PMI-ACP®

Exam Content Outline

PMI Agile Certified Practitioner (PMI-ACP®)

Project Management Institute.

PMI Agile Certified Practitioner (PMI-ACP)®

Examination Content Outline

November 2024

Published by:

Project Management Institute, Inc.
For general information about the Certification Program,
contact the Customer Care Service Center in your region.
Find this information at
https://www.pmi.org/about/contact

Table of Contents

INTRODUCTION

The Project Management Institute (PMI) offers a professional certification for agile practitioners, such as product owners, scrum masters, and agile project managers, titled PMI Agile Certified Practitioner (PMI-ACP)®. The PMI-ACP® is developed by agile practitioners for agile practitioners seeking to enhance their agile skillset, knowledge and application across multiple agile frameworks and methodologies, increase team efficiency, deliver greater value to their organization and customers, and advance their career with a globally recognized certification.

PMI's rigorous professional certification examination development processes align with certification industry best practices, such as those found in the *Standards for Educational and Psychological Testing*[1].

PMI conducted a global practice analysis (GPA), which included both extensive market research and a job task analysis (JTA). The GPA identified market trends, needs and opportunities in agile, such as expanding the primary audience to include product development roles, realigning the professional experience requirements, and introducing credit for prior learning into the PMI-ACP Certification Program eligibility requirements.

The JTA identifies knowledge and task-driven guidelines to assess the practitioners' proficiency and determines the level of criticality and frequency of the knowledge, tasks, and skills required to perform across industries. Industry wide standards in the role of an agile practitioner—that are, professionals who use agile principles, methods, and approaches when working on or facilitating agile teams, such as product owners, scrum masters, and agile project managers. Thus, the JTA validates the tasks and domains tested in the exam. Validation assures that the outcome of the exam is, in fact, appropriately measuring and evaluating the specific knowledge skills, and experience required to function as an agile practitioner.

PMI-ACP® certification holders can be confident that their professional certification has been developed according to the best practices of test development and based upon input from the practitioners and experts who establish those standards.

The PMI-ACP examination is a vital part of the activities leading to earning a professional certification, thus it is imperative that the PMI-ACP examination reflect accurately the practices of an agile practitioner. All exam items have been written and extensively reviewed by subject matter experts qualified in agile practices. These items are mapped against the *PMI-ACP Examination Content Outline (ECO)* to ensure that an appropriate number of items are in place for a valid examination.

Furthermore, PMI retained Alpine Testing Solutions to calibrate the global *PMI-ACP Examination Content Outline (ECO*.) Alpine Testing Solutions provides psychometric, test development, and credential management solutions to credentialing and educational programs.

Candidates studying for the PMI-ACP examination should use the PMI-ACP ECO as a guide to the areas included in the examination. Candidates are encouraged to use the PMI® Authorized PMI-ACP® Exam Prep (available on demand and instructor-led), PMI-ACP® Practice Exams, and PMI® Study Hall (all PMI prep materials will be available in September), and review resources such as the PMI® Agile Practice Guide listed on the PMI-ACP examination preparation page. PMI Authorized Training Providers are required to use the PMI® Authorized PMI-ACP® Exam Prep instructor and student materials to structure their training.

EXAM CONTENT OUTLINE

The following table identifies the proportion of questions from each domain that will appear on the examination.

Domain	Percentage of Items on Test
Domain I. Mindset	28%
Domain II. Leadership	25%
Domain III. Product	19%
Domain IV. Delivery	28%
TOTAL	**100%**

DOMAINS, TASKS, AND ENABLERS

In this document you will find the structure for the PMI-ACP ® Examination Content Outline (ECO.) On the following pages you will find the domains, tasks, and enablers as defined by the JTA.

- **Domain:** Defined as the high-level knowledge area that is essential to the practice of agile practitioners.
- **Tasks:** The underlying responsibilities of an agile practitioner within each domain area.
- **Enablers:** Illustrative examples of the work associated with the task. Please note that enablers are not meant to be an exhaustive list but rather offer a few examples to help demonstrate what the task encompasses.

Following is an example of the new task structure:

Task statement → Embrace agile mindset

Enablers

- Identify the importance or risks of each of the classifications of different systems thinking
- Interpret the outline of agile suitability tools
- Integrate agile models based on needs (e.g., use case, team, project, organization)

The PMI-ACP® examination will consist of 100 scored items and 20 unscored (pre-test) items. The unscored items will not be identified and will be randomly distributed throughout the exam. The allocation of questions will be as follows:

Domain 1 Mindset – 28%

Agile practitioners should have a deep understanding of the agile mindset and principles and the ability to apply them in practice. They should be able to create an environment that fosters innovation, experimentation, and continuous learning. Additionally, they should be able to promote collaboration and teamwork, establish a shared vision and working agreements, and develop high-performing teams. They should also be able to use retrospective findings to improve the team and breakdown silos. Finally, agile practitioners should be able to evaluate the team's understanding of agile and tailor the approach accordingly, as well as identify the appropriate inter-team coordination approach.

