

Project Management Professional (PMP)®

Examination Content Outline

Project Management Institute

**Project Management Professional (PMP)[®]
Examination Content Outline**

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14 Campus Boulevard
Newtown Square, Pennsylvania 19073-3299 USA.
Phone: +610-356-4600
Fax: +610-356-4647
Email: customercare@pmi.org
Internet: www.PMI.org

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INTRODUCTION

The Project Management Institute (PMI) offers a professional credential for project managers, known as the Project Management Professional (PMP)[®]. PMI's professional credentialing 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*. The PMP[®] credential is also accredited against the internationally recognized ISO 17024 standard.¹

A key component of this process is that organizations wishing to offer valid and reliable professional credentialing 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 practitioner's competence, and determine the levels 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 a project manager.

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

PMP credential holders can be confident that their professional credential has been developed according to the best practices of test development and based upon input from the practitioners who establish those standards.

The PMP examination is a vital part of the activities leading to earning a professional credential, thus it is imperative that the PMP examination reflect accurately the practices of the project management practitioner. All the questions on the examination have been written and extensively reviewed by qualified PMP credential holders and tracked to at least two academic references. These questions are mapped against the *PMP 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 *PMP 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.

Finally, although the *PMP Examination Content Outline* and *A Guide to the Project Management Body of Knowledge (PMBOK[®] Guide)* have commonalities, it is important to note that those involved in

¹ Published jointly by the American Education Research Association, National Council on Measurement in Education, and American Psychological Association. The PMP credential is also accredited by the American National Standards Institutes (ANSI) against the internationally recognized ISO/IEC 17024 standard: *Conformity Assessment—General Requirements for Bodies Operating Certification of Persons*.

the study described previously were not bound by the *PMBOK® Guide*. They were charged with defining the roles of individuals leading and directing projects, and using their experience and pertinent resources to help in this task.

Although many of the domains, tasks, knowledge, and skills outlined in the *PMP Examination Content Outline* are also covered in the *PMBOK® Guide*, there are some that are unique to the *PMP Examination Content Outline*. Candidates studying for the examination will certainly want to include the current edition of the *PMBOK® Guide* as one of their references, and would be well advised to read other current titles on project management.

EXAM CONTENT OUTLINE

The following table identifies the proportion of questions from each domain that will appear on the examination. These percentages are used to determine the number of questions related to each domain and task that should appear on the multiple-choice format examination.

Domain	Percentage of Items on Test
I. Initiating	13%
II. Planning	24%
III. Executing	31%
IV. Monitoring and Controlling	25%
V. Closing	7%
Total	100%

DOMAINS, TASKS, AND KNOWLEDGE AND SKILL STATEMENTS

This section of the report contains the domains, tasks, and knowledge and skill statements as defined by the Role Delineation Study.

Each domain contains tasks that are measured through the PMP certification progress. In addition, the domain contains knowledge and skills, which are required to competently perform these tasks. There are also cross-cutting knowledge and skills, which are used in multiple domains and tasks.

- I. Initiating**
- II. Planning**
- III. Executing**
- IV. Monitoring and Controlling**
- V. Closing**

PERFORMANCE DOMAIN I: INITIATING

Domain I	Initiating – 13%
Task 1	Perform project assessment based upon available information, lessons learned from previous projects, and meetings with relevant stakeholders in order to support the evaluation of the feasibility of new products or services within the given assumptions and/or constraints.
Task 2	Identify key deliverables based on the business requirements in order to manage customer expectations and direct the achievement of project goals.
Task 3	Perform stakeholder analysis using appropriate tools and techniques in order to align expectations and gain support for the project.
Task 4	Identify high level risks, assumptions, and constraints based on the current environment, organizational factors, historical data, and expert judgment, in order to propose an implementation strategy.
Task 5	Participate in the development of the project charter by compiling and analyzing gathered information in order to ensure project stakeholders are in agreement on its elements.
Task 6	Obtain project charter approval from the sponsor, in order to formalize the authority assigned to the project manager and gain commitment and acceptance for the project.
Task 7	Conduct benefit analysis with relevant stakeholders to validate project alignment with organizational strategy and expected business value.
Task 8	Inform stakeholders of the approved project charter to ensure common understanding of the key deliverables, milestones, and their roles and responsibilities.
	Knowledge and Skills: ² <ul style="list-style-type: none"> • Analytical skills • Benefit analysis techniques • Elements of a project charter • Estimation tools and techniques • Strategic management

² In addition to domain-specific knowledge and skills, these specifications include a set of cross-cutting knowledge and skills used in multiple domains. The Cross-Cutting Knowledge and Skills list is found in the section on Cross-Cutting Knowledge and Skills.

