

BCS PRACTITIONER CERTIFICATE IN USER EXPERIENCE SYLLABUS

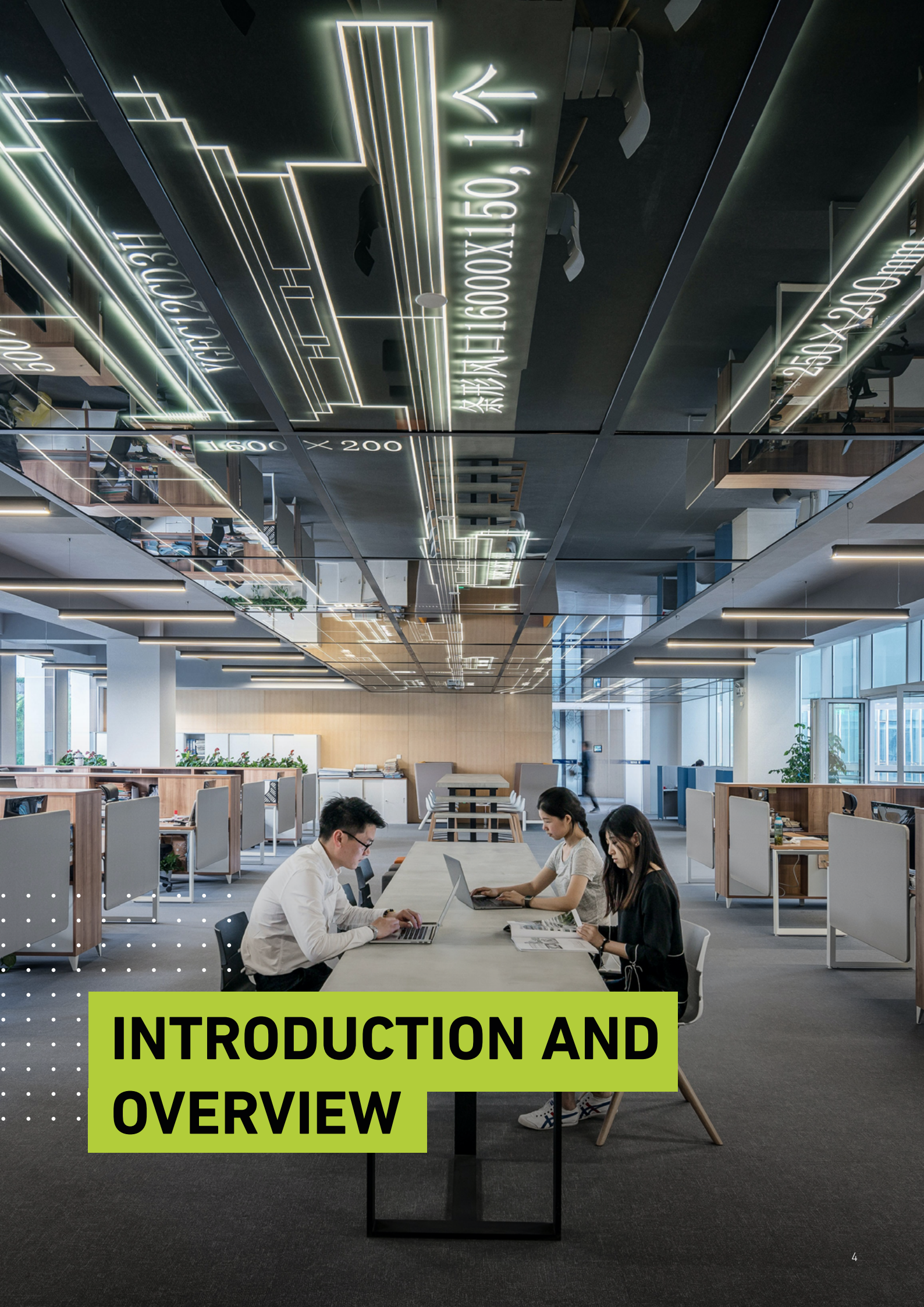
SOLUTION DEVELOPMENT PORTFOLIO

This professional award is not regulated by the following United Kingdom Regulators - Ofqual, Qualifications Wales, CCEA or SQA.