Task 1	Experiment Early • Build an increment of the product to validate solution and/or market need • Create an environment to innovate, learn, and grow
Task 2	Embrace Agile Mindset • Use agile values and principles • Apply the appropriate complexity method/domain to the complexity theory system (i.e. CAS, Stacey Matrix, Cynefin) to classify scenarios • Identify the application and importance or risks of each complexity system theory given a specific scenario • Interpret the output of agile suitability tools • Integrate agile models based on needs (e.g., use case, team, project, organization)
Task 3	Promote Collaborative Team Environment • Establish team vision and working agreements • Form and develop a high performing team • Use retrospective findings to improve the team • Use collaboration practices to breakdown silos • Commit to the team's decisions even in disagreement • Evaluate the team's understanding of agile to tailor the agile approach • Identify the key factors to consider when determining the appropriate inter-team coordination approach (e.g., scrum of scrums, team of teams)
Task 4	Build Transparency • Make status, progress, process, risks, impediments, and learning accessible to all (e.g., using information radiators) • Establish a feedback loop for team • Define communication strategies for co-located and distributed teams
Task 5	Foster Psychological Safety • Promote a no blame culture by encouraging objectivity • Encourage dialogue over debate • Solicit and provide constructive feedback. Act on it • Encourage challenging the status quo
Task 6	Shorten Feedback Loops • Include the stakeholders from day one • Maximize value given a specific timeframe • Use tools and techniques to shorten feedback (e.g., design thinking and lean startup)

Task 7	Embrace Change • Promote a growth mindset to respond to change • Embrace process adaptation by responding to changing requirements and priorities • Encourage and model cross skills (e.g., generalizing specialists) • Adapt to product needs based on the learning and feedback

Domain 2 Leadership – 25%

Agile practitioners should possess the necessary skills and knowledge to effectively lead within an agile team. This includes a deep understanding of agile principles and methodologies and the ability to create a collaborative team environment that fosters innovation, learning, and growth. They should also be able to apply principles of systems thinking to classify scenarios and identify the importance or risks of each classification. Additionally, they should be able to interpret the output of agile suitability tools and integrate agile models based on needs. Other key skills include the ability to establish team vision and working agreements, form and develop high-performing teams, use retrospective findings to improve the team, and use collaboration practices to break down silos. They should also be committed to the team's decisions even in disagreement and be able to evaluate the team's understanding of agile to tailor the approach.

Task 1	Empower Teams • Establish an environment of trust (e.g., enable transparent communication) • Motivate team members (e.g., to experiment and/or take risks) • Coach and mentor team members • Promote collective ownership of goals • Recognize the differences between training, coaching, and mentoring and when to apply each approach • Apply emotional intelligence techniques to support the team, increase empathy, resolve conflict and support positive influence • Interpret non-verbal cues during team interaction • Interpret the output of self-assessment tools and techniques to help teams develop their capabilities
Task 2	Facilitate Problem Resolution • Investigate the root cause of problems (e.g., root cause analysis, Ishikawa) • Determine the resolution strategies with the team that will add the most value • Ensure the problems are resolved in a timely manner
Task 3	Promote Knowledge Sharing • Create environment to capture and share knowledge (e.g., Lessons Learned for continuous improvement, retrospectives, communities of practice) • Leverage organizational knowledge assets (e.g., from other similar initiatives, people and processes) • Allocate time for knowledge sharing and making required updates
Task 4	Promote agile mindset principles and practices • Create awareness around the agile values and principles • Foster an environment for continuous improvement • Recognize, reward, and encourage agile behavior
Task 5	Promote shared vision and purpose • Define and ensure there is a common understanding of the purpose and vision with all stakeholders • Ensure product is always aligned to the vision and organizational goals • Continuously communicate the vision and purpose

Task 6	Facilitate conflict management • Identify the root cause and the level of the conflict • Promote collaborative approach to solve the conflict

Domain 3 Product – 19%

Agile practitioners should have a deep understanding of agile methodologies, including (but not limited to): Scrum, Kanban, and Lean, and be able to apply them to project management and product development. They should have experience in product development, building product roadmaps, creating user stories, and managing product backlogs. They should have foundational technical knowledge and be able to work closely with development teams to understand technical requirements and constraints. Practitioners should have excellent communication skills and be able to effectively communicate with stakeholders, including customers, development teams, and executives. The candidate should have strong leadership skills and be able to lead cross-functional teams to deliver high-quality products. Additionally, they should be committed to continuous learning and be willing to stay up to date with the latest trends and best practices in agile project and product management and development.

Task 1	Refine product backlog • Clarify the backlog items • Prioritize the backlog items with the customer/stakeholder • Decompose the backlog items as needed • Use tools and techniques to collectively size work
Task 2	Manage increments • Ensure increment is aligned with business priorities • Define the increment goals • Demonstrate increments of value for early feedback • Measure the delivery of value
Task 3	Visualize work • Educate work visualization techniques • Establish a process to update the data/stats • Continuously share information
Task 4	Manage value delivery • Define what value will look like (e.g., success criteria, sustainability, security, privacy, regulatory, compliance) • Ensure the value increments are optimized • Ensure that the targeted results are achieved (e.g., Customer satisfaction, increase in sales)

Domain 4 Delivery – 28%

Agile practitioners should have the necessary skills and knowledge to effectively manage and deliver projects and products using agile approaches. The candidate should have strong communication and collaboration skills to work effectively with cross-functional teams. Experience in agile project management tools and techniques such as user stories, sprint planning, and retrospectives. Knowledge of agile development practices such as continuous integration, continuous delivery, and test-driven development. Familiarity with agile frameworks and methodologies, but not limited to, such as Scrum, Kanban, SAFe, and Lean. Ability to adapt to changing requirements and priorities in a fast-paced environment. Experience in using agile metrics to measure project progress and success. Seeking early feedback from internal and external customers to ensure alignment with their needs. Managing risks proactively to minimize impact on project and/or product delivery. Eliminating waste by focusing on delivering value to the customer. Performing continuous improvement to enhance project delivery and team performance. Engaging customers throughout the project to ensure their needs are met. Optimizing flow by focusing on delivering value quickly and efficiently. In addition, agile practitioners should also have a strong commitment to continuous learning and improvement and a passion for delivering high-quality products and services to customers.

