



# PROJECT MANAGEMENT CENTER FOR EXCELLENCE

A.J. CLARK SCHOOL OF ENGINEERING  
Civil & Environmental Engineering Department



## A GRADUATE-LEVEL, COMPETENCY-BASED CURRICULUM FOR PROJECT MANAGEMENT

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*Project Management Symposium*



## Introduction

- Experience in designing a competency-based curriculum (CBE) in project management at UMUC
- UMUC is a component university of USM
  - Includes graduate and undergraduate schools
  - The Graduate School has master's, MBA, and doctoral programs
- The CBE program in project management is designed as a master's degree

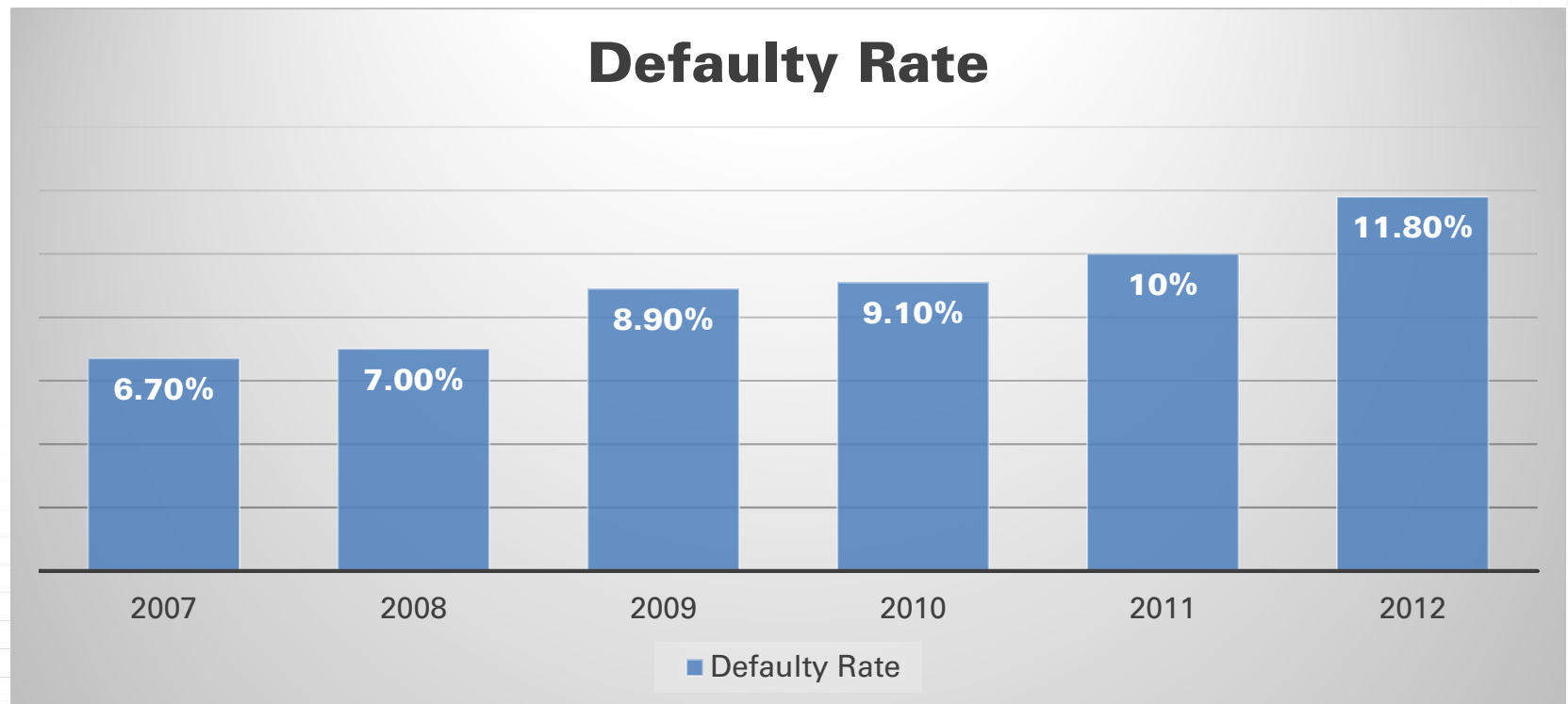