CONTENTS

INTRODUCTION	05
LEARNING OUTCOMES	05
QUALIFICATION SUITABILITY	06
TRAINER CRITERIA	06
SFIA LEVELS	07
SYLLABUS	09
EXAMINATION FORMAT	21
QUESTION WEIGHTING	22
RECOMMENDED READING	23
DOCUMENT CHANGE HISTORY	24
REFERENCES	25



INTRODUCTION AND OVERVIEW

INTRODUCTION

The role of a user experience (UX) designer combines a passion for helping others along with an understanding of the best way to design solutions based on the users' goals, needs, and daily tasks.

The BCS Practitioner Certificate in User Experience is for candidates who want to develop the skills to succeed in a user experience role. Specifically, this certificate covers tools and techniques to approach researching, designing, and evaluating in a UX environment underpinned by a human-centred approach.

This certificate is suitable for those who currently work in a UX role and are looking to enhance their understanding of industry-standard UX methodologies.

Furthermore, the content of this certificate is suitable for roles that interact with UX elements as part of their duties. For example, product managers, software developers, project managers, and entrepreneurs and business owners.

LEARNING OBJECTIVES

Upon completion of this certificate, candidates will be able to demonstrate a practical understanding of:

- the principles and lifecycle stages of human-centred design
- the techniques to gather, evaluate, and communicate user research including relevant ethical and legal considerations
- the methods to analyse the different inputs that inform UX design
- the principles, methods, and tools to transform plans into concrete products.
- the methods to test, evaluate, and review designs



QUALIFICATION SUITABILITY AND OVERVIEW

Centres must ensure that candidates have the potential and opportunity to gain the qualification successfully. It is recommended that candidates pass the BCS Foundation Certificate in User Experience. It is also advised that candidates hold a minimum of 3 years' experience in a user experience (or related) role. The candidate should also have a good standard of English and maths.

This is a practitioner certificate which will:

- assess the candidate's ability to identify, describe, and explain key concepts
- assess the candidate's ability to apply and analyse UX principles, methods, and tools to specific scenarios
- enable candidates to progress in their professional development

Candidates can study for this award by attending a training course provided by a BCS accredited training provider or through self-study.

TOTAL QUALIFICATION TIME	GUIDED LEARNING HOURS	INDEPENDENT LEARNING	ASSESSMENT TIME
29 hours	18 hours	10 hours	60 minutes



TRAINER CRITERIA



It is recommended that to deliver this certificate effectively, trainers should possess:

- Ten days of training experience or have a Train the Trainer qualification.
- A minimum of 3 years of practical experience in the subject area.

SFIA LEVELS

This award provides candidates with the level of knowledge highlighted within the table, enabling them to develop the skills to operate successfully at the levels of responsibility indicated.

LEVEL	LEVELS OF KNOWLEDGE	LEVELS OF SKILLS AND RESPONSIBILITY (SFIA)
K7		Set strategy, inspire and mobilise
K6	Evaluate	Initiate and influence
K5	Synthesise	Ensure and advise
K4	Analyse	Enable
K3	Apply	Apply
K2	Understand	Assist
K1	Remember	Follow

For further information regarding the SFIA Levels

[SFIAplus](#) | [BCS Levels](#)

SFIAPLUS

This syllabus has been linked to the SFIA knowledge, skills and behaviours required at level 4 for an individual working in the following subject areas.

KSB02

Acquiring understanding and insights regarding the underlying issues in complex problems or situations through the development of abstract representations, the identification of patterns and the analysis of hypotheses.

KSB04

Identifying gaps in the available information required to understand a problem or situation and devising a means of resolving them.

KSB19

Understanding the needs, objectives and constraints of those in other disciplines and functions.

KSB22

Establishing relationships, contributing to an open culture and maintaining contacts with people from a variety of backgrounds and disciplines. Effective, approachable and sensitive communicator in different communities and cultures. Ability to adapt style and approach to meet the needs of different audiences.

KSC89

Methods and techniques that ensure users with physical impairments or learning disorders are not disadvantaged by the system.

