>Apprentice meets the standard in all relevant areas assessed by the assessment method</td>
<td>Apprentice shows some evidence of exceeding the standard expected for a pass in at least five areas; meeting the standard in all other areas</td>
<td>Exceeds the standard expected for a pass in at least eight areas; meeting the standard in all other areas</td>
</tr>
</tbody>
</table>

The scores from each stage are added together to give the apprentice a final score. To pass the assessment, they must achieve a minimum total score of 6, with no less than a 3 in either assessment stage, indicating that they have met the apprenticeship standard. To achieve a distinction, they must achieve a minimum total score of 8. As mentioned above, if the apprentice has to resubmit their case study and/or attend a second or third interview, they will not be eligible for a distinction except in exceptional circumstances. If the apprentice ultimately scores less than three at either stage of assessment, they automatically fail the assessment.

The combination of these assessment methods builds a cumulative picture of performance against the Standard. They require apprentices to demonstrate the application of knowledge, skills and behaviours in an integrated manner to deliver the required outcomes, enabling the assessor to make a holistic judgement about how well the apprentice meets or exceeds each element of the Standard.

The final judgement, as to whether an apprentice has passed the end-point assessment, will be made by the EPAO, which will be registered on the ESFA’s Register of End-point Assessment Organisations.

Assessors, appointed by the EPAO, will hold a suitable qualification, for example Associate or Fellow of the Institute and Faculty of Actuaries, or equivalent. Assessors will also be subject to the EPAO’s quality assurance process.
Independence

An independent EPAO will be selected by the employer from the Register of Apprentice End Point Assessment Organisations held by the Education and Skills Funding Agency. The Assessor must not have previously been involved in any on-programme training of the Apprentice.

EPA – Summary of role and responsibilities

The responsibilities of the various stakeholders in the End-point Assessment, and the means by which the independence of the assessment is achieved, are detailed below.

<table>
<thead>
<tr>
<th>EPAO</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Registered on the Education and Skills Funding Agency’s Register of End-Point Assessment Organisations.</td>
<td></td>
</tr>
<tr>
<td>- Has no involvement in the training of the apprentices.</td>
<td></td>
</tr>
<tr>
<td>- Ensures there are robust quality assurance processes in place to deliver assessments to the required standard.</td>
<td></td>
</tr>
<tr>
<td>- Develops the detailed criteria for marking the assessments.</td>
<td></td>
</tr>
<tr>
<td>- Marks each element of the end-point assessment against the criteria and ensures that the assessors/examiners have the required qualifications and experience to assess the performance of the apprentice in all components of the end-point assessment.</td>
<td></td>
</tr>
<tr>
<td>- Has effective quality assurance and quality control procedures that support fair, objective, reliable and consistent assessments.</td>
<td></td>
</tr>
<tr>
<td>- Determines whether competence has been achieved.</td>
<td></td>
</tr>
<tr>
<td>- Hold internal reviews of assessment processes and practices</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Apprenticeship Training Provider</th>
<th>Provides appropriate training to the apprentice in preparation for the on-programme and end-point assessment.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monitors progress.</td>
</tr>
<tr>
<td></td>
<td>Training providers will be registered on the Education and Skills Funding Agency’s Register of EPAOs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employer</th>
<th>Provides appropriate training, both on and off the job, to the Apprentice in preparation for the end-point assessment.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Undertakes regular progress reviews.</td>
</tr>
</tbody>
</table>

| Apprentice                    | Completes the end-point Assessment.                                                                                |

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Quality Assurance and Quality Control

Quality Assurance and Quality Control of this Assessment Plan is vital to ensure the credibility and competence of apprentices who have successfully completed the end-point assessment. The design principles of this Assessment Plan include both internal and external assurance over the quality of assessment.

Internal Assurance

The EPAO has the primary responsibility for ensuring the quality assurance and quality control of the end-point assessment and for determining fair, reliable and consistent judgments on the competency of apprentices.