## Motivations for CBE

- Increases in cost of education
- Graduate unemployment
- Student profile



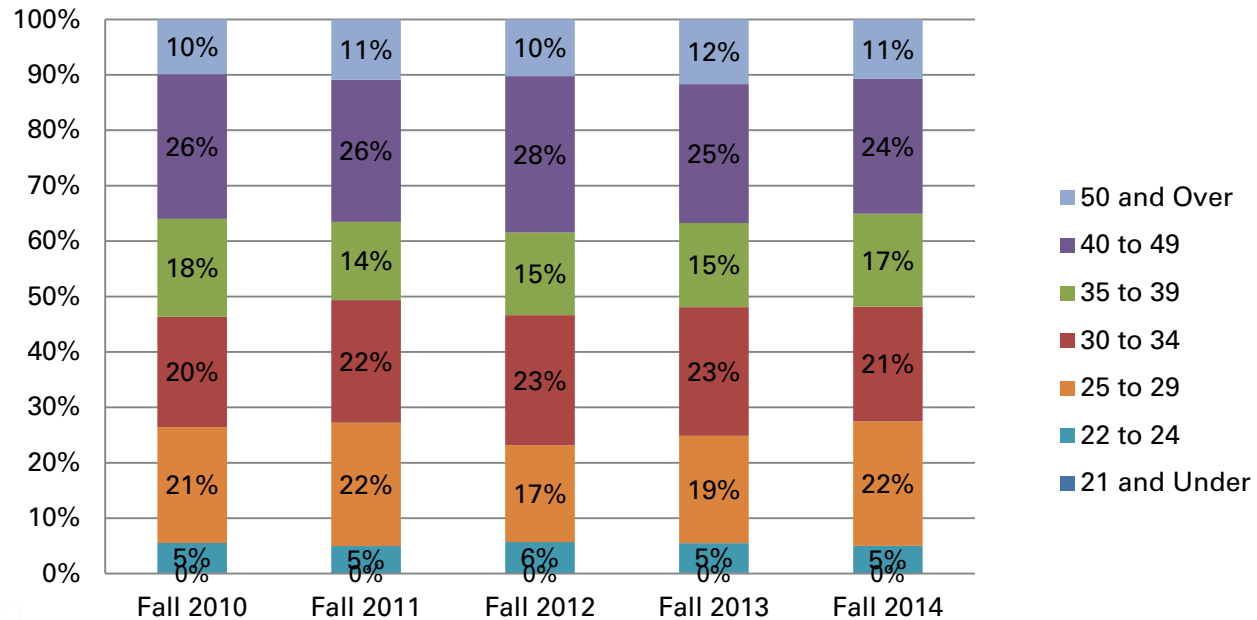
# Student Loan Default Rate





# Student Profile

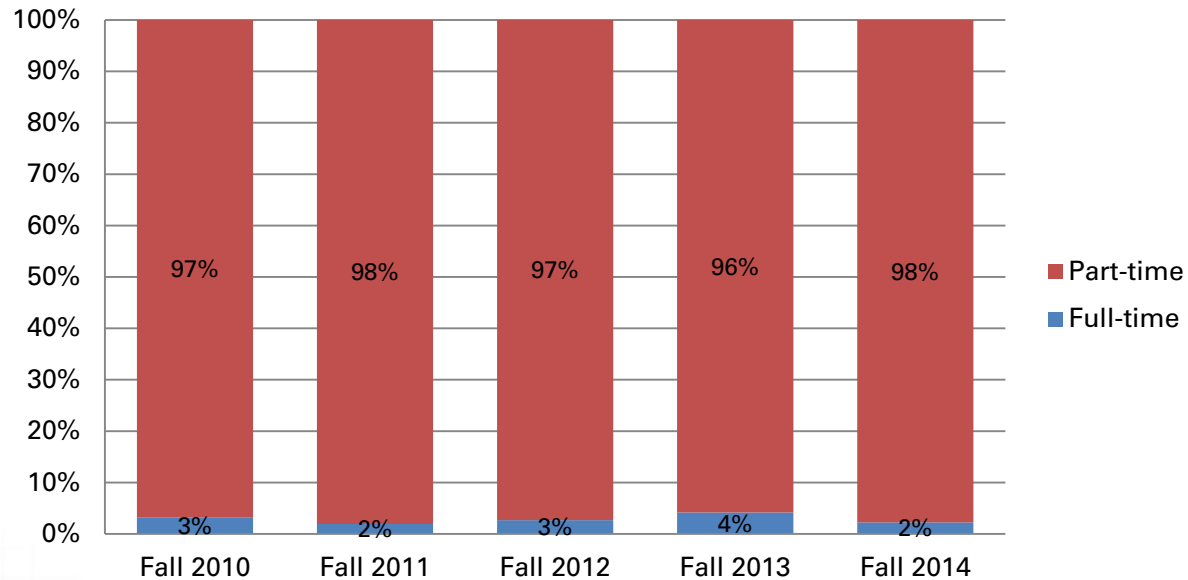
## Headcount by Age Range





# Student Profile

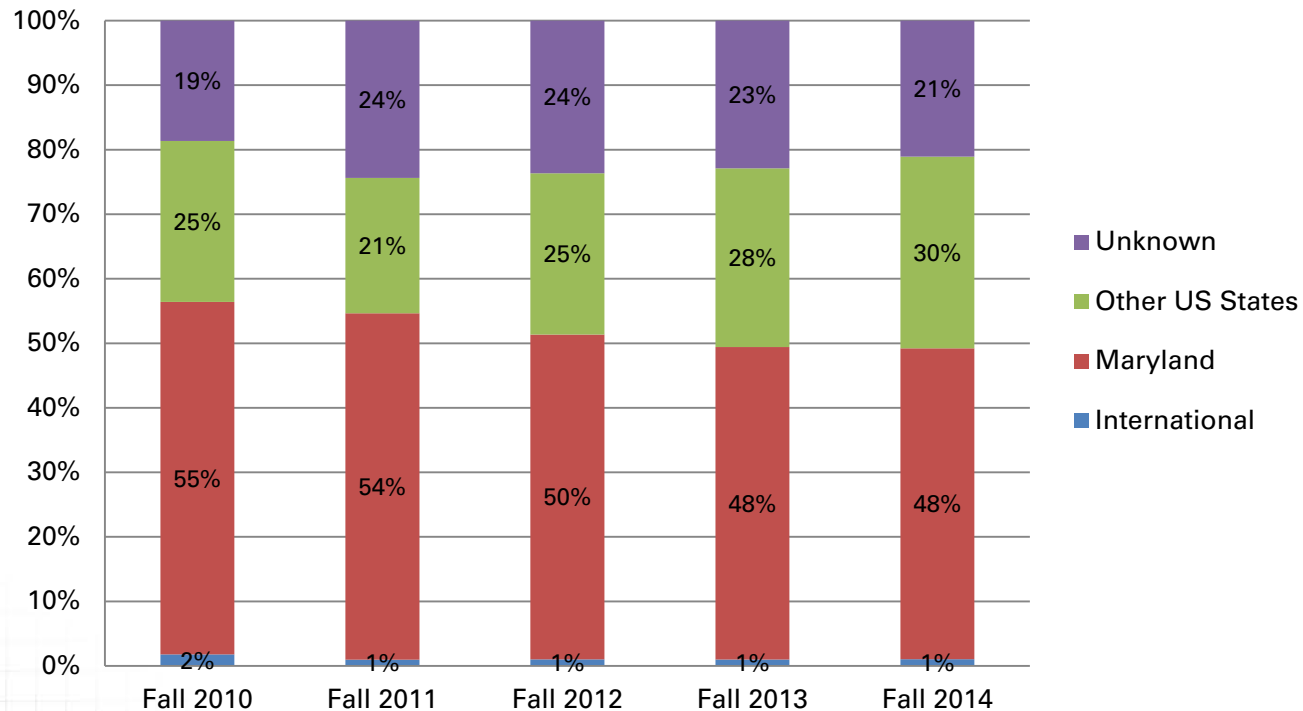
### Headcount by Full and Part-Time status





# Student Profile

## Headcount by Geographic Origin





## Target Audience

- Adult students
- Working part-time
- Distributed geographically
- Interested in:
  - Enhancing their careers in project management
  - Transitioning to a career in project management





# Institutional Curriculum Requirements

- 36 credits for master's degree
- Distributed over 6 courses
- 4 semesters in an academic year
- Each semester 11 weeks long



## Institutional Requirements

- Common design process across all degree programs
  - State program learning objectives
  - Specify competencies
  - Design assessments to exercise competencies
  - Identify learning topics
  - Allocate competencies to courses
  - Define rubrics



## Project Management Program Learning Objectives

- Lead and work in teams
- Persuade and influence others
- Delegate tasks
- Communicate clearly
- Perform quantitative analysis
- Solve problems and make decisions
- Learn how to apply technology to solve problems
- Plan, organize, and prioritize