PERFORMANCE DOMAIN II: PLANNING

Domain II	Planning – 24%
Task 1	Review and assess detailed project requirements, constraints, and assumptions with stakeholders based on the project charter, lessons learned, and by using requirement gathering techniques in order to establish detailed project deliverables.
Task 2	Develop a scope management plan, based on the approved project scope and using scope management techniques, in order to define, maintain, and manage the scope of the project.
Task 3	Develop the cost management plan based on the project scope, schedule, resources, approved project charter and other information, using estimating techniques, in order to manage project costs.
Task 4	Develop the project schedule based on the approved project deliverables and milestones, scope, and resource management plans in order to manage timely completion of the project.
Task 5	Develop the human resource management plan by defining the roles and responsibilities of the project team members in order to create a project organizational structure and provide guidance regarding how resources will be assigned and managed.
Task 6	Develop the communications management plan based on the project organizational structure and stakeholder requirements, in order to define and manage the flow of project information.
Task 7	Develop the procurement management plan based on the project scope, budget, and schedule, in order to ensure that the required project resources will be available.
Task 8	Develop the quality management plan and define the quality standards for the project and its products, based on the project scope, risks, and requirements, in order to prevent the occurrence of defects and control the cost of quality.
Task 9	Develop the change management plan by defining how changes will be addressed and controlled in order to track and manage change.
Task 10	Plan for risk management by developing a risk management plan; identifying, analyzing, and prioritizing project risk; creating the risk register; and defining risk response strategies in order to manage uncertainty and opportunity throughout the project life cycle.

Task 11	Present the project management plan to the relevant stakeholders according to applicable policies and procedures in order to obtain approval to proceed with project execution.
Task 12	Conduct kick-off meeting, communicating the start of the project, key milestones, and other relevant information in order to inform and engage stakeholders and gain commitment.
Task 13	Develop the stakeholder management plan by analyzing needs, interests, and potential impact in order to effectively manage stakeholders' expectations and engage them in project decisions.
	<p>Knowledge and Skills:³</p> <ul style="list-style-type: none"> • Change management planning • Cost management planning, including project budgeting tools and techniques • Communications planning • Contract types and selection criteria • Estimation tools and techniques • Human resource planning • Lean and efficiency principles • Procurement planning • Quality management planning • Requirements gathering techniques (e.g., planning sessions, brainstorming, and focus groups) • Regulatory and environmental impacts assessment planning • Risk management planning • Scope deconstruction (e.g., WBS, Scope backlog) tools and techniques • Scope management planning • Stakeholder management planning • Time management planning, including scheduling tools and techniques • Workflow diagramming techniques

³ In addition to domain-specific knowledge and skills, these specifications include a set of cross-cutting knowledge and skills used in multiple domains. The Cross-Cutting Knowledge and Skills list is found in the section on Cross-Cutting Knowledge and Skills.

PERFORMANCE DOMAIN III: EXECUTING

Domain III	Executing – 31%
Task 1	Acquire and manage project resources by following the human resource and procurement management plans in order to meet project requirements.
Task 2	Manage task execution based on the project management plan by leading and developing the project team in order to achieve project deliverables.
Task 3	Implement the quality management plan using the appropriate tools and techniques in order to ensure that work is performed in accordance with required quality standards.
Task 4	Implement approved changes and corrective actions by following the change management plan in order to meet project requirements.
Task 5	Implement approved actions by following the risk management plan in order to minimize the impact of the risks and take advantage of opportunities on the project.
Task 6	Manage the flow of information by following the communications plan in order to keep stakeholders engaged and informed.
Task 7	Maintain stakeholder relationships by following the stakeholder management plan in order to receive continued support and manage expectations.
	Knowledge and Skills: ⁴ <ul style="list-style-type: none"> • Continuous improvement processes • Contract management techniques • Elements of a statement of work • Interdependencies among project elements • Project budgeting tools and techniques • Quality standard tools • Vendor management techniques

⁴ In addition to domain-specific knowledge and skills, these specifications include a set of cross-cutting knowledge and skills used in multiple domains. The Cross-Cutting Knowledge and Skills list is found in the section on Cross-Cutting Knowledge and Skills.

PERFORMANCE DOMAIN IV: MONITORING AND CONTROLLING

Domain IV	Monitoring and Controlling – 25%
Task 1	Measure project performance using appropriate tools and techniques in order to identify and quantify any variances and corrective actions.
Task 2	Manage changes to the project by following the change management plan in order to ensure that project goals remain aligned with business needs.
Task 3	Verify that project deliverables conform to the quality standards established in the quality management plan by using appropriate tools and techniques to meet project requirements and business needs.
Task 4	Monitor and assess risk by determining whether exposure has changed and evaluating the effectiveness of response strategies in order to manage the impact of risks and opportunities on the project.
Task 5	Review the issue log, update if necessary, and determine corrective actions by using appropriate tools and techniques in order to minimize the impact on the project.
Task 6	Capture, analyze, and manage lessons learned, using lessons learned management techniques in order to enable continuous improvement.
Task 7	Monitor procurement activities according to the procurement plan in order to verify compliance with project objectives.
	<p>Knowledge and Skills:⁵</p> <ul style="list-style-type: none"> • Performance measurement and tracking techniques (e.g., EV, CPM, PERT, Trend Analysis) • Process analysis techniques (e.g., LEAN, Kanban, Six Sigma) • Project control limits (e.g., thresholds, tolerance) • Project finance principles • Project monitoring tools and techniques • Project quality best practices and standards (e.g., ISO, BS, CMMI, IEEE) • Quality measurement tools (e.g., statistical sampling, control charts, flow-charting, inspection, assessment) • Risk identification and analysis techniques • Risk response techniques • Quality validation and verification techniques

