

Subject CP2

2023 Study Guide

Introduction

This Study Guide has been created to help you navigate your way through Subject CP2. It contains all the information you will need before starting to study Subject CP2 for the 2023 exams and you may also find it useful to refer to throughout your studies.

The guide is split into two parts:

- Part 1 contains specific information about Subject CP2
- Part 2 contains general information.

Please read this Study Guide carefully before reading the Course Notes, even if you have studied for some actuarial exams before. While you may have already read (the majority of) the Part 2 material in previous subjects, the information in Part 1 is unique to this course.

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1.1 Subject CP2 – background and contents

History

The Core Practices subjects (Subjects CP1, CP2 and CP3) were introduced in the Institute and Faculty of Actuaries' 2019 Curriculum.

Subject CP2 is *Modelling Practice*.

Predecessors

The topics in the Core Practices subjects cover content previously in Subjects CA1, CA2 and CA3:

- Subject CP1 replaces Subject CA1.
- Subject CP2 replaces Subject CA2.
- Subject CP3 replaces Subject CA3.

Exemptions

In order to be eligible for a pass in Subject CP2, you will need:

- to have passed or been granted an exemption from Subject CA2 during the transfer process
- to have met the Institute and Faculty of Actuaries' requirements based on the current curriculum.

See the Institute and Faculty of Actuaries' website for further details:

actuaries.org.uk/studying/exam-exemptions

Links to other subjects

- Subjects CM1 and CM2 – Subject CP2 subject builds upon the concepts introduced in these subjects.
- Subjects CS1 and CS2 – Subject CP2 can also use material from these subjects.
- Subjects CP1 and CP3 – Subject CP2 also uses the principles in Subject CP1 and some features of the communications development in Subject CP3.

Contents

There are three parts to the Subject CP2 course. The parts cover related topics and are broken down into chapters. At the end of every other part there is an assignment testing the material from that part.

The following table shows how the parts and chapters relate to each other. This table should help you plan your progress across the study session.

Part	Chapter	Title	No of pages	X Assignment
1	1	Analysing data	14	X1
	2	Developing a model	13	
2	3	Creating an audit trail	15	X2
	4	Creating a summary document	23	
	5	Presenting results	16	
3	6	Using Excel	47	X3
	7	Using Word	15	
	8	Exam technique	8	
	9	Worked example Paper 1	25	
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1.2 Subject CP2 – Syllabus and Core Reading

Syllabus

The Syllabus for Subject CP2 is given here. To the right of each objective are the chapter numbers in which the objective is covered in the ActEd course.

Aim

The aim of the Modelling Practice subject is to ensure that the successful candidate can model data, document the work (including maintaining an audit trail for a fellow student and senior actuary), analyse the methods used and outputs generated and communicate to a senior actuary the approach, results and conclusions.

Competences

On successful completion of this subject, a student will be able to:

1. prepare and summarise data, and undertake exploratory data analysis and visualisation
2. construct an actuarial model to solve a realistic problem
3. document the model by constructing an audit trail
4. analyse the methods used and outputs generated
5. communicate the results.

Syllabus topics

1. Preparation and exploratory analysis of data (10%)
2. Development of a model with clear documentation (30%)
3. Analysis of methods and model outputs (15%)
4. Application and interpretation of results (20%)
5. Communication of results and conclusions (25%)

The weightings are indicative of the approximate balance of the assessment of this subject between the main syllabus topics, averaged over a number of examination sessions, and taking into account how the subject will be examined in the future.

The weightings also correspond with the amount of learning material underlying each syllabus topic. However, this will also reflect aspects such as:

- the relative complexity of each topic, and hence the amount of explanation and support required for it
- the need to provide thorough foundation understanding on which to build the other objectives
- the extent of prior knowledge which is expected
- the degree to which each topic area is more knowledge or application based.