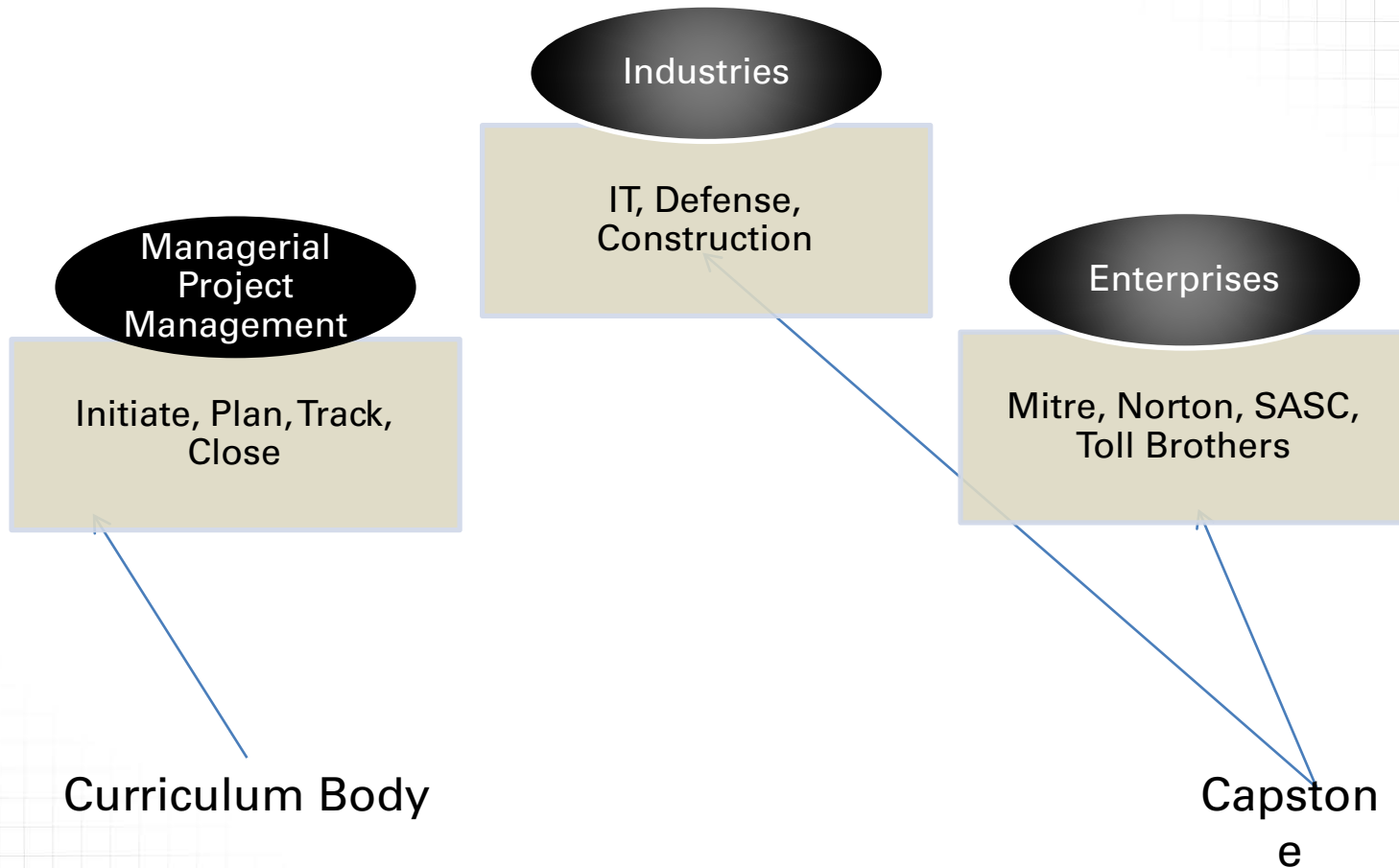


## Program Competencies

- Managerial aspects of project management
  - Competencies transferable across industries and enterprises
- Industry-specific policies and procedures
  - Competencies specific to an industry
- Enterprise assets, policies, and procedures
  - Competencies specific to an enterprise