KSD04

The selection and application of information elicitation methods, tools and techniques that are appropriate to the information required and the sources available.

KSC07

Graphical human/computer interfaces that facilitate effective communication between human operator and computer.

KSC22

Methods and techniques for structured reviews, including reviews of technical work products, test plans, business cases, architectures and any other key deliverables.



SYLLABUS

1. HUMAN-CENTRED DESIGN (10%)

1.1 Describe the principles of human-centred design.

Indicative content

- a. The design is based upon an explicit understanding of users, tasks and environments
- b. Users are involved throughout design and development
- c. The design is driven and refined by user-centred evaluation
- d. The process is iterative
- e. The design addresses the whole user experience
- f. The design team includes multidisciplinary skills and perspectives

Guidance

As per ISO 9241-210: human-centred design is an approach to systems design and development that aims to make interactive systems more usable by focusing on the use of the system and applying human factors/ergonomics and usability knowledge and techniques.

The term "human-centred design" is used rather than "user-centred design" in order to emphasise that this document also addresses impacts on a number of stakeholders, not just those typically considered as users. However, in practice, these terms are often used synonymously.

Usable systems can provide a number of benefits, including improved productivity, enhanced user well-being, avoidance of stress, increased accessibility and reduced risk of harm.

1.2 Summarise the stages in the human-centred design lifecycle.

Indicative content

- a. Plan the work
- b. Understand the context
- c. Specify the requirements
- d. Make designs
- e. Evaluate the designs

Guidance

Candidates should be aware of the iterative nature of the lifecycle and the need for the design solution to evolve through each stage/cycle.

2. USER RESEARCH (25%)

2.1 Define user populations, target users and segments.

Indicative content

- a. Characteristics:
 - Diverse populations
 - Cultural differences
- b. Limitations:
 - Accessibility
 - Inclusive design
- c. Universal design

Guidance

Summarise the considerations involved in specifying a user population or segment.

Candidates should consider the aspects listed in indicative content to capture diverse behaviours, needs and motivations for a range of user groups.

2.2 Evaluate appropriate user research techniques.

Indicative content

- a. Types of research technique and their advantages and disadvantages:
 - Interviewing
 - Surveys/questionnaires
 - Observational techniques (e.g. contextual inquiry, ethnography)

Guidance

Candidates should be aware of different research techniques and be able to evaluate their relevance to a scenario.

2.3 Apply user research techniques.

Indicative content

- a. Types of research technique:
 - Interviewing
 - Surveys/questionnaires
 - Observational techniques (e.g. contextual inquiry, ethnography)

Guidance

Candidates should be able to apply appropriate techniques when presented with a given scenario. They should also demonstrate an understanding of ResearchOps.

2.4 Communicate the outcomes of user research.

Indicative content

- a. Method of communication:
 - Formal/informal
- b. Communication content:
 - Define goals and audience
 - Research questions and methodologies
 - Summarise details of research findings
 - Next steps

Guidance

Candidates should be aware of appropriate methods of communication in different scenarios.

They should also be aware of typical content to communicate research outcomes and of the use of templates/standards to facilitate this.

2.5 Apply ethical and legal considerations when conducting research.

Indicative content

- a. Apply the following ethical principles:
 - Rights and dignity of groups and individuals
 - Informed consent
 - Integrity, quality and transparency
 - Independent review
 - Fair subject selection
- b. Legal:
 - Data protection

Guidance

UX research ethics is about understanding, accepting, and respecting the participants of the research, including their rights and welfare.

2.6 Apply research methods to guide the user to a sustainable product or service.

Indicative content

- a. Add research topics to support social and environmental sustainability options
- b. Investigate User Innovation Communities

Guidance

Candidates should be able to apply appropriate methods to a) research how to improve physical and social aspects of life and use less environmental resources. b) The use of engagement with wider user innovation communities to build in current and future sustainability solutions.

3. USER EXPERIENCE ANALYSIS (25%)

3.1 Describe the context of use for a product, system or service.

Indicative content

- a. Users
- b. Goals
- c. Tasks
- d. Environment
- e. Resources

Guidance

Candidates should be able to describe technical, physical, social, cultural and organisational environmental contexts.