Detailed syllabus objectives

1. Preparation and analysis of data (10%) (Chapter 1)
 - 1.1 Use appropriate tools for cleaning, restructuring and transforming data to make it suitable for analysis.
 - 1.2 Summarise data using appropriate analysis, descriptive statistics and graphical representation.
 - 1.3 Select and carry out appropriate statistical tests of reasonableness.
 - 1.4 Make appropriate assumptions about the data provided.
 - 1.5 Repair corrupt or missing data.
2. Development of a model with clear documentation (30%) (Chapters 2 and 3)
 - 2.1 Plan and produce a spreadsheet model to solve a specified problem.
 - 2.2 Document the results of the model including justification of key assumptions, detailing the methodology adopted, an appropriate level of reasonableness checks, sensitivities and limitations.
 - 2.3 Produce an audit trail enabling detailed checking and high level scrutiny of the model by a fellow student and a senior actuary.
3. Analysis of methods used and model outputs (15%) (Chapters 2, 3 and 4)
 - 3.1 Perform checks on the results of a model, including applying sensitivity and/or scenario tests.
 - 3.2 Comment on the reasonableness of the results under different scenarios.
4. Application and interpretation of results (20%) (Chapter 4)
 - 4.1 Apply the results to the problem set, suggesting solutions.
 - 4.2 Summarise the results using appropriate charts and tables.
 - 4.3 Consider possible next steps.

- 5 Communication of results and conclusions (25%) (Chapters 4 and 5)
- 5.1 Plan and draft a summary document to cover the data, approach, assumptions, results, conclusions and suggested next steps for presentation to a senior actuary.
- 5.2 Create appropriate data visualisations to communicate the key conclusions of an analysis.

Background Reading

There is no Core Reading for Subject CP2. However, the Institute and Faculty of Actuaries produce background reading for this subject, which can be found in *A Guide to CP2 Modelling Practice* available on the IFoA website:

www.actuaries.org.uk/studying/curriculum/modelling-practice

Students should ensure that they have read and understood the background reading before their CP2 examination. This is important as there can be changes made to the background reading after the Course Notes are published.

A Guide to CP2 Modelling Practice also includes more detailed information relating to the CP2 exam, including the objectives and format of the exam and links to sample projects.

1.3 Subject CP2 – summary of ActEd products

The following products are available for Subject CP2:

- Course Notes
- X Assignments – three assignments:
 - Assignment X1 focuses on the Excel aspects of CP2 (you are allowed 1¾ hours to complete this)
 - Assignment X2 focuses on the audit trail, summary report and charts (you are allowed 1¾ hours to complete this)
 - Assignment X3 is similar to a CP2 Paper 2 exam (you are allowed 3¾ hours to complete this).
- Series X Marking
- Online Classroom
- ASET (20-22 papers) – three years of exam papers, *ie* six sittings, covering the period April 2020 to September 2022
- Mini ASET – covering the April 2023 exam paper
- Mock Exam – two 100-mark tests (Paper 1 and Paper 2)
- Additional Mock Pack (AMP) – two additional 100-mark Paper 1 tests and two additional 100-mark Paper 2 tests
- Mock Exam Marking
- Marking Vouchers.

Products are generally available in both paper and eBook format. Visit **ActEd.co.uk** for full details about available eBooks, software requirements and restrictions.

We offer a one-day Preparation Tutorial for Subject CP2.

Tutorials are typically available both face-to-face and live online.

Full details are set out in our *Tuition Bulletin*, which is available on our website at **ActEd.co.uk**.

1.4 Subject CP2 – skills and assessment

Skill levels

In Subject CP2, the approximate split of assessment across the three skill types is:

- 20% Knowledge
- 50% Application
- 30% Higher Order skills.

Assessment

Assessment consists of two 3¼-hour* computer-based modelling assignments.

* The online exams provide an additional 5 minutes (*ie* 3 hours 20 minutes in total) for students to download and print the question paper.

Each paper will be marked out of 100 and the scores for the two papers will be aggregated. There will be no requirement to pass or to reach a minimum standard on either paper on a stand-alone basis.

1.5 Subject CP2 – frequently asked questions

Q: *What knowledge of earlier subjects should I have?*

A: The Course Notes are written on the assumption that students have studied the Core Principles subjects (the CS, CM and CB subjects) or the equivalent CT subjects. The exam could test any area of actuarial knowledge from the earlier examiner subjects, but any formulae required should be provided in the question.