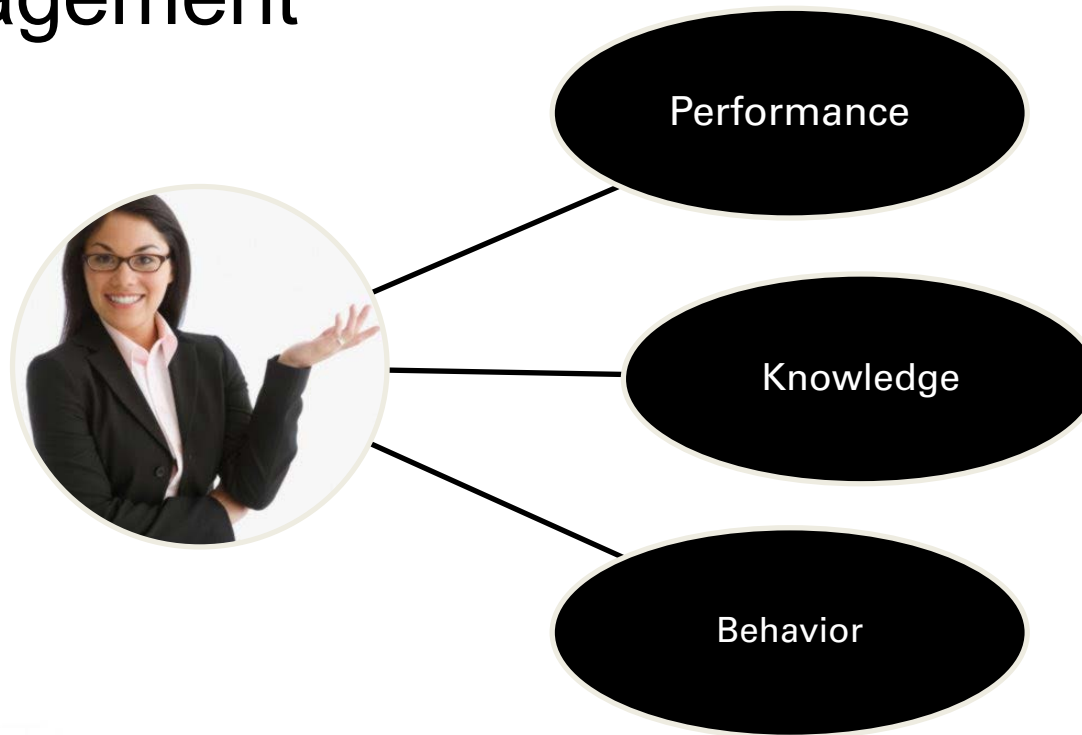


# Curriculum Scope



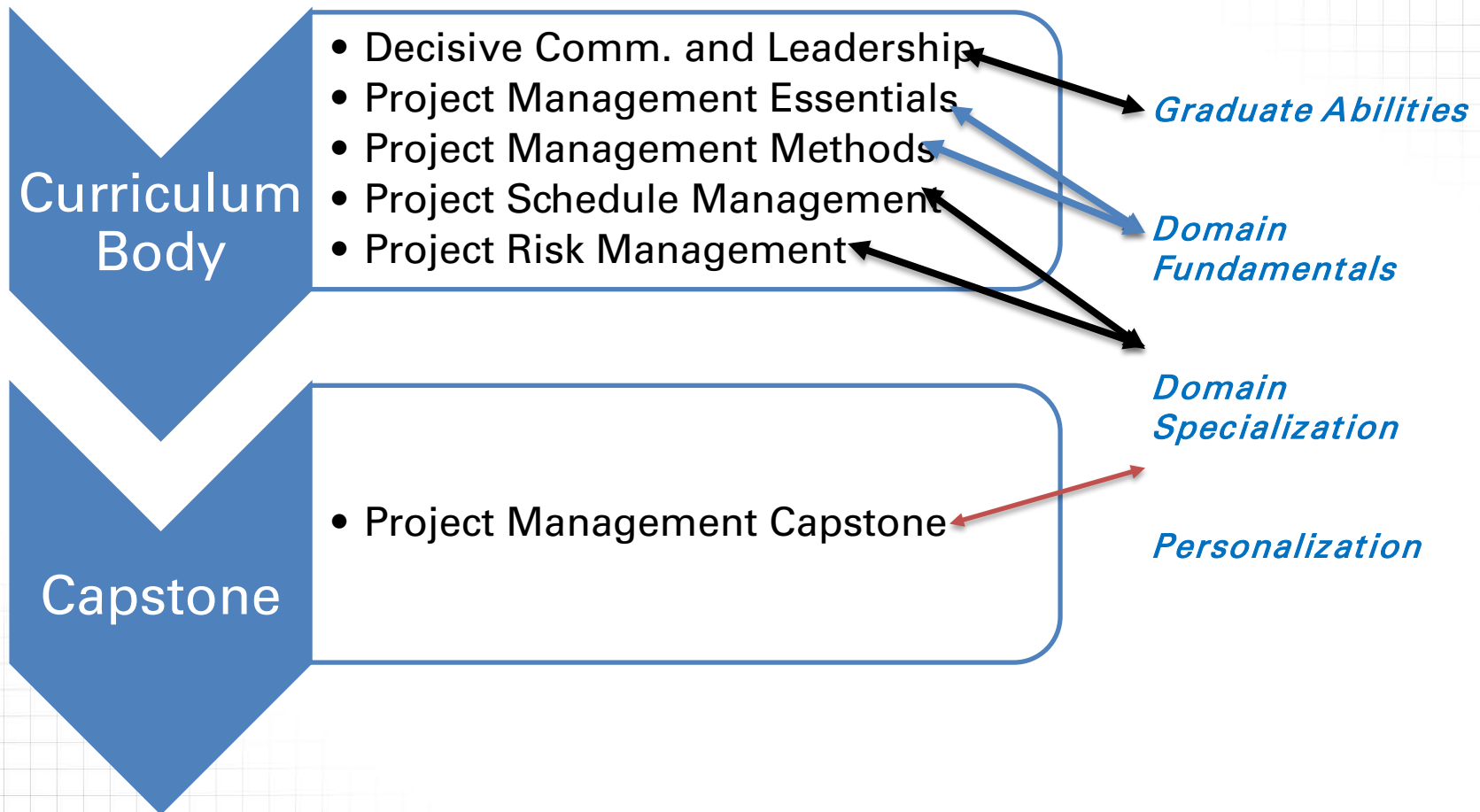


# Managerial Aspects of Project Management



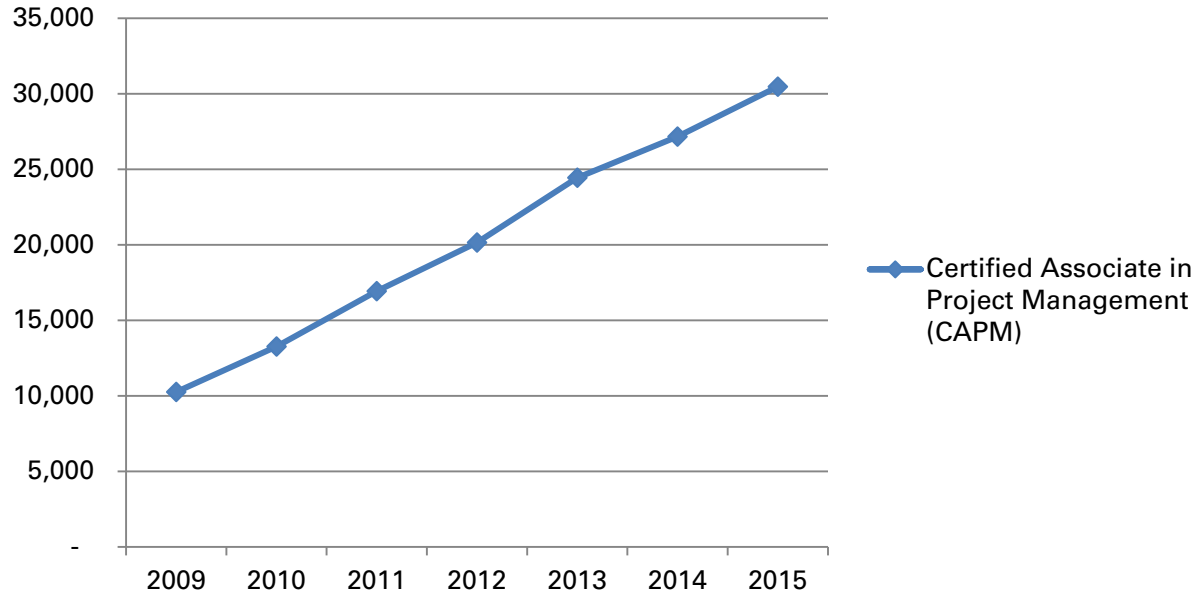