Task 1	Seek early feedback • Evaluate customer satisfaction • Deliver work in small increments • Collect and incorporate stakeholders' feedback on a regular basis
Task 2	Manage agile metrics • Determine which metrics are appropriate for a given audience • Radiate metrics across the relevant audience • Review and analyze metrics • Use metrics insights for decision making
Task 3	Manage impediments and risk • Proactively identify risks and impediments • Engage the team to find the most appropriate course of action • Prioritize impediment removal and risk mitigation activities • Monitor/control risks and impediments • Use lessons learned to avoid risks/impediments recurrence
Task 4	Recognize and eliminate waste • Visualize the end-to-end flow of value in the system (e.g., value added, non-value added) • Use metrics, tools and feedback loops to identify waste • Prioritize waste reduction activities • Iterate on identification and reduction of waste
Task 5	Perform continuous improvements • Obtain metrics and feedback to drive continuous improvements • Implement improvement actions • Evaluate the effectiveness of process improvement
Task 6	Actively engage customers • Identify and analyze customer and their needs • Validate that iteration deliverables meet acceptance criteria • Encourage collaboration between customer and team
Task 7	Optimize flow • Limit work-in-progress at all levels • Shield team from interruptions (e.g., create team interfaces) • Use metrics to analyze and improve flow

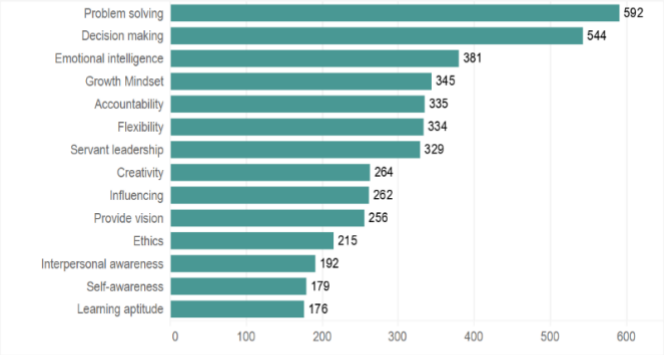
TOOLS AND TECHNIQUES

The examples illustrate the breadth of the tools and techniques, but are **NOT** meant to provide an exhaustive list in the agile landscape	
Agile Analysis and Design	Including but not limited to: • product roadmap • user stories/backlog • story maps • progressive elaboration wireframes • chartering • personas • modeling • workshops • learning cycle plan • collaboration games
Agile Estimation	• relative sizing/story points/T-shirt sizing wide band Delphi/planning poker • affinity estimating • ideal time
Communications	• information radiator team space agile tooling • osmotic communications for co-located and/or distributed teams • two-way communications (trustworthy, conversation driven) • social media–based communication • active listening • brainstorming feedback methods
Metrics	• velocity/throughput/productivity cycle time • lead time • EVM for agile projects defect rate • approved iterations • work in progress
Planning, Monitoring, and Adapting	• reviews Kanban board task board timeboxing • iteration and release planning variance and trend analysis WIP limits • daily synchronization meetings • burn down/up charts cumulative flow diagrams backlog grooming/refinement • product-feedback loop

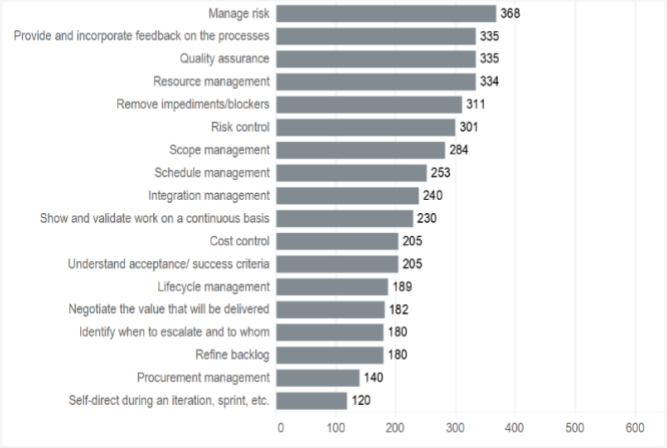
Process Improvement	• Kaizen • the Five WHYs • retrospectives, intraspectives • process tailoring/hybrid models • value stream mapping • control limits • pre-mortem (rule setting, failure analysis) • fishbone diagram analysis
Product Quality	• frequent verification and validation • definition of done • continuous integration • testing, including exploratory and usability
Risk Management	• risk adjusted backlog • risk burn down graphs • risk-based spike • architectural spike
Value-Based Prioritization	• ROI/NPV/IRR • compliance • customer valued prioritization • requirements reviews • minimal viable product (MVP) • minimal marketable feature (MMF) • relative prioritization/ranking • MoSCoW • Kano analysis

KNOWLEDGE AND SKILLS

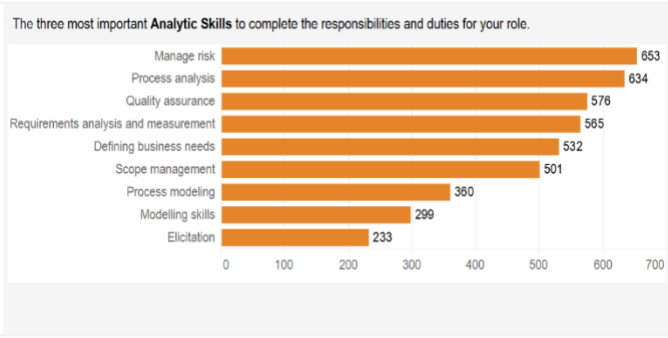
The three most important **Leadership Skills** to complete the responsibilities and duties for your role.