Further details can be found in Section 1.1.

Q: *The Guide to CP2 Modelling Practice mentions ‘technical standards’. Do I need to address these in my audit trail or my summary?*

A: You won’t be expected to mention these explicitly in the CP2 exam. However, you should be aware of them and you should apply them where appropriate.

For example, regarding the data, you should check any data provided and show that you understand the importance of having complete and accurate data. You could mention this as one of your assumptions and, if you have any doubts about the quality of the data, you could include this in the Next Steps section of your summary as something to follow up on.

For the modelling stage, you need to ensure that the documentation in your audit trail is ‘fit for purpose’. In particular, it must contain sufficient detail and be clear, unambiguous and complete.

For the reporting stage, you need to ensure that your summary is complete and covers all material and relevant information that the senior actuary will need.

Q: *What is the CP2 exam testing?*

Although the projects in your CP2 exams may be based on an actuarial topic from one of the earlier subjects, the exam is *not* testing your detailed knowledge of these subjects. So there’s no need to dig out the chapter summaries from your old courses and start memorising all the equations. In the exam you’ll be provided with any relevant technical information.

Both Paper 1 and Paper 2 involve working with Excel spreadsheets. However, the exam is *not* testing whether you can produce a flashy spreadsheet using advanced features of the software. In fact, we strongly recommend that you stick to the simpler features (and as we will see later this will help score marks in the exam).

Subject CP2 complements Subject CP3, which tests whether you can communicate effectively to a non-technical audience.

Q: *What might the projects in the CP2 exam be about?*

A: The questions in the CP2 exams have been based on a variety of different themes and many of the past exam projects have not had an overtly actuarial theme at all. For example, some of them have related to sporting events, animal populations and pizza delivery.

The questions in Paper 1 and Paper 2 will be based on different scenarios. So, if you were not comfortable with the situation in the first paper you may get something you feel more confident with the following day.

Q: *How is studying for the CP2 exam different from other subjects?*

A: The CP2 exams require you to develop particular skills around model building, analysis, documentation and communication. In order to develop these skills we suggest that you work through the Course Notes and attempt some sample projects. There are various sources of projects and these are outlined in Section 2.3.

In preparation for attempting sample projects, Chapters 9 and 10 of these Course Notes contain worked examples. These chapters include the instructions for example projects for Paper 1 and Paper 2 and a full analysis of the solutions produced from the viewpoint of a student attempting them under exam conditions.

We recommend that you study sample projects and attempt some of them as practice exams.

Remember that there is no single 'right' answer and different approaches are possible. So your work may look different from the solutions given but still score well. Note also that the examiners' solutions are intended to 'cover all angles', so in places they may be a lot longer and include a lot more detail than an individual student would be expected to produce in the exam.

You should also read the *Guide to CP2 Modelling Practice* on the IFoA website, which includes other useful information and guidance.

Q: *What should I do if I discover an error in the course?*

A: If you find an error in the course, please check our website at:

[ActEd.co.uk/paper_corrections.html](https://acted.co.uk/paper_corrections.html)

to see if the correction has already been dealt with. Otherwise please send details via email to **CP2@bpp.com**.

Q: *Who should I send feedback to?*

A: We are always happy to receive feedback from students, particularly details concerning any errors, contradictions or unclear statements in the courses.

If you have any comments on this course in general, please email to **CP2@bpp.com**.

If you have any comments or concerns about the Syllabus or Core Reading, these can be passed on to the Institute and Faculty of Actuaries via ActEd. Alternatively, you can send them directly to the Institute and Faculty of Actuaries' Examination Team by email to **education.services@actuaries.org.uk**.

2.1 General information and support

Before you start

When studying for the Institute and Faculty of Actuaries' exams, you will need:

- a copy of the **Formulae and Tables for Examinations of the Faculty of Actuaries and the Institute of Actuaries, 2nd Edition (2002)** – these are referred to simply as the *Tables*
- a **scientific calculator** and/or **software package** to help with calculations.

The *Tables* are available from the Institute and Faculty of Actuaries' eShop. Please visit [actuaries.org.uk](https://www.actuaries.org.uk).