⁵ In addition to domain-specific knowledge and skills, these specifications include a set of cross-cutting knowledge and skills used in multiple domains. The Cross-Cutting Knowledge and Skills list is found in the section on Cross-Cutting Knowledge and Skills.

PERFORMANCE DOMAIN V: CLOSING

Domain V	Closing – 7%
Task 1	Obtain final acceptance of the project deliverables from relevant stakeholders in order to confirm that project scope and deliverables were achieved.
Task 2	Transfer the ownership of deliverables to the assigned stakeholders in accordance with the project plan in order to facilitate project closure.
Task 3	Obtain financial, legal, and administrative closure using generally accepted practices and policies in order to communicate formal project closure and ensure transfer of liability.
Task 4	Prepare and share the final project report according to the communications management plan in order to document and convey project performance and assist in project evaluation.
Task 5	Collate lessons learned that were documented throughout the project and conduct a comprehensive project review in order to update the organization's knowledge base.
Task 6	Archive project documents and materials using generally accepted practices in order to comply with statutory requirements and for potential use in future projects and audits.
Task 7	Obtain feedback from relevant stakeholders using appropriate tools and techniques and based on the stakeholder management plan in order to evaluate their satisfaction.
	<p>Knowledge and Skills:⁶</p> <ul style="list-style-type: none"> • Archiving practices and statutes • Compliance (statute/organization) • Contract closure requirements • Close-out procedures • Feedback techniques • Performance measurement techniques (KPI and key success factors) • Project review techniques • Transition planning technique

⁶ In addition to domain-specific knowledge and skills, these specifications include a set of cross-cutting knowledge and skills used in multiple domains. The Cross-Cutting Knowledge and Skills list is found in the section on Cross-Cutting Knowledge and Skills.

CROSS-CUTTING KNOWLEDGE AND SKILLS

All Domains	Cross-Cutting Knowledge and Skills
	<ul style="list-style-type: none"> • Active listening • Applicable laws and regulations • Benefits realization • Brainstorming techniques • Business acumen • Change management techniques • Coaching, mentoring, training, and motivational techniques • Communication channels, tools, techniques, and methods • Configuration management • Conflict resolution • Customer satisfaction metrics • Data gathering techniques • Decision making • Delegation techniques • Diversity and cultural sensitivity • Emotional intelligence • Expert judgment technique • Facilitation • Generational sensitivity and diversity • Information management tools, techniques, and methods • Interpersonal skills • Knowledge management • Leadership tools, techniques, and skills • Lessons learned management techniques • Meeting management techniques • Negotiating and influencing techniques and skills

	<ul style="list-style-type: none"> • Organizational and operational awareness • Peer-review processes • Presentation tools and techniques • Prioritization/time management • Problem-solving tools and techniques • Project finance principles • Quality assurance and control techniques • Relationship management • Risk assessment techniques • Situational awareness • Stakeholder management techniques • Team-building techniques • Virtual/remote team management
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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 credential. It must be known what the individuals who lead and direct projects 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 leading and directing projects occurs in two major phases: one in which individuals currently in the role define the responsibilities; the other in which the identified responsibilities are validated on a global scale.

Beginning in 2014, PMI commissioned a global Role Delineation Study (RDS) for the PMP credential. The RDS process was led by a steering committee, representing PMI's Certification Governance structure. A project task force comprised of project managers was responsible for the conduct of work on the project, with oversight from the steering committee. The task force represented diversity in geography, industry, job position, and experience. Project managers were also responsible for the independent reviews of the work of the task force and piloting the information before surveying a larger sample of project managers.

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 project management practitioners throughout the world. Surveys were distributed to thousands of project managers around the world. PMI received a robust set of responses to the survey, with participants from 96 countries and representing every major industry. 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 their work as project managers 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 175 scorable questions on the test should be distributed among the domains as shown in the following table. The remaining 25 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.

Domains	Percentage of Items/Domain
1. Initiating	13%
2. Planning	24%
3. Executing	31%
4. Monitoring and Controlling	25%
5. Closing	7%
Total Number of Scored Questions	175
Total Number of Unscored (Pretest) Questions	25
Total Number of Questions	200



Making project management indispensable for business results.®