The three most important **Technical Skills** to complete the responsibilities and duties for your role.

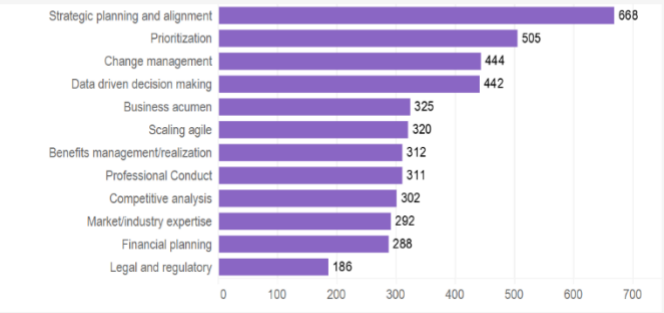


The three most important **Analytic Skills** to complete the responsibilities and duties for your role.

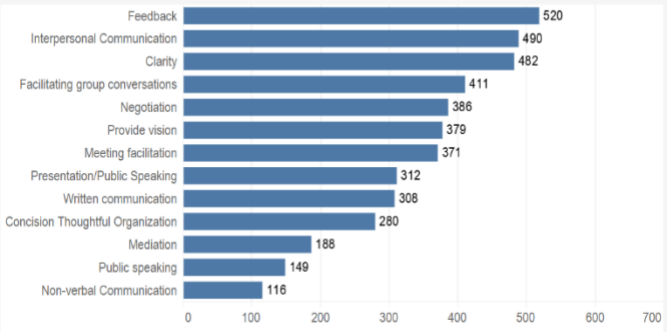


The three most important **People Skills** to complete the responsibilities and duties for your role.

The three most important **Strategic Business Management** Skills to complete the responsibilities and duties for your role.



The three most important **Communication Skills** to complete the responsibilities and duties for your role.



POST JOB TASK ANALYSIS SURVEY OCTOBER 2023

PMI-ACP Eligibility Requirements

To be eligible for the PMI-ACP certification, you need to meet the following certification program requirements, defined by the Global Practice Analysis:

Educational Background	Professional Learning	Professional Agile Experience
Secondary diploma (high school diploma, GED, associate's degree or global equivalent)	28 hours of formal training in agile practices, frameworks, methodologies (21 hours will be accepted until 31 March 2025)	2 years of agile experience in past 5 years OR 1 year agile experience and degree from Global Accreditation Center (GAC) program OR 1 year agile experience and active 3rd party agile certification (current and earned more than 1 year ago)* OR Active PMP® Certification

** Current agile certification that demonstrates knowledge of Agile approaches and principles*

How to Record Your Professional Learning During the Application Process

Use the section of the online application to record your formal training contact hours.

Exam eligibility requirements include having a minimum of 28 hours* of formal learning based on agile **approaches, tools and techniques included in the ECO**. The coursework must be completed prior to submitting the application and should include proof of course completion.

Learning course hours should cover agile related topics as detailed in the Exam Content Outline above and may include content on, but not limited to agile mindset, collaborative team environments, embracing change, knowledge sharing, team-centric leadership, value delivery, and agile metrics.

The learning course hours must come from quality sources defined as:

- Aligns to the exam content outline.
- Includes experiential exercises to assure ample practice.
- Balances subject matter expertise with test-wise content (i.e. practice exams).
- Provides an end of course assessment and certificate of completion.

**Please note that PMI will accept 21-hour courses to be submitted in the application until 31 March 2025. It is recommended that candidates supplement their exam preparation with PMI Study Hall™*

How to Record Your Third-Party Agile Certifications During the Application Process

If you have an agile certification in Scrum, SAFe or other agile certifications, PMI will credit you 12 months towards the 2 years of agile experience requirement. Agile certifications (held for a year) that that demonstrates knowledge of Agile approaches and principles will be accepted. Use the section of the online application to upload and record your third-party agile certification and then will proceed to enter two years of agile experience the application.

How Other PMI Certifications will be included in the Application Process

Current PMI Certification holders' (e.g. PgMP®, PMP®) agile and hybrid experience will count towards experience requirements (experience must be within the past five years) and will be included in the PMI-ACP application. Candidates will no longer have to write in their experience previously collected.

PMI-ACP Exam Information

The PMI-ACP examination is comprised of 120 multiple-choice items, multiple response, drag-and-drop-style items, and exhibits. Of the 120 questions, 20 are considered pretest questions. Pretest questions do not affect the score and are used in examinations as an effective and legitimate way to test the validity of future examination questions. All questions are placed randomly throughout the examination.

No. of Scored Questions	No. of Pretest (Unscored) Questions	Total Examination Questions
100	20	120

The allotted time to complete the PMI-ACP pilot examination is 3 hours. Final time for the production exam will be established after the pilot examination is completed.
It may take some certification candidates less than the allotted 3 hours to complete the examination.

Allotted Exam Time
3 hours

For the PMI-ACP exam, there is a 10-minute break in the exam. The break will appear after completion of questions 1–60 and after you have reviewed all your answers. Please note, once you review your responses and start your break, you will not be able to return to the questions from the previous exam section.

The examination is preceded by a tutorial and followed by a survey, both of which are optional, and take 5 to 15 minutes to complete. The time used to complete the tutorial and survey is not included in the examination time of 3 hours.

Taking the Exam

The PMI-ACP is available to take in person at a center and proctored online. Online proctored exams will require system tests and an extensive check in process. Please allow for time prior to your exam to ensure you complete these processes.