BPP learning support

BPP's Learning Support team offers a wide range of support for all students who disclose a learning difficulty or disability, including sensory difficulties, mobility difficulty, ADHD, Asperger Syndrome, mental health difficulties, dyslexia, dyspraxia and general health problems. This support is accessible to all ActEd students free of charge.

This support includes:

- accessible and inclusive learning facilities
- a dedicated team that provides information, advice, guidance and support.

Please contact the Learning Support team at LearningSupport@bpp.com for more information.

Safeguarding

Safeguarding means protecting people's health, wellbeing and human rights, and enabling them to live free from harm, abuse and neglect.

For ActEd, safeguarding is recognising when someone needs support to help them achieve their learning goals while maintaining their safety, both face-to-face and online.

We want you to feel comfortable within our learning environment and safe in the knowledge that if you ever needed support, you would know where to go.

If you need support, please contact BPP's Safeguarding team at safeguarding@bpp.com or for urgent concerns call 07464 542 636.

The Prevent Duty

As a Government-regulated training provider, we are responsible for ensuring our learners are well informed and staying safe.

The Prevent Duty is to protect people from radicalisation and being drawn into extremist views and terrorism. ActEd has a duty to ensure that our learners are well informed and stay safe, and to empower our students to know what to look for and when to report concerns.

Please be aware of:

- people sharing or accessing extremist materials
- homophobic, disability-related, religious or racist bullying
- expressions of hatred towards or incitement to harm particular groups
- use of derogatory language towards particular groups.

Please report any concerns to a tutor or email **safeguarding@bpp.com**.

More information is available at:

officeforstudents.org.uk/advice-and-guidance/regulation/counter-terrorism-the-prevent-duty

2.2 Core study material

Syllabus

The Syllabus for Subject CP2 has been produced by the Institute and Faculty of Actuaries. The relevant individual syllabus objectives are included at the start of each course chapter and a complete copy of the Syllabus is included in Section 1.2 of this Study Guide. We recommend that you use the Syllabus as an important part of your study.

Course Notes

All of the Subject CP2 Course Notes are ActEd material. It is intended to support the syllabus and background reading published by the IFoA. There is no Core Reading for Subject CP2

Copyright

All study material produced by ActEd is copyright and is sold for the exclusive use of the purchaser. The copyright is owned by Institute and Faculty Education Limited, a subsidiary of the Institute and Faculty of Actuaries. Unless prior authority is granted by ActEd, you may not hire out, lend, give out, sell, store or transmit electronically or photocopy any part of the study material. You must take care of your study material to ensure that it is not used or copied by anybody else.

Legal action will be taken if these terms are infringed. In addition, we may seek to take disciplinary action through the Institute and Faculty of Actuaries or through your employer.

These conditions remain in force after you have finished using the course.

2.3 ActEd study support

This section gives a description of the products offered by ActEd.

Successful students tend to undertake three main study activities:

1. *Learning* – initial study and understanding of subject material
2. *Revision* – learning subject material and preparing to tackle exam-style questions
3. *Rehearsal* – answering exam-style questions, culminating in answering questions at exam speed.

Different approaches suit different people. For example, you may like to revise material gradually over the months running up to the exams or you may do your revision in a shorter period just before the exams. Also, these three activities will almost certainly overlap.

We offer a flexible range of products to suit you and let you control your own learning and exam preparation. The following table shows the products that we produce. Not all products are available for all subjects.

LEARNING	LEARNING & REVISION	REVISION	REVISION & REHEARSAL	REHEARSAL
Course Notes	X Assignments	Flashcards	Revision Notes	Mock Exam
	Combined Materials Pack (CMP)	Sound Revision	ASET	Additional Mock Pack (AMP)
	X Assignment Marking			Mock Marking
	Tutorials			
	Online Classroom			

The products and services relevant to Subject CP2 are described in more detail below.

‘Learning’ products

Course Notes

The Course Notes will help you develop the basic knowledge and understanding of principles needed to pass the exam. They incorporate the complete Core Reading and include full explanation of all the syllabus objectives, with worked examples and questions (including some past exam questions) to test your understanding.