This includes contexts relating to sustainability and ethics.

3.2 Analyse the main features of a given persona.

Indicative content

- a. Qualitative personas
- b. Statistical personas
- c. Proto-personas

Guidance

Research-based personas highlight users' wants and needs. Qualitative and quantitative personas should be based on research and refined through feedback. These should include feelings, thoughts, personality traits.

<https://www.nngroup.com/articles/persona-types/>

ANTI-PERSONAS

IT IS SOMETIMES USEFUL TO CREATE NEGATIVE PERSONAS – OUTLINING FOR THE SAKE OF CLARITY THE TYPES OF USER THAT WE HAVE DECIDED THAT THE SYSTEM IS NOT GOING TO BE DESIGNED TO SUPPORT.

Voil, 2020

3.3 Identify stakeholder groups and methods to resolve conflicts.

Indicative content

- a. Identify stakeholders who are directly or indirectly involved/impacted by the project
- b. Interpret stakeholders' relationships to the project
- c. Describe characteristics, goals, constraints and attributes of the stakeholder
- d. Plan and create appropriate channels for ease of communication

Guidance

Candidates should be aware of the need for good consistent communication techniques to ensure mutual understanding, respect and successful relations with business stakeholders throughout the project.

Candidates should be able to think about the different needs of stakeholders and adopt appropriate ways to communicate with them and to understand the need for a consistent and timely approach. Communication itself should follow effective communication principles such as clarity, completeness, coherence, conciseness, credibility and continuity.

3.4 Analyse the use of user stories to describe capabilities.

Indicative content

- a. Express a feature from a user perspective (As a [Type of User] I want to)
- b. Create concise user stories for each target user persona where necessary
- c. Apply acceptance criteria to further define the user story
- d. Evaluate and iterate to refine the story where required

Guidance

User stories should have a focus on the value a user will gain from a feature. They should focus on the user needs and candidates should be aware of the need to evaluate and gain feedback to refine user experience within the stories.

Acceptance criteria should be applied to allow for the feature to be tested and to give more specific information. It should be emphasised that user stories should be small and bigger stories should be broken down into smaller stories.

3.5 Identify usability and user experience design goals.

Indicative content

- a. Differentiate between usability and user experience
- b. Define UX problem statements

Guidance

Usability is defined as the extent to which specified users can achieve specified goals in a specified context with effectiveness, efficiency and satisfaction.

User experience is defined as a user's physical, emotional and cognitive responses to their interaction with a system.

Candidates should be expected to create a problem statement which describes the problem or challenge they wish to solve and their desired objective/outcome for this.

3.6 Describe measurable accessibility requirements.

Indicative content

- a. Describe common accessibility functionality which can be measured
- b. Demonstrate knowledge of the listed tools for testing content for accessibility
- c. Apply accessibility features *as a user story* with quantifiable acceptance criteria

Guidance

Candidates should be aware of standards and tools which exist to measure content for accessibility. They should have knowledge of common accessibility features which should be implemented and quality assured (i.e. ensure alternative text (shown in green) conveys the equivalent content and/or function of the image); and encouraged to research current advances in accessibility within apps, websites and technology.

<https://www.w3.org/WAI/WCAG21/Understanding/contrast-minimum.html#resources>

<https://webaim.org/resources/evalquickref/>

<https://webaim.org/resources/contrastchecker/>

4. USER EXPERIENCE DESIGN (25%)

4.1 Analyse the use of techniques to design user interactions.

Indicative content

- a. Low and high fidelity prototype
- b. Paper and digital prototypes
- c. Terminology:
 - Sketches
 - Wireframes
 - Mockups
 - Design comps
- d. Storyboards, user flows, wireflows
- e. Site maps, information architecture

Guidance

Candidates should be aware of differences between techniques and be able to evaluate their relevance to a scenario.

4.2 Analyse how and when to translate concepts into concrete UX work products.

Indicative content

- a. Low and high fidelity prototype
- b. Paper and digital prototypes
- c. Terminology:
 - Sketches
 - Wireframes
 - Mockups
 - Design comps
- d. Storyboards, user flows, wireflows
- e. Site maps, information architecture

Guidance

The practice of creating storyboards to illustrate UX Ideas requires the use of drawings to map user interactions with the product over time. Candidates should be aware of the importance of including emotions and challenges and different flows.