# Curriculum Courses

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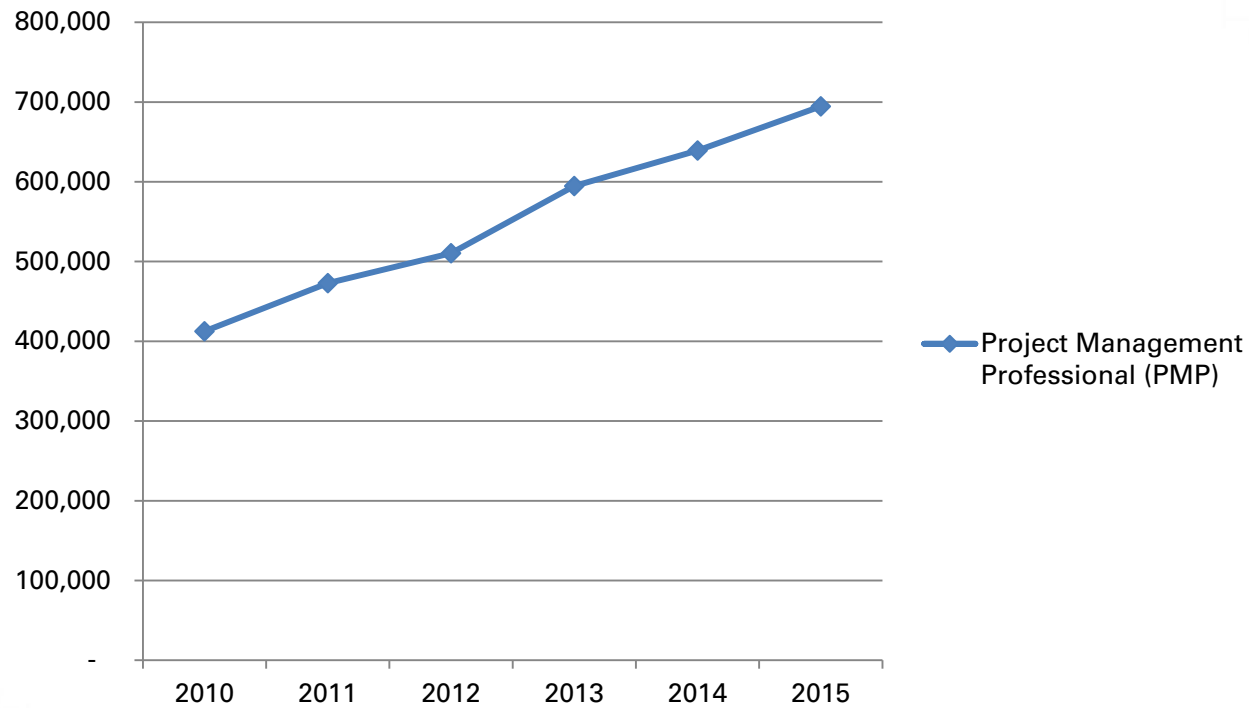
# Certified Associate in Project Management (CAPM)