- For in person test center and availability (recommended) please make sure to review test centers near you by visiting: https://www.pearsonvue.com/us/en/pmi.html
- For testing online via OnVue online proctored please make sure you review, and complete necessary system checks by visiting: https://www.pearsonvue.com/us/en/pmi/onvue.html

Retaking the Exam

If you do not pass the exam on your first attempt, we encourage you to continue studying and then retake the exam. You may take the examination up to three times within the 1-year eligibility period. After three attempts, you must wait 1 year from the date of your last examination before you can reapply for the certification. This policy is designed to uphold exam security and reduce the overexposure of examination questions to individual candidates. However, during this 1-year waiting period, you are welcome to apply for any other PMI certification.

If your 1-year eligibility period expires without passing the examination, you must reapply for the certification.

Continuing Certification Requirements (CCR) Program

Once you have successfully earned your PMI-ACP certification, maintain your certification by completing 30 professional development units (PDUs) every 3 years.

For details on the CCR Program and instructions on how to earn and track PDUs in CCR, please review the CCR Handbook by visiting https://www.pmi.org/certifications/certification-resources/maintain

PMI-ACP®

PMI Agile Certified Practitioner (PMI-ACP)®

Examination Content Outline

Valid through November 7, 2024

PROJECT MANAGEMENT INSTITUTE

PMI Agile Certified Practitioner (PMI-ACP)®

Examination Content Outline

REVISED DECEMBER 2014

Published by: Project Management Institute, Inc.
14 Campus Boulevard
Newtown Square, Pennsylvania 19073-3299 USA.
Phone: +610-356-4600
Fax: +610-356-4647
E-mail: customercare@pmi.org
Internet: www.PMI.org

TABLE OF CONTENTS

INTRODUCTION

The Project Management Institute (PMI) offers a professional certification for agile practitioners, known as the PMI Agile Certified Practitioner (PMI-ACP)®. PMI's professional certification examination development processes stand apart from other project management certification examination development practices. PMI aligns its process with certification industry best practices, such as those found in the *Standards for Educational and Psychological Testing*[1].

A key component of this process is that organizations wishing to offer valid and reliable professional certification examinations are directed to use a Role Delineation Study (RDS) as the basis for the creation of the examination. This process utilizes knowledge and task-driven guidelines to assess the practitioners' competence, and determine the level of salience, criticality, and frequency of each of the knowledge, tasks, and skills required to perform to the industry-wide standard in the role of an agile practitioner—that is, professionals who use agile principles, methods, and approaches when working on or leading agile teams.

The Role Delineation Study ensures the validity of an examination. Validation assures that the outcome of the exam is, in fact, appropriately measuring and evaluating the specific knowledge and skills required to function as an agile practitioner. Thus, the Role Delineation Study guarantees that each examination validly measures all elements of agile practice in terms of real settings.

PMI-ACP® certification holders can be confident that their professional certification has been developed according to the best practices of test development and based upon input from the practitioners who establish those standards. Please see Appendix A for a detailed description of the process.

The PMI-ACP examination is a vital part of the activities leading to earning a professional certification, thus it is imperative that the PMI-ACP examination reflect accurately the practices of the agilist. All the questions on the examination have been written and extensively reviewed by qualified agile subject matter experts and are supported by current published references in agile topics. These questions are mapped against the *PMI-ACP Examination Content Outline* to ensure that an appropriate number of questions are in place for a valid examination.

PMI retained Professional Examination Service (ProExam) to develop the global *PMI-ACP Examination Content Outline*. Since 1941, ProExam has provided a full range of assessment and advisory services to organizations across a broad range of professions, in support of professional licensure and certification, training, and continuing professional education. ProExam is dedicated to promoting the public welfare through credentialing as a mission-driven, not-for-profit organization.

[1] American Educational Research Association, American Psychological Association, & National Council on Measurement in Education (2014). *Standards for educational and psychological testing.* Washington, DC: American Educational Research Association.

Candidates studying for the PMI-ACP examination are urged to use the *PMI-ACP Examination Content Outline* as a guide to the areas included on the examination. Further, trainers are urged to use the *PMI-ACP Examination Content* Outline to structure their training. Candidates are also encouraged to study current references in agile, such as those on the PMI-ACP examination preparation reference list.

PMI-ACP® EXAM CONTENT OUTLINE

The PMI-ACP® examination will consist of 100 scored items and 20 unscored (pre-test) items. The unscored items will not be identified and will be randomly distributed throughout the exam. The allocation of questions will be as follows:

Domain	Percentage of Items on Test
Domain I. Agile Principles and Mindset	16%
Domain II. Value-driven Delivery	20%
Domain III. Stakeholder Engagement	17%
Domain IV. Team Performance	16%
Domain V. Adaptive Planning	12%
Domain VI. Problem Detection and Resolution	10%
Domain VII. Continuous Improvement (Product, Process, People)	9%

DOMAINS AND TASKS

Domain I. **Agile Principles and Mindset** (9 tasks)

Explore, embrace, and apply agile principles and mindset within the context of the project team and organization.

Domain II. Value-Driven Delivery (4 sub-domains, 14 tasks)

Deliver valuable results by producing high-value increments for review, early and often, based on stakeholder priorities. Have the stakeholders provide feedback on these increments, and use this feedback to prioritize and improve future increments.

Domain III. Stakeholder Engagement (3 sub-domains, 9 tasks)

Engage current and future interested parties by building a trusting environment that aligns their needs and expectations and balances their requests with an understanding of the cost/effort involved. Promote participation and collaboration throughout the project life cycle and provide the tools for effective and informed decision making.