Candidates should be able to apply their understanding of using prototypes to given scenarios.

4.3 Describe effective visual design principles.

Indicative content

- a. Similarity
- b. Proximity
- c. Figure/ground
- d. Common fate
- e. Continuation
- f. Closure
- g. Simplicity
- h. Symmetry
- i. Consistency

Guidance

Candidates should be able to describe and apply the Gestalt principles.

4.4 Apply relevant cognitive principles in design.

Indicative content

- a. Limits on attention
- b. Limits to short-term memory
- c. Processing limitations (cognitive load)
- d. Limitations on visual perception
- e. Limits to colour vision
- f. Affordances

Guidance

Candidates should be aware of the principles and how to apply them effectively to their design. Specifically, this involves reading a given scenario and extracting the relevant principle(s).

4.5 Analyse the use of a user-centred approach to content design

Indicative content

- a. Write effective content

Guidance

User-centred design requires regular engagement with the intended users of the product.

Candidates will be required to identify methods of applying a user-centred approach based on the given scenario.

4.6 Understand the use of visual design and branding guidelines to create a consistent and impactful experience.

Indicative content

- a. Style guides
- b. Design systems

Guidance

Candidates should be aware of the benefits of standardisation in interface design and implementation and have a knowledge of different approaches to this.



5. USER EXPERIENCE EVALUATION (25%)

5.1 Describe appropriate tools and techniques to evaluate the user experience.

Indicative content

- a. Testing with users versus inspection
- b. Formative versus summative evaluation
- c. Moderated and unmoderated tests

Guidance

Candidates should be aware of the difference between different types of usability evaluation. They should understand that summative evaluation often requires more test participants than formative evaluation, which does not require a statistically significant sample.

5.2 Analyse the use of usability testing plans.

Indicative content

- a. Identify research questions that need to be answered
- b. Identify and recruit some test participants
- c. Devise test tasks and scenarios that will answer the questions

Guidance

Candidates should be able to articulate and analyse the required steps to test design hypotheses. Candidates should be able to identify these approaches in a given scenario.

5.3 Analyse the use of suitability testing.

Indicative content

- a. Prepare the environment for running the test
- b. Put the participants at their ease
- c. Moderate the test
- d. Observe participants
- e. Administer a questionnaire
- f. Record your findings

Guidance

Candidates should understand how to ensure effective use of the think-aloud protocol (the encouragement of participants to verbalise their thoughts, feelings, and actions when engaging with a product or interface).

Candidates will be expected to identify best practice when presented with a scenario.

5.4 Apply heuristics to evaluate an interface.

Indicative content

- a. Visibility of system status
- b. Match between system and the real world
- c. User control and freedom
- d. Consistency and standards
- e. Error prevention
- f. Recognition rather than recall
- g. Flexibility and efficiency of use
- h. Aesthetic and minimalist design
- i. Help users recognise, diagnose, and recover from errors
- j. Help and documentation

Guidance

Candidates should know how to apply Jakob Nielsen's 10 heuristics. Specifically, should be able to read a given scenario and identify the relevant heuristics.

5.5 Analyse and interpret results of evaluations and prioritise issues.

Indicative content

- a. The importance of defining tasks clearly, including success criteria, to make recording the results easier
- b. Formal (e.g. spreadsheets) and informal recording (e.g. sticky notes)

Guidance

Candidates should be able to record observations from a usability study. What happened when the users tried to carry out their tasks? Understand that a formal approach works best for a summative test and an informal approach for formative tests. Prioritise issues by calculating severity (critical, serious, medium or low) on the basis of frequency, persistence and impact.

EXAMINATION FORMAT

This award is assessed by completing an invigilated online exam that candidates will only be able to access at the date and time they are registered to attend.

Adjustments and/or additional time can be requested in line with the [BCS reasonable adjustments policy](#) for candidates with a disability or other special considerations, including English as a second language.