For internal assurance requirements, EPAOs must:

- be registered on the Education and Skills Funding Agency’s Register of Approved EPAOs.
- have the infrastructure and geographical coverage in order to assess apprentices as required by employers.
- have established internal quality assurance and quality control procedures. As part of this, EPAOs are expected to put in place robust systems that support fair, reliable and consistent assessment across organisations and over time.
- provide assessors who are suitably qualified for the role, for example who are an Associate or Fellow of the Institute and Faculty of Actuaries, or equivalent, with at least three years’ relevant industry experience.
- develop and maintain a set of Assessment Tools that are used by all to carry out assessments. train and certify all individual assessors to be able to assess consistently against the Standard.
- apply robust quality assurance and verification processes to the assessments e.g. use of standard formats, moderation and standardisation of scoring, oversight of assessment.

The moderation processes should reflect the risks faced, with significant moderation of EPAs carried out for the first 6 months of an IAO’s delivery (for example 50%), to ensure consistency and quality in this initial period. With a reduction of required moderation as delivery establishes to a set normal rate (for example 10%). This should also apply to new assessors, whose work should be more heavily moderated for the first 6 months of their work, before being moderated at usual levels following that (as long as no issues have arisen in the first 6 months).

EPAOs should also:

- run the appeal process for any appeals that arise from grading decisions.
- report to the Employers on any issues that arise.
- organise annual standardisation events between its assessors and ideally with other independent EPAOs to ensure a consistent and comparable approach to the end point assessment.
The Independent EPAO will create and then maintain the Assessment Tools to ensure continuing robustness (independent, consistent, accurate), working with the Employers as appropriate.

The assessment methods are designed to produce assessment outcomes that are consistent and reliable, allowing fair and proper comparison between apprentices employed in different types and sizes of organisations. At the core of this will be the set of Assessment Tools that are used by all assessors and will be a part of the training that assessors receive. The Independent EPAO will create and hold the tools, materials and techniques to be used in assessment based on this Plan. These tools should include clear guidance for conducting the interview and grading each assessment method.

All assessors will be trained and approved by the Independent EPAO to ensure that they are capable of using the tools developed for assessment in a fair and consistent manner to make reliable judgments.

Immediate and appropriate action will be taken where any quality concerns are identified.

External Assurance

External quality assurance of the end-point assessment for this Apprenticeship Standard will be managed by the Institute for Apprenticeships.
Implementation

Affordability

The majority of costs within our Assessment Plan relate to the on-programme assessment.

It is estimated that the end-point assessment will cost around 6% of the total fundable cost of the allocated funding band for the apprenticeship. This is considered reasonable given the level of the apprenticeship, the complexity of the subject matter, and the skills and experience of the assessors required.

The cost quoted is based on an estimate provided by a potential EPAO and is consistent with the cost of other end-point assessments in the sector. This will cover all aspects of setting, delivering, grading and administering the End Point Assessments together with the costs associated with Internal and External Quality Assurance.

Professional Body Recognition

Completion of the apprenticeship will mean that the apprentice will be eligible to apply for membership of the Institute and Faculty of Actuaries as an Associate (IFoA), subject to meeting any specific requirements of the IFoA.

Further development/progression routes will be available, which include further examinations leading to Fellowship status.

Consistency

Actuarial training programmes are already well recognised in the sector. The Assessment Plan is easy to administer with training offered via classroom courses, distance learning and online delivery. Both the training and the assessments are available in a range of external locations allowing for complete flexibility, regardless of the location of the employer and the apprentice. The EPAO will have the infrastructure and geographical coverage in order to assess apprentices as required by employers on a consistent basis.