Each chapter includes:

- the relevant syllabus objectives
- a chapter summary
- practice questions with full solutions.

‘Learning & revision’ products

X Assignments

The Series X Assignments are assessments that cover the material in each part of the course in turn. They can be used to develop and test your understanding of the material. The last assignment provides extra practice on case studies and tests topics across the course.

The X Assignments come with full marking schedules, and are available with or without marking (see below).

Combined Materials Pack (CMP)

The Combined Materials Pack (CMP) comprises the Course Notes and the Series X Assignments.

CMP Upgrade

The purpose of the CMP Upgrade is to enable you to amend last year’s study material to make it suitable for study for this year.

Wherever possible, it lists the changes to the syllabus objectives, Core Reading and the ActEd material since last year that might realistically affect your chance of success in the exam. It is produced so that you can manually amend your notes. The upgrade includes replacement pages and additional pages where appropriate.

However, if a large number of changes have been made to the Course Notes and X Assignments, it is not practical to produce a full upgrade, and the upgrade will only *outline* the most significant changes. In this case, we recommend that you purchase a replacement CMP (printed copy or eBook) or Course Notes at a significantly reduced price.

The CMP Upgrade can be downloaded free of charge on our website at **ActEd.co.uk**.

A separate upgrade for eBooks is not produced but a significant discount is available for retakers wishing to re-purchase the latest eBook.

X Assignment Marking

We are happy to mark your attempts at the X Assignments. Marking is not included with the Assignments or the CMP and you need to order it separately.

IMPORTANT NOTE: You must submit your script on our virtual learning environment, 'The Hub', in the format detailed in your assignment instructions. You will also be able to download your marked script, including marker feedback, from The Hub, as well as being given the opportunity to provide comments on the quality of the marking.

Don't underestimate the benefits of attempting and submitting assignments for marking:

- Question practice during this phase of your study gives an early focus on the end goal of answering exam-style questions.
- You're incentivised to keep up with your study plan and get a regular, realistic assessment of your progress.
- Objective, personalised feedback from a high quality marker will highlight areas on which to work and help with exam technique.

In a recent study, we found that students who attempt more than half the assignments and get them marked have significantly higher pass rates.

There are two different types of marking product: Series Marking and Marking Vouchers.

Series Marking

Series Marking applies to a specified subject, session and student. If you purchase Series Marking, you will **not** be able to defer the marking to a future exam sitting or transfer it to a different subject or student.

We typically provide full solutions with the Series X Assignments. However, if you order Series Marking at the same time as you order the Series X Assignments, you can choose whether or not to receive a copy of the solutions in advance. If you choose not to receive them with the study material, you will be able to download the solutions from The Hub when your marked script is returned (or following the final deadline date if you do not submit a script).

If you are having your attempts at the assignments marked by ActEd, you should submit your scripts regularly throughout the session, in accordance with the schedule of recommended dates set out on our website at **ActEd.co.uk**. This will help you to pace your study throughout the session and leave an adequate amount of time for revision and question practice.

The recommended submission dates are realistic targets for the majority of students. Your scripts will be returned more quickly if you submit them well before the final deadline dates.

Any script submitted *after* the relevant final deadline date will not be marked. It is your responsibility to ensure that we receive scripts in good time.

Marking Vouchers

Marking Vouchers give the holder the right to submit a script for marking at any time, irrespective of the individual assignment deadlines, study session, subject or person.

Marking Vouchers can be used for any assignment. They are valid for four years from the date of purchase and can be refunded at any time up to the expiry date.

Although you may submit your script with a Marking Voucher at any time, you will need to adhere to the explicit Marking Voucher deadline dates to ensure that your script is returned before the date of the exam. The deadline dates are provided on our website at **ActEd.co.uk**.

Tutorials

Our tutorials are specifically designed to develop the knowledge that you will acquire from the course material into the higher-level understanding that is needed to pass the exam.

We run a range of different tutorials including face-to-face tutorials at various locations, and Live Online tutorials. Full details are set out in our *Tuition Bulletin*, which is available on our website at **ActEd.co.uk**.

