# PROJECT MANAGEMENT (PMP)

## PMP 710. Project Management Essentials. (3 h)

This course introduces the foundational concepts of project management. The project management life cycle, as defined in the Project Management Body of Knowledge, is introduced, as are several project management knowledge areas such as risk, scope, schedule, quality, monitoring, and communication, among others. Distinctions between project, program, and portfolio management are explored. Achieving literacy in Microsoft Project software is a goal of the course, as well.

## PMP 712. Mastering the Project Life Cycle. (3 h)

The course pursues an in-depth exploration of the different phases of a project from Initiation to Closure. Project Setup focuses on the introduction of a robust project organization and qualities of an effective project manager. Project Planning reviews methods for defining project activities and establishing a budget and scheduling projects under certainty (CPM) and uncertainty (PERT). Techniques for identifying and analyzing project-related risks and selecting the right project approach (Waterfall versus Agile/Scrum), are considered. Project Execution focuses on tools for supporting, monitoring and controlling projects, with a focus on successful implementation. Students leave with a set of best practices for effective project management throughout the project management life cycle.

#### PMP 714. Portfolio and Program Management. (3 h)

This course focuses on managing and coordinating multiple organizational projects. Students will develop the ability to build and manage a project portfolio, including consideration of project alignment, organizational goals, performance maximization, risk minimization, and program success. Particular attention is given to the differentiating aspects of program governance and compliance within organizational, industry, and legal requirements.

## PMP 730. Agile Fundamentals. (3 h)

This course introduces the foundational concepts of Agile, which is an iterative approach to project management (PM). Agile is contrasted with other PM methodologies. An introductory consideration of scrum is provided, including Scrum events and artifacts, the anatomy of a sprint, the roles of Scrum Master and Scrum team members, as well as release planning.

PMP 734. Al and Data Analytics for Project Management. (3 h) In this course, project managers will learn how AI applies to project management as well as how to select, apply, and present the right data in various scenarios. A human-in-the-loop approach to applying generative AI is explored, including how AI is being incorporated into project management to automate routine tasks. Project managers will also learn the basics of data analytics, including how to partner with data scientists to get the right data at the right time, use KPIs to drive project success, and present data effectively to executives.

### PMP 750. Lean Six Sigma. (3 h)

Continuous Improvement Projects (CIP) are typically vital contributors as companies pursue their goals. This course focuses on the essentials of Lean management/thinking and Six Sigma quality as the two dominating and complementary methodologies suited to the pursuit of operational excellence. Participants learn about the basic philosophies and essential tools of these two concepts, with a focus on leveraging various improvement methods and becoming more effective with their project work. The course also discusses how the Lean and Six Sigma approaches can be applied early in the development phase of products and services with basic principles for lean development and design for six sigma. A review is provided of successful Lean Six Sigma project implementations in different industries, with lessons learned and an outlook on remaining challenges in the era of the fourth industrial revolution.

#### PMP 752. ScrumMaster Leadership Preparation. (3 h)

This course will prepare students for the Professional ScrumMaster certification exam offered by scrum.org. Detailed consideration is given to the Scrum framework and the key attributes of being an effective Scrum Master.

## PMP 753. Leading Construction and Engineering Projects. (3 h)

This course will enable students to develop an in-depth knowledge of industry-specific subjects in construction and engineering design, planning, and safety. Students will gain a deep understanding of project estimation, construction ethics, and writing contracts as experienced within the construction and engineering contexts. Salient industry and organizational factors that impact the performance of construction and engineering projects will be emphasized.

## PMP 756. CAPM Certification Preparation. (3 h)

The "CAPM Certification Preparation" course is designed to equip students with the foundational knowledge and skills necessary to achieve the Certified Associate in Project Management (CAPM) certification. This course is ideal for individuals with 0-3 years of project or change management experience looking to validate their understanding of project management principles and practices as defined in the PMBOK® Guide. As an Authorized Training Provider (ATP), Wake Forest University partners with Project Management Institute (PMI) to deliver the highest quality certification preparation in the market.

#### PMP 757. PMP Certification Preparation. (3 h)

The "PMP (Project Management Professional) Certification Preparation" course is designed to prepare students for the Project Management Professional (PMP) certification exam. This course is ideal for experienced project managers who aim to validate their skills and knowledge in project management, as defined by the PMBOK® Guide. The course covers a comprehensive range of project management concepts, methodologies, and best practices, ensuring that students are well-prepared to excel in the PMP certification exam and in their professional roles. As an Authorized Training Provider (ATP), Wake Forest University partners with the Project Management Institute (PMI) to deliver the highest quality certification preparation. This course is offered in an online synchronous format due to Project Management Institute (PMI) requirements.

#### PMP 799. Capstone in Project Management. (3 h)

This immersive hands-on course offers students the opportunity to apply the principles, best practices, techniques, and frameworks they have developed throughout their previous coursework to actual project management (PM) context in an organization of their choosing. Assessment of the current PM environment creates the basis for recommendations for furthering the intent of the project(s) under consideration.