Volumes

The approach set out above offers an affordable and scalable programme for the apprenticeship. We expect 100+ apprentices to start in the first year but anticipate this will grow to over 250 each year as we expect apprenticeships to be popular and encourage more employers across the sector to train. They will also prove attractive to students, offering another route to a professional qualification.
Appendix – mapping of KSBs to Assessment Methods

The combination of the two assessment methods builds a cumulative picture of performance against the Standard. They require apprentices to demonstrate the application of knowledge, skills and behaviours in an integrated manner to deliver the required outcomes, enabling the assessor to make a holistic judgement about how well the apprentice meets or exceeds each element of the Standard.

The chart below provides an overview of what an apprentice can expect to be covered in each assessment method (CS = Case Study and INT = Interview). It also indicates how an apprentice can exceed the learning outcomes detailed in the Standard to reach the level of distinction.

<table>
<thead>
<tr>
<th>Skills</th>
<th>FAIL</th>
<th>PASS Show the ability to:</th>
<th>DISTINCTION Show the ability to:</th>
<th>CS</th>
<th>INT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business and Commercial</td>
<td>▪ has not demonstrated the ability to apply tools and techniques to assist management decisions</td>
<td>▪ apply tools and techniques to assist strategic thinking needed for a role in wider management.</td>
<td>▪ select the most appropriate tools and techniques and use the results to make strategic decisions.</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>▪ unable to draw any basic conclusions from accounts and financial statements.</td>
<td>▪ interpret the accounts and financial statements of companies and financial institutions, drawing basic conclusions from the data provided.</td>
<td>▪ interpret the accounts and financial statements of companies and financial institutions, drawing more in-depth conclusions from the data provided.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Modelling, Documentation and Reporting</td>
<td>▪ unable to build a basic model or builds one with fundamental and significant errors fails to produce a useful audit trail and documentation of a model.</td>
<td>▪ build a model, analyse the data methods used and outputs generated and document the work (including maintaining an audit trail for a fellow student and senior actuary).</td>
<td>▪ build an efficient model.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ communication is ineffective and leaves too many significant issues unresolved.</td>
<td>▪ communicate the approach, results and conclusions to a senior actuary.</td>
<td>▪ demonstrate communication skills of a standard beyond that expected of a recently qualified actuary.</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Communication</td>
<td>▪ communication is consistently below that expected of a recently qualified actuary, with inappropriate language and unclear or missing information.</td>
<td>▪ communicate effectively, both written and orally, when relating concepts used by actuaries to recipients without specialist actuarial expertise, using effective structure, appropriate language and adequate explanation.</td>
<td>▪ demonstrate communication skills of a standard beyond that expected of a recently qualified actuary. Advise others on how to improve their communication skills.</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Actuarial Risk Management</td>
<td>▪ lacks knowledge and skills to apply actuarial techniques</td>
<td>▪ apply actuarial techniques to analyse business problems</td>
<td>▪ using the results of the analysis, formulate and present plausible solutions for consideration.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ unable to justify methods used</td>
<td>▪ Justify the techniques and solutions presented.</td>
<td>▪ understand why their preferred solution is more appropriate than other options.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td>FAIL</td>
<td>PASS</td>
<td>DISTINCTION</td>
<td>CS</td>
<td>INT</td>
</tr>
<tr>
<td>Mathematics &amp; Statistics</td>
<td>▪ shows little knowledge or understanding of relevant mathematical or statistical techniques</td>
<td>▪ the mathematical and statistical techniques that are of particular relevance to their own actuarial work.</td>
<td>▪ the mathematical and statistical techniques that are appropriate to use in an environment with which the apprentice is unfamiliar.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ uses inappropriate and unhelpful statistics or presentations to summarise data.</td>
<td>▪ the essential features of statistical distributions and how to summarise data using appropriate descriptive statistics and graphical presentations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actuarial Modelling</td>
<td>▪ unable to demonstrate knowledge of the principles of modelling.</td>
<td>▪ the principles of modelling as applied to actuarial work, including deterministic models and survival models.</td>