Domain IV. Team Performance (3 sub-domains, 9 tasks)

Create an environment of trust, learning, collaboration, and conflict resolution that promotes team self-organization, enhances relationships among team members, and cultivates a culture of high performance.

Domain V. Adaptive Planning (3 sub-domains, 10 tasks)

Produce and maintain an evolving plan, from initiation to closure, based on goals, values, risks, constraints, stakeholder feedback, and review findings.

Domain VI. Problem Detection and Resolution (5 tasks)

Continuously identify problems, impediments, and risks; prioritize and resolve in a timely manner; monitor and communicate the problem resolution status; and implement process improvements to prevent them from occurring again.

Domain VII. Continuous Improvement (Product, Process, People) (6 tasks)

Continuously improve the quality, effectiveness, and value of the product, the process, and the team.

TASKS

Domain I	Agile Principles and Mindset
Task 1	**Advocate for agile principles by modeling those principles and discussing agile values in order to develop a shared mindset across the team as well as between the customer and the team.**
Task 2	**Help ensure that everyone has a common understanding of the values and principles of agile and a common knowledge around the agile practices and terminology being used in order to work effectively.**
Task 3	**Support change at the system or organization level by educating the organization and influencing processes, behaviors, and people in order to make the organization more effective and efficient.**
Task 4	**Practice visualization by maintaining highly visible information radiators showing real progress and real team performance in order to enhance transparency and trust.**
Task 5	**Contribute to a safe and trustful team environment by allowing everyone to experiment and make mistakes so that each can learn and continuously improve the way he or she works.**
Task 6	**Enhance creativity by experimenting with new techniques and process ideas in order to discover more efficient and effective ways of working.**
Task 7	**Encourage team members to share knowledge by collaborating and working together in order to lower risks around knowledge silos and reduce bottlenecks.**
Task 8	**Encourage emergent leadership within the team by establishing a safe and respectful environment in which new approaches can be tried in order to make improvements and foster self-organization and empowerment.**
Task 9	**Practice servant leadership by supporting and encouraging others in their endeavors so that they can perform at their highest level and continue to improve.**

Domain II	Value-Driven Delivery
Define Positive Value	
Task 1	**Define deliverables by identifying units that can be produced incrementally in order to maximize their value to stakeholders while minimizing non-value added work.**
Task 2	**Refine requirements by gaining consensus on the acceptance criteria for features on a just-in-time basis in order to deliver value.**
Task 3	**Select and tailor the team's process based on project and organizational characteristics as well as team experience in order to optimize value delivery.**
Avoid Potential Downsides	
Task 4	**Plan for small releasable increments by organizing requirements into minimally marketable features/minimally viable products in order to allow for the early recognition and delivery of value.**
Task 5	**Limit increment size and increase review frequency with appropriate stakeholders in order to identify and respond to risks early on and at minimal cost.**
Task 6	**Solicit customer and user feedback by reviewing increments often in order to confirm and enhance business value.**
Prioritization	
Task 7	**Prioritize the units of work through collaboration with stakeholders in order to optimize the value of the deliverables.**
Task 8	**Perform frequent review and maintenance of the work results by prioritizing and maintaining internal quality in order to reduce the overall cost of incremental development.**
Task 9	**Continuously identify and prioritize the environmental, operational, and infrastructure factors in order to improve the quality and value of the deliverables.**
Incremental Development	
Task 10	**Conduct operational reviews and/or periodic checkpoints with stakeholders in order to obtain feedback and corrections to the work in progress and planned work.**
Task 11	**Balance development of deliverable units and risk reduction efforts by incorporating both value producing and risk reducing work into the backlog in order to maximize the total value proposition over time.**

Task 12	**Re-prioritize requirements periodically in order to reflect changes in the environment and stakeholder needs or preferences in order to maximize the value.**
Task 13	**Elicit and prioritize relevant non-functional requirements (such as operations and security) by considering the environment in which the solution will be used in order to minimize the probability of failure.**
Task 14	**Conduct frequent reviews of work products by performing inspections, reviews, and/or testing in order to identify and incorporate improvements into the overall process and product/service.**

Domain III	Stakeholder Engagement
Understand Stakeholder Needs	
Task 1	**Identify and engage effective and empowered business stakeholder(s) through periodic reviews in order to ensure that the team is knowledgeable about stakeholders' interests, needs, and expectations.**
Task 2	**Identify and engage all stakeholders (current and future) by promoting knowledge sharing early and throughout the project to ensure the unimpeded flow of information and value throughout the lifespan of the project.**
Ensure Stakeholder Involvement	
Task 3	**Establish stakeholder relationships by forming a working agreement among key stakeholders in order to promote participation and effective collaboration.**
Task 4	**Maintain proper stakeholder involvement by continually assessing changes in the project and organization in order to ensure that new stakeholders are appropriately engaged.**
Task 5	**Establish collaborative behaviors among the members of the organization by fostering group decision making and conflict resolution in order to improve decision quality and reduce the time required to make decisions.**
Manage Stakeholder Expectations	
Task 6	**Establish a shared vision of the various project increments (products, deliverables, releases, iterations) by developing a high level vision and supporting objectives in order to align stakeholders' expectations and build trust.**
Task 7	**Establish and maintain a shared understanding of success criteria, deliverables, and acceptable trade-offs by facilitating awareness among stakeholders in order to align expectations and build trust.**
Task 8	**Provide transparency regarding work status by communicating team progress, work quality, impediments, and risks in order to help the primary stakeholders make informed decisions.**
Task 9	**Provide forecasts at a level of detail that balances the need for certainty and the benefits of adaptability in order to allow stakeholders to plan effectively.**