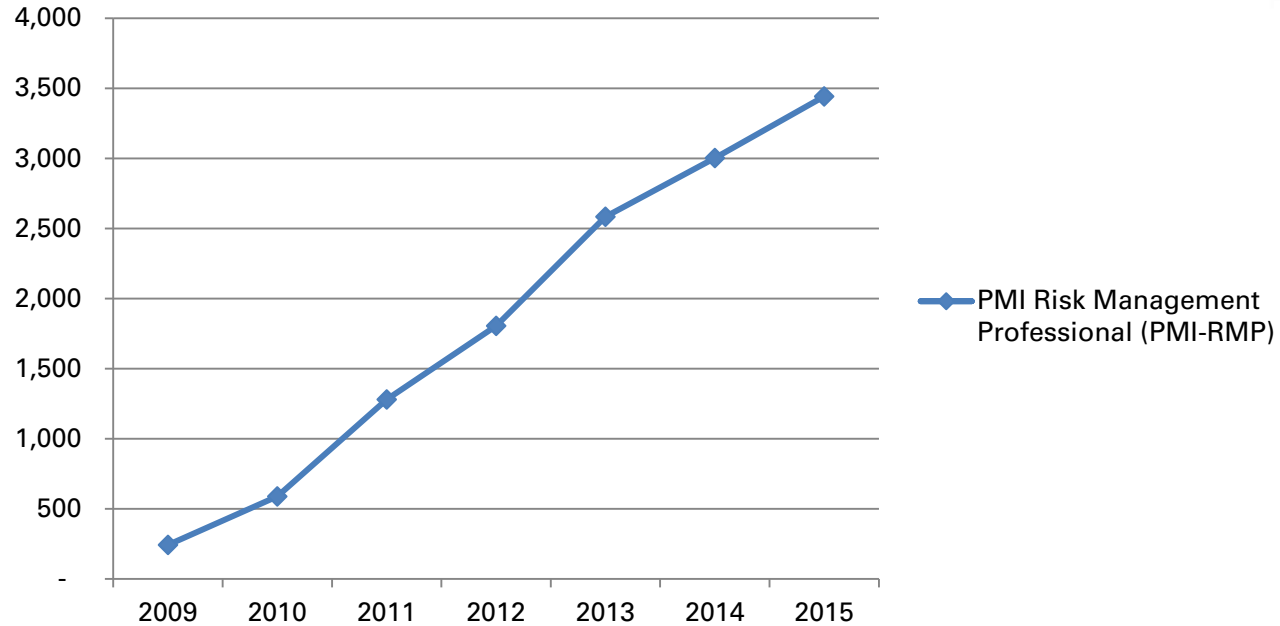


# Project Management Professional (PMP)



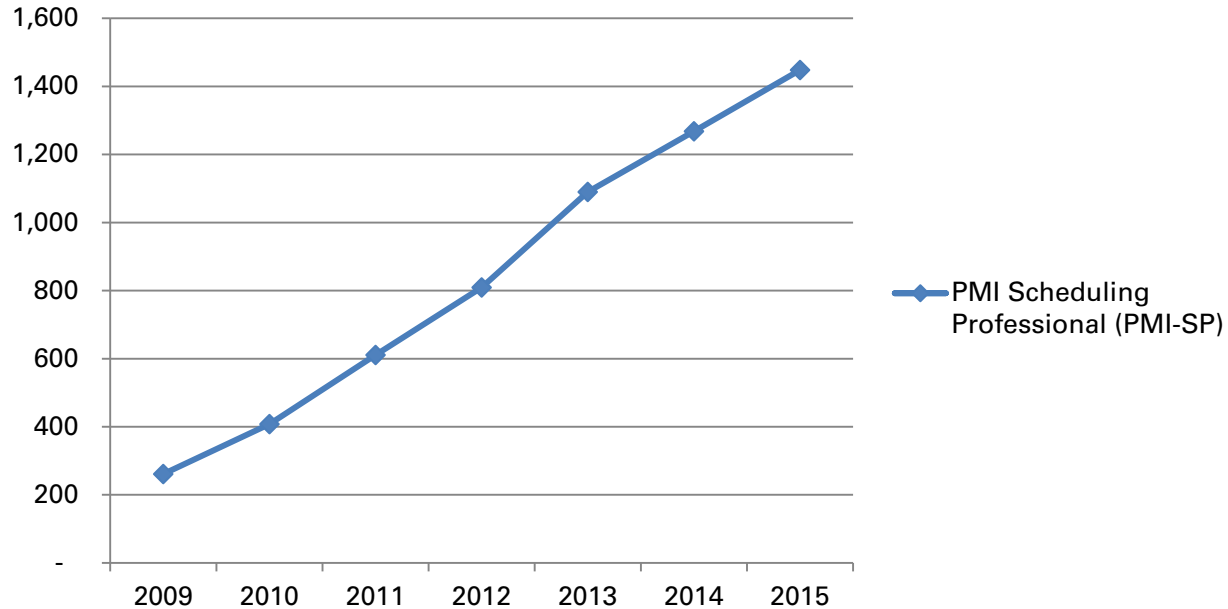


# PMI Risk Management Professional (PMI-RMP)



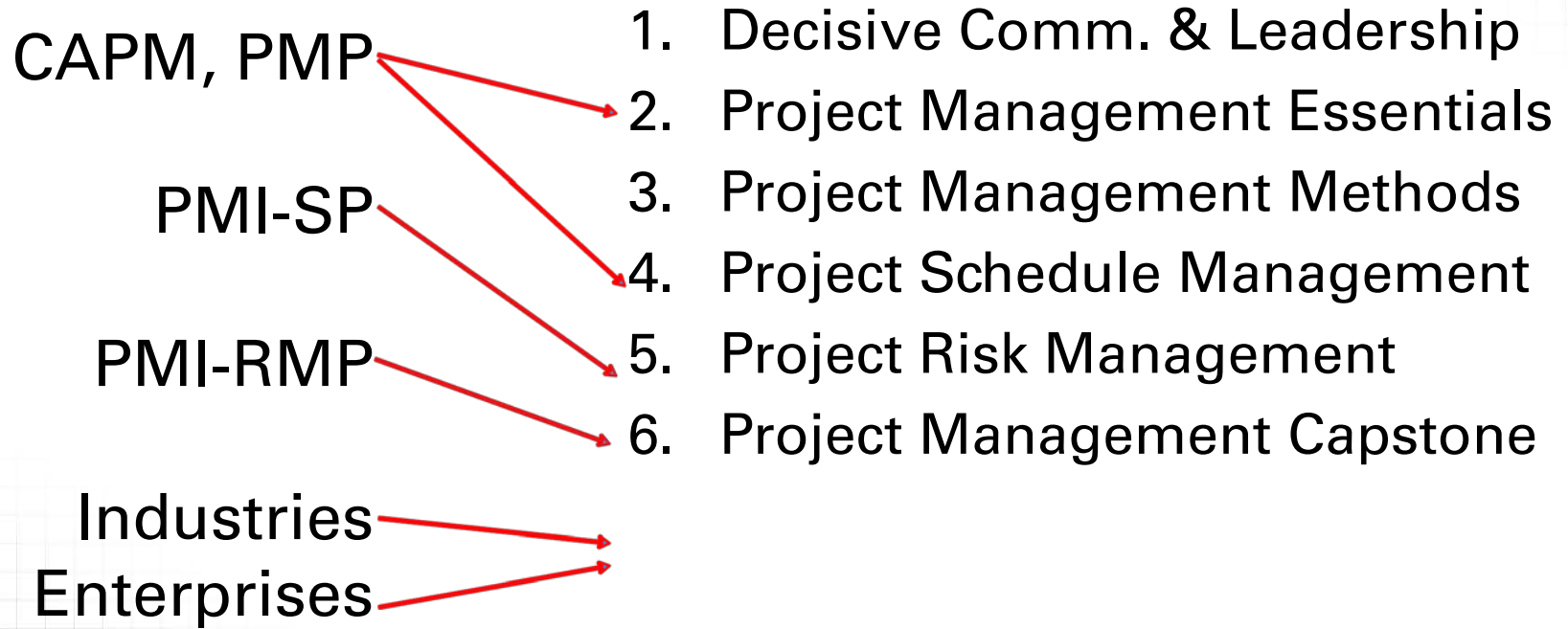


# PMI Scheduling Professional (PMI-SP)





# PMI Credentials & Industries Alignment





# Curriculum Architecture





## Summary of Differences between CBE and Traditional

CBE	Traditional
Program can be aligned with market requirements.	Program is generally knowledge-based.
Competencies are specified.	Courses are specified.
Study pace may vary for different students.	Study pace is generally the same for all students.
Financial aid is based on acquiring competencies.	Financial aid is based on time spent in the program.
Since the program is individualized, it is suitable for online mode and adults.	The program is generally offered face to face.