<td>▪ The more advanced principles of modelling as applied to actuarial work, including stochastic processes and the valuation of derivatives.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ has a limited knowledge of the requirements of a model or techniques used to model cashflows.</td>
<td>▪ the requirements of a good model and the common mathematical techniques used to model cash flows that may be contingent on other events.</td>
<td>▪ more complex mathematical techniques used to model cash flows, which, for example, may be contingent on multiple events.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Business Finance</td>
<td>▪ does not know the fundamentals of corporate finance or the instruments used by companies to raise finance.</td>
<td>▪ the fundamentals of corporate finance including a basic knowledge of the instruments used by companies to raise finance and manage financial risk.</td>
<td>▪ the principles of corporate finance including a comprehensive knowledge of the instruments used by companies to raise finance and manage financial risk.</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Business Economics</td>
<td>▪ shows a limited knowledge of the core economic principles and fails to understand how they can be used to help with any decision making.</td>
<td>▪ the core economic principles (of both microeconomics and macroeconomics) and how these can be used in a familiar business environment to help decision making and behaviour.</td>
<td>▪ how these can be used in an unfamiliar business environment to help decision making and behaviour.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Actuarial Risk Management</td>
<td>▪ demonstrates little or no knowledge of risk management processes fails to identify risks or ways to mitigate those risks unable to explain or demonstrate how providers of financial products ensure liabilities are met.</td>
<td>▪ the essential risk management techniques and processes required by all actuaries. ▪ the risks faced both by individuals and groups who might use financial products and also by the providers of such products. the principles and techniques used to manage these risks. the key techniques used by the providers of financial products to ensure that promised liabilities can be met.</td>
<td>▪ alternative, less traditional risk management techniques. ▪ the relative merits of the different techniques used to manage risks.</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Business and Commercial Awareness</td>
<td>▪ shows a limited knowledge of the wider business context in which actuaries work.</td>
<td>▪ the wider business context in which actuaries work, including an understanding of the external and internal business environments, business strategy, business culture and the importance of leadership and teamwork within an organisation.</td>
<td>▪ how the external and internal business environment can impact a company’s operations and success.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Behaviours</td>
<td>FAIL</td>
<td>PASS Display:</td>
<td>DISTINCTION Display:</td>
<td>CS</td>
<td>INT</td>
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<td>------------------------------------------------</td>
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</tbody>
</table>
| Professionalism                                | ▪ fails to carry out the required professional development activities or keep adequate records  
   ▪ does not adhere to the actuaries’ code  
   ▪ fails to display the required professional and ethical standards of an actuary. | ▪ a responsibility for your own personal and professional development.  
   ▪ commitment to the Actuaries Code.  
   ▪ professional and ethical standards in the actuarial work undertaken.  
   ▪ commitment to the role of peer review in professional work. | ▪ the actions of a role model and supports others in their development as appropriate. |    |     |
| Teamwork, stakeholder and time management       | ▪ unable to work effectively within a team  
   ▪ lacks organisational skills and the ability to prioritise tasks and communicate issues with relevant stakeholders. | ▪ teamwork skills (by effectively liaising with a large and diverse range of colleagues to complete a task).  
   ▪ good time management (by managing work effectively to prioritise tasks appropriately, inform stakeholders, peers and/or senior colleagues if anticipated deadlines may not be met). | ▪ the ability to take a leadership role within a team.  
   ▪ the ability to adapt to changing business needs effectively. |    | ✓   |
| Personal and professional development          | ▪ shows no desire to plan and undertake personal development  
   ▪ fails to meet the personal and professional development requirements of the Institute and Faculty of Actuaries. | ▪ an aptitude for personal and professional development (by producing a development plan and seeking appropriate training or reading material).  
   ▪ the personal and professional development requirements of the Institute and Faculty of Actuaries. | ▪ a commitment to go beyond the minimum amount of PPD required by the Institute and Faculty of Actuaries. | ✓  |     |

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