Domain IV	Team Performance
Team Formation	
Task 1	**Cooperate with the other team members to devise ground rules and internal processes in order to foster team coherence and strengthen team members' commitment to shared outcomes.**
Task 2	**Help create a team that has the interpersonal and technical skills needed to achieve all known project objectives in order to create business value with minimal delay.**
Team Empowerment	
Task 3	**Encourage team members to become generalizing specialists in order to reduce team size and bottlenecks, and to create a high-performing cross-functional team.**
Task 4	**Contribute to self-organizing the work by empowering others and encouraging emerging leadership in order to produce effective solutions and manage complexity.**
Task 5	**Continuously discover team and personal motivators and de-motivators in order to ensure that team morale is high and team members are motivated and productive throughout the project.**
Team Collaboration and Commitment	
Task 6	**Facilitate close communication within the team and with appropriate external stakeholders through co-location or the use of collaboration tools in order to reduce miscommunication and rework.**
Task 7	**Reduce distractions in order to establish a predictable outcome and optimize the value delivered.**
Task 8	**Participate in aligning project and team goals by sharing project vision in order to ensure the team understands how their objectives fit into the overall goals of the project.**
Task 9	**Encourage the team to measure its velocity by tracking and measuring actual performance in previous iterations or releases in order for members to gain a better understanding of their capacity and create more accurate forecasts.**

Domain V	Adaptive Planning
Levels of Planning	
Task 1	**Plan at multiple levels (strategic, release, iteration, daily) creating appropriate detail by using rolling wave planning and progressive elaboration to balance predictability of outcomes with ability to exploit opportunities.**
Task 2	**Make planning activities visible and transparent by encouraging participation of key stakeholders and publishing planning results in order to increase commitment level and reduce uncertainty.**
Task 3	**As the project unfolds, set and manage stakeholder expectations by making increasingly specific levels of commitments in order to ensure common understanding of the expected deliverables.**
Adaptation	
Task 4	**Adapt the cadence and the planning process based on results of periodic retrospectives about characteristics and/or the size/complexity/criticality of the project deliverables in order to maximize the value.**
Task 5	**Inspect and adapt the project plan to reflect changes in requirements, schedule, budget, and shifting priorities based on team learning, delivery experience, stakeholder feedback, and defects in order to maximize business value delivered.**
Agile Sizing and Estimation	
Task 6	**Size items by using progressive elaboration techniques in order to determine likely project size independent of team velocity and external variables.**
Task 7	**Adjust capacity by incorporating maintenance and operations demands and other factors in order to create or update the range estimate.**
Task 8	**Create initial scope, schedule, and cost range estimates that reflect current high level understanding of the effort necessary to deliver the project in order to develop a starting point for managing the project.**
Task 9	**Refine scope, schedule, and cost range estimates that reflect the latest understanding of the effort necessary to deliver the project in order to manage the project.**
Task 10	**Continuously use data from changes in resource capacity, project size, and velocity metrics in order to evaluate the estimate to complete.**

Domain VI	Problem Detection and Resolution
Task 1	**Create an open and safe environment by encouraging conversation and experimentation, in order to surface problems and impediments that are slowing the team down or preventing its ability to deliver value.**
Task 2	**Identify threats and issues by educating and engaging the team at various points in the project in order to resolve them at the appropriate time and improve processes that caused issues.**
Task 3	**Ensure issues are resolved by appropriate team members and/or reset expectations in light of issues that cannot be resolved in order to maximize the value delivered.**
Task 4	**Maintain a visible, monitored, and prioritized list of threats and issues in order to elevate accountability, encourage action, and track ownership and resolution status.**
Task 5	**Communicate status of threats and issues by maintaining threat list and incorporating activities into backlog of work in order to provide transparency.**

Domain VII	Continuous Improvement (Product, Process, People)
Task 1	**Tailor and adapt the project process by periodically reviewing and integrating team practices, organizational culture, and delivery goals in order to ensure team effectiveness within established organizational guidelines and norms.**
Task 2	**Improve team processes by conducting frequent retrospectives and improvement experiments in order to continually enhance the effectiveness of the team, project, and organization.**
Task 3	**Seek feedback on the product by incremental delivery and frequent demonstrations in order to improve the value of the product.**
Task 4	**Create an environment of continued learning by providing opportunities for people to develop their skills in order to develop a more productive team of generalizing specialists.**
Task 5	**Challenge existing process elements by performing a value stream analysis and removing waste in order to increase individual efficiency and team effectiveness.**
Task 6	**Create systemic improvements by disseminating knowledge and practices across projects and organizational boundaries in order to avoid re-occurrence of identified problems and improve the effectiveness of the organization as a whole.**

TOOLS AND TECHNIQUES

Toolkit	*The examples illustrate the breadth of the toolkit, but are **NOT** meant to provide an exhaustive list of all techniques and tools in the toolkit*
Agile Analysis and Design	**Including but not limited to:** **product roadmap** **user stories/backlog** **story maps** **progressive elaboration** **wireframes** **chartering** **personas** **agile modeling** **workshops** **learning cycle** **collaboration games**
Agile Estimation	**Including but not limited to:** **relative sizing/story points/T-shirt sizing** **wide band Delphi/planning poker** **affinity estimating** **ideal time**
Communications	**Including but not limited to:** **information radiator** **team space agile tooling** **osmotic communications for co-located and/or distributed teams** **two-way communications (trustworthy, conversation driven)** **social media–based communication** **active listening** **brainstorming** **feedback methods**