In preparation for these tutorials, we expect you to have read the relevant part(s) of the Course Notes before attending the tutorial so that the group can spend time on exam questions and discussion to develop understanding rather than basic bookwork.

Online Classroom

The Online Classroom acts as either a valuable add-on or a great alternative to a face-to-face or Live Online tutorial.

At the heart of the Online Classroom in each subject is a comprehensive, easily-searched collection of tutorial units. These are a mix of:

- teaching units, helping you to really get to grips with the course material, and
- guided questions, enabling you to learn the most efficient ways to answer questions and avoid common exam pitfalls.

The best way to discover the Online Classroom is to see it in action. You can watch a sample of the Online Classroom tutorial units on our website at **ActEd.co.uk**.

‘Revision & rehearsal’ products

ActEd Solutions with Exam Technique (ASET)

The ActEd Solutions with Exam Technique (ASET) contains our solutions to a number of past exam papers, plus comment and explanation. In particular, it highlights how questions might have been analysed and interpreted so as to produce a good solution with a wide range of relevant points. This will be valuable in approaching questions in subsequent examinations.

‘Rehearsal’ products

Mock Exam

The Mock Exam consists of two 100-mark mock exam papers that provides a realistic test of your exam readiness.

It is based on the Mock Exam from last year but it has been updated to reflect any changes to the Syllabus, Core Reading and examination format.

The Mock Exam comes with a full marking schedule, and is available with or without marking (see below).

Additional Mock Pack (AMP)

The Additional Mock Pack (AMP) consists of four further 100-mark mock exam papers – Mock Exam 2 (Papers 1 and 2) and Mock Exam 3 (Papers 1 and 2). This is if you are retaking and have already sat the Mock Exam, or if you just want some extra question practice.

Mock Exam 2 and Mock Exam 3 come with full marking schedules, and are available with or without marking (see below).

Mock Marking

We are happy to mark your attempts at the mock exams. The same general principles apply as for the X Assignment Marking. In particular:

- Mock Exam Marking applies to a specified subject, session and student. In this subject it covers the marking of both Paper 1 and Paper 2.
- Marking Vouchers can be used for each mock exam paper. You will need two marking vouchers in order to have both Paper 1 and Paper 2 marked. Marking vouchers have to be used for marking the AMP mock exam papers and can be used for marking the Mock Exam.

Recall that:

- marking is not included with the products themselves and you need to order it separately
- you should submit your script via the Hub in the format detailed in the mock exam instructions
- you will be able to download the feedback on your marked script, the solutions if you have Mock Exam Marking, and provide comments on the quality of the marking via The Hub.

2.4 Study skills and assessment

The Subject CP2 exams

In testing your ability to communicate clearly rather than to recall and apply technical knowledge, Subject CP2 is very different to the other actuarial exams. Your approach to study and preparation for the examination may also be quite different. Learning to communicate effectively is a gradual process – you will need to practise a great deal and be open to constructive criticism.

The aim of the Subject CP2 exams is to ensure that students can model data, document their work, analyse results and communicate the approach, results and conclusions. Some of these areas may take a lot of practice for you to develop the necessary skills to demonstrate to the examiners in order to pass the exam.

Study skills

Overall study plan

We suggest that you develop a realistic study plan, building in time for relaxation and allowing some time for contingencies. Be aware of busy times at work, when you may not be able to take as much study leave as you would like. Once you have set your plan, be determined to stick to it. You don't have to be too prescriptive at this stage about what precisely you do on each study day. The main thing is to be clear that you will cover all the important activities in an appropriate manner and leave plenty of time for revision and question practice.

Aim to manage your study so as to allow plenty of time to acquire the necessary skills. Most successful students will probably aim to complete the course at least six weeks before the exam, thereby leaving a sufficient amount of time for rehearsal. By finishing the course as quickly as possible, you will have a much clearer view of the *big picture*. It will also allow you to plan your rehearsal so that you can concentrate on practising the skills you find more challenging.

You can also try looking at our discussion forum, which can be accessed at **ActEd.co.uk/forums** (or use the link from our home page at **ActEd.co.uk**). There are some good suggestions from students on how to study.

