BCS EXIN Practitioner Certificate in Agile Scrum Master Syllabus

V2 October 2021

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

Change History

This log provides a single point of reference, where a summary of any changes is recorded, to include the date of the amendment and a summary of the changes made.

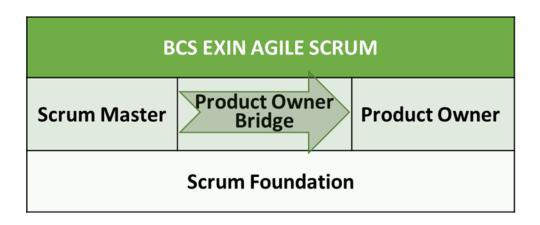| Version Number	Changes Made
Version 2 October 2021	The BCS EXIN Agile Scrum Master certification has been updated to align with all changes in the 2020 version of The Scrum Guide and the updated version of the Agile Scrum Handbook.
Version 1.2 May 2020	Update to the Training Criteria.
Version 1.1 Jan 2020	Adjustment to weighing of Topics 1 and 2, with removal of topic 1.4 Applying Agile principles to IT Service Management.
Version 1.0 July 2019	Finalised.
Version 0.1 March 2019	BCS Formatted syllabus created.

Contents

Introduction

The Scrum Master is responsible for ensuring Scrum is understood and enacted. Scrum Masters do this by facilitating the Scrum Team in adhering to Scrum theory, practices, and rules.

In order to do this, the Scrum Master role struggles with the apparent contradiction of the Scrum Master as both a servant-leader to the team and also someone with no authority. The Scrum Master is responsible for maximising the throughput of the team and for assisting team members in adopting and using Scrum. A successful Scrum Master influences others, both on the team and outside it. The Scrum Master helps those outside the Scrum Team understand which interactions with the Scrum Team are helpful and which aren't.

Summary

EXIN Agile Scrum Master is a certification that looks to confirm both skills and knowledge of the Agile framework and Scrum methodology.

Agile Scrum is about working together to successfully reach a goal. Agile methodologies are popular approaches in software development and are increasingly being used in other areas. Scrum practices include establishing cross-functional and self-managed teams, producing a working deliverable at the end of each iteration or Sprint. This certification focuses on adopting Agile or Scrum in the workplace and taking on the role of Scrum Master.

The BCS EXIN Practitioner certificate in Agile Scrum Master certification is part of the Agile Scrum qualification program.

Scope

The EXIN Agile Scrum Master certification validates a candidate's knowledge on:

- Agile Way of Thinking
- Scrum Master Role
- Agile Estimating, Planning, Monitoring and Control
- Complex Projects
- Adopting Agile

Target Audience

The Agile way of thinking is best known in the field of software development, but the principles are increasingly being applied in other types of projects. Scrum is the most used Agile methodology and is suitable for all professionals looking to keep their knowledge up to date with the latest developments in the fields of IT and Project Management, particularly those leading or participating in projects. In particular, the certification is suitable for professionals working in an Agile context and who have the ambition to facilitate a Scrum team by assuming the role of a Scrum Master.

Levels of Knowledge / SFIA Levels

This syllabus will provide candidates with the levels of difficulty highlighted within the following table, also enabling them to develop the skills to operate at the highlighted level of responsibility (as defined within the SFIA framework) within their workplace. The levels of knowledge and SFIA levels are further explained on the website.

Level	Levels of Knowledge	Levels of Skill and Responsibility (SFIA)
7		Set strategy, inspire and mobilise
6	Evaluate	Initiate and influence
5	Synthesise	Ensure and advise
4	Analyse	Enable
3	Apply	Apply
2	Understand	Assist
1	Remember	Follow

Learning Outcomes

Candidates should be able to demonstrate the ability to understand and explain Agile concepts in the following areas:

1. The Agile way of thinking;
2. Scrum Master role;
3. Agile Estimating, Planning, Monitoring and Control;
4. Complex projects;
5. Adopting Agile.

Course Format and Duration

Candidates can choose to study for this certificate from one of two ways: by either attending a training course provided by a BCS Accredited Training Organisation, or by self-study.

BCS recommends that for full coverage of the syllabus to be achieved, training courses leading to the certificate should normally run for a minimum 16 hours. This number includes group assignments, exam preparation, and short coffee breaks. Not included are: homework, practical assignments, the exam session and lunch breaks. The recommended number of hours for the Practical Assignments is a maximum of 8. The Practical Assignments can be completed outside of the training. They may also be included in the training if the training duration is extended.

Candidates should spend about 120 hours on self-study, depending on existing knowledge.

Examination Format and Duration

Type	40 Multiple choice questions
Duration	90 Minutes
Supervised	Yes
Open Book	No
Pass Mark	65%
Calculators	No
Delivery	Digital or Paper-based

Eligibility for the Examination

Attendance at an accredited BCS EXIN Agile Scrum Master training course is mandatory.