Toolkit	*The examples illustrate the breadth of the toolkit, but are **NOT** meant to provide an exhaustive list of all techniques and tools in the toolkit*
Interpersonal skills	**Including but not limited to:** **emotional intelligence** **collaboration** **adaptive leadership** **servant leadership** **negotiation** **conflict resolution**
Metrics	**Including but not limited to:** **velocity/throughput/productivity** **cycle time** **lead time** **EVM for agile projects** **defect rate** **approved iterations** **work in progress**
Planning, Monitoring, and Adapting	**Including but not limited to:** **reviews** **Kanban board** **task board** **timeboxing** **iteration and release planning** **variance and trend analysis** **WIP limits** **daily stand ups** **burn down/up charts** **cumulative flow diagrams** **backlog grooming/refinement** **product-feedback loop**

Toolkit	*The examples illustrate the breadth of the toolkit, but are **NOT** meant to provide an exhaustive list of all techniques and tools in the toolkit*
Process Improvement	**Including but not limited to:** **Kaizen** **the Five WHYs** **retrospectives, intraspectives** **process tailoring/hybrid models** **value stream mapping** **control limits** **pre-mortem (rule setting, failure analysis)** **fishbone diagram analysis**
Product Quality	**Including but not limited to:** **frequent verification and validation** **definition of done** **continuous integration** **testing, including exploratory and usability**
Risk Management	**Including but not limited to:** **risk adjusted backlog** **risk burn down graphs** **risk-based spike** **architectural spike**
Value-Based Prioritization	**Including but not limited to:** **ROI/NPV/IRR** **compliance** **customer valued prioritization** **requirements reviews** **minimal viable product (MVP)** **minimal marketable feature (MMF)** **relative prioritization/ranking** **MoSCoW** **Kano analysis**

KNOWLEDGE AND SKILLS

*Each statement is preceded implicitly by **Knowledge of** or **Skill in***

- Agile values and principles
- Agile frameworks and terminology
- Agile methods and approaches
- Assessing and incorporating community and stakeholder values
- Stakeholder management
- Communication management
- Facilitation methods
- Knowledge sharing/written communication
- Leadership
- Building agile teams
- Team motivation
- Physical and virtual co-location
- Global, cultural, and team diversity
- Training, coaching, and mentoring
- Developmental mastery models (for example, Tuckman, Dreyfus, Shu Ha Ri)
- Self-assessment tools and techniques
- Participatory decision models (for example, convergent, shared collaboration)
- Principles of systems thinking (for example, complex adaptive, chaos)
- Problem solving
- Prioritization
- Incremental delivery
- Agile discovery
- Agile sizing and estimation
- Value based analysis and decomposition
- Process analysis
- Continuous improvement
- Agile hybrid models
- Managing with agile KPIs
- Agile project chartering
- Agile contracting
- Agile project accounting principles
- Regulatory compliance
- PMI's Code of Ethics and Professional Conduct

APPENDIX A: ROLE DELINEATION STUDY (RDS) PROCESS

Defining the Responsibilities

The first step in developing a certification examination is to define the responsibilities of the recipients of the certification. It must be known what the individuals who perform agile activities actually do on the job *before* a content-valid test can be developed. A valid examination draws questions from every important area of the profession and specifies that performance areas (domains) considered more important, critical, and relevant be represented by more questions on the examination. Defining the role of individuals who serve in an agile capacity occurs in two major phases: one in which individuals currently in the role defines the responsibilities and another in which the identified responsibilities are validated on a global scale.

Beginning in 2014, PMI commissioned a global Role Delineation Study (RDS) for the PMI Agile Certified Practitioner (PMI-ACP)® certification. The RDS process was led by a steering committee, representing PMI's Certification Governance structure. A project task force comprised of various roles that perform agile activities was responsible for the conduct of work on the project, with oversight from the steering committee. The task force had global representation and diversity in industry, job position, and experience. Others in agile roles were also responsible for the independent reviews of the work of the task force and piloting the information before surveying a larger sample of agile practitioners.

Study participants, working under the direction of the Professional Education Service (ProExam), reached consensus on the performance domains, a broad category of duties and responsibilities that define the role, as well as the tasks required for competence performance and the knowledge/skills needed to perform those tasks.

Validating the Responsibilities Identified by the Panelists

In order to ensure the validity of the study and content outline developed by the panels, a survey requesting feedback on the panel's work was sent to thousands of agile practitioners throughout the world. PMI received a robust set of responses to the survey, with participants from various countries and representing most major industries. This provided PMI with the statistical significance from which to draw conclusions about the criticality for competent performance and frequency of the tasks. Practitioners also rated the knowledge/skills on how essential they were to the work of an agile practitioner and when they were acquired.

Developing a Plan for the Test

Based on respondent ratings, an examination blueprint, clarifying exactly how many questions from each domain and task should be on the examination, was developed. Those domains and tasks that were rated as most important, critical, and relevant by survey respondents would have the most questions devoted to them on the examination.

Results of the study indicated that the 100 scorable questions on the test should be distributed among the domains as shown in the following table. The remaining 20 questions will be dispersed throughout the domains as pretest questions and will not count in the candidates'

scores. The pretest items allow PMI to monitor the question performance better, prior to including the questions in the final databank of test questions.

Domain	Percentage of Items on Test
Domain I. Agile Principles and Mindset	16%
Domain II. Value-driven Delivery	20%
Domain III. Stakeholder Engagement	17%
Domain IV. Team Performance	16%
Domain V. Adaptive Planning	12%
Domain VI. Problem Detection and Resolution	10%
Domain VII. Continuous Improvement (Product, Process, People)	9%

POWERING THE PROJECT ECONOMY™

Project Management Institute.

PMI.org