TYPE

40
MULTIPLE-CHOICE/
MULTIPLE-RESPONSE
QUESTIONS

DURATION

60 MINUTES

SUPERVISED

YES
THIS AWARD WILL BE
SUPERVISED

OPEN BOOK

NO
(NO MATERIALS CAN
BE TAKEN INTO THE
EXAMINATION ROOM)

PASS MARK

(65%)
26/40

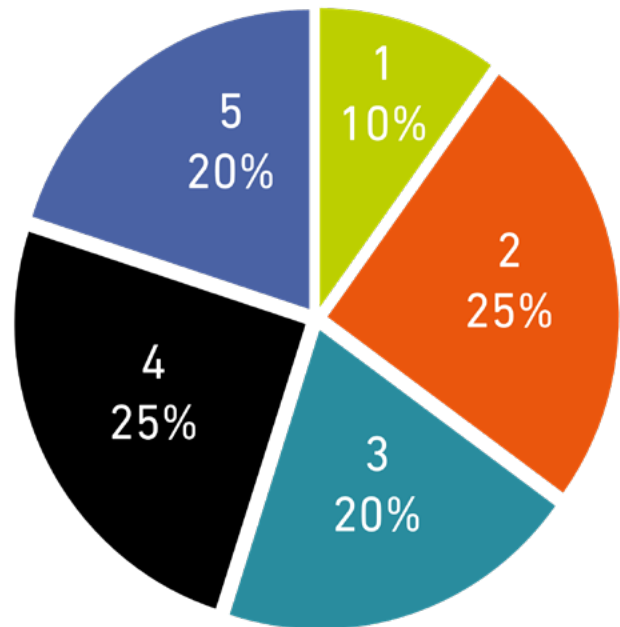
DELIVERY

DIGITAL FORMAT ONLY

QUESTION WEIGHTING

Each major subject heading in this syllabus is assigned a percentage weighting. The purpose of this is:

- Guidance on the proportion of content allocated to each topic area of an accredited course.
- Guidance on the proportion of questions in the exam.



Syllabus Area

- 1 Human-centred design
- 2 User research
- 3 User experience analysis
- 4 User experience design
- 5 User experience evaluation

Question Type

- Multiple-choice questions/
Multiple Response questions

RECOMMENDED READING

The following titles are suggested reading for anyone undertaking this award. Candidates should be encouraged to explore other available sources.

TITLE: User Experience Foundations

AUTHOR: Nick de Voil

PUBLISHER: BCS Learning and Development Ltd

PUBLICATION DATE: 2020

ISBN: 978-1-78017-3498



USING BCS BOOKS

Accredited Training Organisations may include excerpts from BCS books in the course materials. If you wish to use quotes from the books, you will need a licence from BCS. To request an appointment, please get in touch with the Head of Publishing at BCS, outlining the material you wish to copy and the use to which it will be put.



DOCUMENT CHANGE HISTORY

Any changes made to the syllabus shall be clearly documented with a change history log. This shall include the latest version number, date of the amendment and changes made. The purpose is to identify quickly what changes have been made.

VERSION NUMBER	CHANGES MADE
Version 1.0	Syllabus created.

REFERENCES

Voil, N. (2020). User Experience Foundations. [Swindon]: BCS Learning and Development Ltd.

For further information please contact:

BCS

The Chartered Institute for IT

3 Newbridge Square

Swindon

SN1 1BY

T +44 (0)1793 417 417

www.bcs.org

© 2024 Reserved. BCS, The Chartered Institute for IT
All rights reserved. No part of this material protected
by this copyright may be reproduced or utilised in
any form, or by any means, electronic or mechanical,
including photocopying, recording, or by any
information storage and retrieval system without
prior authorisation and credit to BCS, The Chartered
Institute for IT.

Although BCS, The Chartered Institute for IT has used
reasonable endeavours in compiling the document
it does not guarantee nor shall it be responsible for
reliance upon the contents of the document and shall
not be liable for any false, inaccurate or incomplete
information. Any reliance placed upon the contents
by the reader is at the reader's sole risk and BCS, The
Chartered Institute for IT shall not be liable for any
consequences of such reliance.