Knowledge of Scrum terminology, for instance through the BCS EXIN Agile Scrum Foundation exam, is strongly recommended. This syllabus is freely available on the website www.bcs.org.

Additional Time

For Candidates Requiring Reasonable Adjustments Due to a Disability

Please refer to the [reasonable adjustments policy](#) for information on how and when to apply.

For Candidates Whose Language is Not the Language of the Examination

If the examination is taken in a language that is not the candidate's native/official language, then they are entitled to:

- 25% extra time.
- Use their own **paper** language dictionary (whose purpose is translation between the examination language and another national language) during the examination. Electronic versions of dictionaries will **not** be allowed into the examination room.

Guidelines for Accredited Training Organisations

Each major subject heading in this syllabus is assigned an allocated percentage of study time. The purpose of this is:

1) Guidance on the proportion of time allocated to each section of an accredited course.
2) Guidance on the proportion of questions in the exam.

Courses do not have to follow the same order as the syllabus and additional exercises may be included, if they add value to the training course.

Syllabus Weighting

Syllabus Learning Objectives		Weight
1. Agile way of thinking		**10%**
	1.1 Agile concepts	10%
2. Scrum Master role		**27.5%**
	2.1 Responsibilities and commitment	12.5%
	2.2 Facilitating and coaching the team	7.5%
	2.3 Other Roles (Product Owner, Development Team)	7.5%
3. Agile Estimating, Planning, Monitoring and Control		**32.5%**
	3.1 Writing and maintaining the Product and Sprint Backlog	7.5%
	3.2 Agile Planning	5%
	3.3 Agile Estimation	5%
	3.4 Tracking and communicating progress	10%
	3.5 Staying in control	5%
4. Complex projects		**12.5%**
	4.1 Scaling Agile projects	5%
	4.2 Suitability of Agile for different types of projects	5%
	4.3 Agile administration in tooling and tool integration	2.5%
5. Adopting Agile		**17.5%**
	5.1 Introducing Agile	7.5%
	5.2 Self-management	5%
	5.3 Agile requirements and proper environment	5%
	Total	**100%**

Trainer Criteria

The following criterion apply:

- Hold a BCS EXIN Practitioner Certificate in Agile Scrum Master;
- Have 10 days training experience or a train the trainer qualification.
- Have a minimum of 3 years practical Agile experience

Candidate Ratio

Trainers may instruct up to 15 candidates.
Invigilators may supervise up to 25 candidates.

Syllabus

Learning Objectives

1. Agile Way of Thinking – 10%

1.1. Agile concepts
    The candidate can…
- 1.1.1   Explain the Agile way of thinking
- 1.1.2   Explain how Agile brings predictability and flexibility
- 1.1.3   Describe how to establish continuous improvement
- 1.1.4   Differentiate other Agile frameworks and methodologies: Crystal, Extreme Programming (XP), DSDM, LeSS, SAFe and Kanban

2. Scrum Master role – 27.5%

2.1 Responsibilities and commitment
    The candidate can…
- 2.1.1   Explain which tasks and responsibilities belong to the Scrum Master role
- 2.1.2   Analyse a scenario for the best solution to a problem typical to Scrum Masters.
- 2.1.3   Explain which tools to use to facilitate the team

2.2 Facilitating and coaching the team
    The candidate can…
- 2.2.1 Explain how to facilitate the team by removing roadblocks.
- 2.2.2 Explain how to coach and train the team

2.3 Other roles (Product Owner, Developers)
    The candidate can…
- 2.3.1 Explain all roles within the Scrum framework

3. Agile Estimating, Planning, Monitoring and Control – 32.5%

3.1 Writing and maintaining the Product and Sprint Backlog
    The candidate can…
- 3.1.1 Explain why a good definition of done (DOD) is so important
- 3.1.2 Explain how to write good user stories for services or products.
- 3.1.3 Explain how to maintain the product backlog and how to add product backlog Items

3.2 Agile Planning
    The candidate can…
- 3.2.1 Explain planning of portfolio, products, and roadmaps.
- 3.2.2 Explain the role of the Scrum Master in all the sprint planning

3.3 Agile Estimation

The candidate can…
      3.3.1 Explain how to use story points, ideal hours, ideal days and velocity during planning
      3.3.2 Recognise errors in estimation

3.4 Tracking and communicating progress
The candidate can…
      3.4.1 Identify impediments, deviations, roadblocks and other obstacles that influence the progress positively and negatively
      3.4.2 Explain how to create information radiators, how to interpret them and how to act on the results
      3.4.3 Explain how to interpret commonly used tracking methods (burn-down chart, velocity etc cetera)

3.5 Staying in control
The candidate can…
      3.5.1 Explain how to manage issues, bugs and how to inform stakeholders

4. Complex projects – 12.5%

4.1 Scaling Agile projects
The candidate can…
      4.1.1 Explain how to use the product backlog in a scaled environment
      4.1.2 Explain how to scale Scrum using Nexus

4.2 Suitability of Agile for different types of projects
The candidate can…
      4.2.1 Explain in which cases it is not possible to use Agile
      4.2.2 Explain why having a small team is beneficial for any project.