Study sessions

Ideally, each study session should have a specific purpose and be based on a specific task, *eg 'Finish reading Chapter 3 and attempt Practice Questions 3.4, 3.7 and 3.12'*, as opposed to a specific amount of time, *eg 'Three hours studying the material in Chapter 3'*.

Try to study somewhere quiet and free from distractions (*eg* an area at home dedicated to study). Find out when you operate at your peak, and endeavour to study at those times of the day. This might be between 8am and 10am or could be in the evening. Take short breaks during your study to remain focused – it's definitely time for a short break if you find that your brain is tired and that your concentration has started to drift from the information in front of you.

Order of study

We suggest that you work through each of the chapters in turn. To get the maximum benefit from each chapter you should proceed in the following order:

1. Read the syllabus objectives. These are set out in the box at the start of each chapter.
2. Read the Chapter Summary at the end of each chapter. This will give you a useful overview of the material that you are about to study.
3. Study the Course Notes, annotating them and possibly making your own notes. Try the self-assessment questions as you come to them.
4. Read the Chapter Summary again. If there are any ideas that you can't remember covering in the Course Notes, read the relevant section of the notes again to refresh your memory.
5. Attempt (at least some of) the Practice Questions that appear at the end of the chapter.
6. Think about what specifically you might want to include from that chapter in the reference materials that you choose to have to hand during the exam. For example, you might want to put together some easy-reference lists of idea generation prompts for assumptions or next steps that can be referred to quickly and conveniently.

It's a fact that people are more likely to absorb something if they review it several times. So, do look over the chapters you have studied so far from time to time. It is useful to re-read the Chapter Summaries or to try the Practice Questions again a few days after reading the chapter itself. It's a good idea to annotate the questions with details of when you attempted each one. This makes it easier to ensure that you try all of the questions as part of your rehearsal.

Once you've read the relevant part of the notes and tried a selection of questions from the Practice Questions you should attempt the corresponding assignment. If you submit your assignment for marking, spend some time looking through it carefully when it is returned. It can seem a bit depressing to analyse the errors you made, but you will increase your chances of passing the exam by learning from your mistakes. The markers will try their best to provide practical comments to help you to improve.

To be really prepared for the exam, you should be aware of what the examiners will expect. Your rehearsal programme should include plenty of question practice so that you are aware of the typical style, content and marking structure of exam questions. You should attempt as many past exam questions as you can.

As ActEd tutors, it is very illuminating to see/hear how different students study for the exams. We hear quite a few students make comments such as:

- Assignment questions are not relevant to the exam.
- It's quicker just to read through the assignment questions and solutions.
- There isn't enough time to get the assignments done.

Sound familiar?

It may be worth thinking again for Subject CP2 as, when we look at the pass lists, we are finding that there is a correlation between students who are making the effort to do assignment, mock exam and past exam questions, and those who are happy on exam results day.

Active study

Here are some techniques that may help you to study actively.

1. Don't believe everything you read. Good students tend to question everything that they read. They will ask 'why, how, what for, when?' when confronted with a new concept, and they will apply their own judgement. This contrasts with those who unquestioningly believe what they are told, learn it thoroughly, and reproduce it (unquestioningly?) in response to exam questions.
2. Annotate your notes with your own ideas and questions. This will make you study more actively and will help when you come to review the material. These notes may also be useful to refer to in the exam. Do not simply copy out the notes without thinking about the issues.
3. Attempt the questions in the notes as you work through the course. Produce your answer before you refer to the solution.
4. Attempt other questions and assignments on a similar basis, *ie* produce your answer before looking at the solution provided. Attempting the assignments under timed conditions has some particular benefits:
 - It forces you to think and act in a way that is similar to how you will behave in the exam.
 - When you have your assignments marked it is *much* more useful if the marker's comments can show you how to improve your performance under timed conditions than your performance when you are under no time pressure.
 - The knowledge that you are going to do an assignment under timed conditions and then submit it (however good or bad) for marking can act as a powerful incentive to make you study as well as possible.
 - It is also quicker than trying to produce perfect answers.
5. Sit a mock exam four to six weeks before the real exam to identify your weaknesses and work to improve them. You could use a mock exam written by ActEd or a past exam paper. Ensure that you have your reference materials handy, as you plan to in the actual exam, so that you can practise finding what you need in them quickly and efficiently. (You might even be able to add to / modify your reference materials to increase their usefulness.)