4.3 Agile administration in tooling and tool integration
The candidate can…
      4.3.1 Explain which tools can help a team to use or adopt Agile and thereby increase the quality of the development process

5. Adopting Agile – 17.5%

5.1 Introducing Agile
The candidate can…
      5.1.1 Explain how some project management activities are transferred to the Scrum Master role after the transition to Scrum.
      5.1.2 Identify what can go wrong when transitioning to Scrum.
      5.1.3 Explain how to deal with resistance to change

5.2 Self-management
The candidate can…
      5.2.1 Explain what self-management means for a team
      5.2.2 Explain what it means to have a cross-functional team

5.3 Agile Requirements and Proper Environment

The candidate can…

        5.3.1 Explain what changes in culture must be made before adopting Agile

List of Basic Concepts

This chapter contains the terms with which candidates should be familiar.

Please note that knowledge of these terms alone does not suffice for the exam; the candidate must understand the concepts and be able to provide examples.

Accountability	Lean	Servant leader
ADAPT (awareness, desire, ability, promotion and transfer)	Minimal marketable product (MMP)	Software tooling
Affinity estimation	Minimal viable product (MVP)	Split-and-seed
Burn-down (bar) chart	MoSCoW	Splitting teams
Burn-up chart	Niko-niko calendar	Sprint
Business value	Non-functional requirement	Sprint backlog item
Coach	Originator	Sprint goal
Collocated team	Osmotic communication	Sprint planning
Commitment	Transitioning to Scrum	Sprint retrospective
Conserver	User story	Sprint review
Continuous delivery	Value	Story point
Continuous improvement	Value stream mapping (VSM)	Swimlane
Continuous integration	Velocity	Task board
Customer	Other Agile frameworks: • Crystal • Extreme Programming (XP) • DSDM • LeSS • SAFe • Kanban	Test-driven development
Customer/user needs	Pair programming	Time-box/time-boxing
Daily Scrum	Planning poker	Voice of the customer (VoC)
Definition of done (DoD)	Potentially shippable	Waste
Developers	Pragmatist	Waterfall
Diehard	Product backlog item	Work-in-progress limit (WiP-limit)
Distributed team	Product goal	
Epic user story	Product Owner	
Estimation	Product roadmap	

Fine-grained user story	Refinement (of the product backlog)	
Flow	Release	
Follower	Release burn-down (bar) chart	
Functional requirement	Release planning	
Gantt chart	Resistance	
Grow-and-split	Responsibility	
Ideal days	Return on investment (RoI)	
Ideal hours	Roadblock	
Impediment	Saboteur	
Increment	Scaling	
Information radiator	Sceptic	
Internal coaching	Scrum board	
Iteration	Scrum Master	
Kanban board	Scrum team	

Recommended Reading List

The knowledge required for the exam is covered in the following literature:

A. Botha, Johann
The EXIN handbook for Scrum Masters and Product Owners
EXIN (2021)
ISBN: 9789076531007
Freely available from www.exin.com.

Additional literature

Additional literature is for reference and depth of knowledge only.

B. Schwaber, Ken
The Scrum Guide
Microsoft Press (2004)
(most recent version)

Reading Matrix

Syllabus Learning Objectives		Literature
1. Agile Way of Thinking		
	1.1 Agile Concepts	Chapters 1, 2, 3, 6, 7, 10 Appendix A
2. Scrum Master Role		
	2.1 Responsibilities and Commitment	Chapters 5, 6, 7, 8, 10
	2. 2 Facilitating and Coaching the Team	Chapters 5, 7, 13
	2.3 Other Roles (Product Owner, Developers)	Chapters 5, 14
3. Agile Estimating, Planning, Monitoring and Control		
	3.1 Writing and Maintaining the Product and Sprint Backlog	Chapters 5, 6, 12
	3.2 Agile Planning	Chapters 5, 6
	3.3 Agile Estimation	Chapters 7, 10
	3.4 Tracking and Communicating Progress	Chapters 5, 7, 10, 14
	3.5 Staying in Control	Chapters 6, 10 Appendix B
4. Complex Projects		
	4.1 Scaling Agile Projects	Chapters 2, 6, 12, 14
	4.2 Suitability of Agile for Different Types of Projects	Chapters 1, 2, 5, 13
	4.3 Agile Administration in Tooling and Tool Integration	Chapter 10
5. Adopting Agile		
	5.1 Introducing Agile	Chapters 2, 5, 13
	5.2 Self-management	Chapters 1, 3, 5, 7
	5.3 Agile Requirements and Proper Environment	Chapters 1, 2, 13