You can find further information on how to study in the Institute and Faculty of Actuaries' Qualification Handbook, which you can download from their website at:

actuaries.org.uk/qualify

Revision and exam skills

Revision skills

You will have sat many exams before and will have mastered the exam and revision techniques that suit you. However it is important to note that due to the skills development involved in Subject CP2, it is not possible to leave all your revision to the last minute. Students who prepare well in advance have a better chance of passing the exam on the first sitting.

We recommend that you prepare for the exam by practising a large number of exam-style questions under timed conditions. This will help you to practise the specific skills that you will need to pass the exam.

There are many sources of exam-style questions. You can use past exam papers, assignments, mock exams and ASET.

Past exam papers

You can download past exam papers and Examiners' Reports from the Institute and Faculty of Actuaries' website at [actuaries.org.uk](https://www.actuaries.org.uk).

The examination

The Institute and Faculty of Actuaries has produced an:

- Examinations Handbook, which includes guidance around notation, suggesting possible standard keyboard notation that students could use when typing solutions in Word during their examinations
- Assessment Regulations document, which includes rules on eligibility, entry and conduct during an online assessment.

The Examinations Handbook and Assessment Regulations document, along with additional information about preparing for, booking and sitting the Institute and Faculty of Actuaries' exams can be found at:

[actuaries.org.uk/qualify/my-exams/ifo-exams](https://www.actuaries.org.uk/qualify/my-exams/ifo-exams)

IMPORTANT NOTE: For the 2023 examinations, these documents will be updated and published in the weeks leading up to each exam session. It is important that you keep up-to-date with any changes and developments.

For the exam, ensure you have ready:

- your reference materials, with helpful bookmarks
- rough paper and a pen / pencil
- a calculator / Excel (or equivalent)
- a printer (if you wish to print out the exam paper)
- a copy of the *Tables*.

2.5 Queries and feedback

Questions and queries

From time to time you may come across something in the study material that is unclear to you. The easiest way to solve such problems is often through discussion with friends, colleagues and peers – they will probably have had similar experiences whilst studying. If there's no-one at work to talk to then use our discussion forum at **ActEd.co.uk/forums** (or use the link from our home page at **ActEd.co.uk**).

Our online forum is dedicated to actuarial students so that you can get help from fellow students on any aspect of your studies from technical issues to study advice. You could also use it to get ideas for revision or for further reading around the subject that you are studying. ActEd tutors will visit the site from time to time to ensure that you are not being led astray and we also post other frequently asked questions from students on the forum as they arise.

If you are still stuck, then you can send queries by email to the relevant subject email address (see Section 1.5), but we recommend that you try the forum first. We will endeavour to contact you as soon as possible after receiving your query but you should be aware that it may take some time to reply to queries, particularly when tutors are away from the office running tutorials. At the busiest teaching times of year, it may take us more than a week to get back to you.

If you have many queries on the course material, you should raise them at a tutorial or book a personal tuition session with an ActEd tutor. Information about personal tuition is set out in our current brochure. Please email **ActEd@bpp.com** for more details.

Feedback

If you find an error in the course, please check the corrections page of our website (**ActEd.co.uk/paper_corrections.html**) to see if the correction has already been dealt with. Otherwise please send details via email to the relevant subject email address (see Section 1.5).

Each year our tutors work hard to improve the quality of the study material and to ensure that the courses are as clear as possible and free from errors. We are always happy to receive feedback from students, particularly details concerning any errors, contradictions or unclear statements in the courses. If you have any comments on this course, please email them to the relevant subject email address (see Section 1.5).

Our tutors also work with the Institute and Faculty of Actuaries to suggest developments and improvements to the Syllabus and Core Reading. If you have any comments or concerns about the Syllabus or Core Reading, these can be passed on via ActEd. Alternatively, you can send them directly to the Institute and Faculty of Actuaries' Examination Team by email to **education.services@actuaries.org.uk**.