PJM 5900. Foundations of Project Management. 4 Hours. 
Examines the differences between general and project management responsibilities. Introduces the Guide to the Project Management Body of Knowledge (PMBOK), which provides a structured approach to understanding project process groups and knowledge areas needed to manage any size project through a complete project life cycle. Explains high-level distinctions between project, program, and portfolio management. Includes an introduction to Microsoft Project, which is one of the most widely utilized project management software tools. Strongly recommended for students with little or no formal project management experience.

PJM 5976. Directed Study. 1-4 Hours. 
Offers independent work under the direction of members of the department on a chosen topic.

PJM 5978. Independent Study. 1-4 Hours. 
Offers independent work under the direction of members of the department on a chosen topic.

PJM 5984. Research. 1-4 Hours. 
Offers students an opportunity to conduct research under faculty supervision.

PJM 6000. Project Management Practices. 3 Hours. 
Provides an overview of the project management process. Emphasizes project definition, identification of project scope, project life cycle, and project planning. Uses case studies to examine best practices and common project management pitfalls.

PJM 6005. Project Scope Management. 3 Hours. 
Offers insight into how projects are defined, evaluated, and ultimately translated into manageable project requirements and concrete deliverables. By learning how to identify stakeholder needs and convert those needs into viable, measurable project scope documentation, a project manager can successfully manage not only a project's scope but also make informed recommendations when trade-offs between project scope, cost, and schedule become necessary.

PJM 6010. Project Planning and Scheduling. 3 Hours. 
Offers students an opportunity to learn effective operations research tools and techniques that allow project managers to translate specifications to realistic project plans, minimizing bottlenecks and downtime, and to learn to identify and plan for resource needs, develop contingencies, and manage risk and scope creep. A well-thought-out and well-managed schedule is critical to successful project management.

PJM 6015. Project Risk Management. 3 Hours. 
Examines quantitative techniques for risk assessment and decision making, as well as the steps and elements of a risk management plan, including the ongoing monitoring of risk factors. The accurate identification of risks, and understanding of how to account for the potential impact of risks, can greatly impact the likelihood of project success.

PJM 6020. Project Cost and Budget Management. 3 Hours. 
Explores cost estimation methods, break-even analysis, earned value management, and developing confidence levels. Offers students an opportunity to learn to manage the project budget and revise cost estimates. Topics include outsourcing decisions and management, vendor selection and negotiation, and general cost containment.

PJM 6025. Project Scheduling and Cost Planning. 3 Hours. 
Builds on the project schedule to explore cost estimation methods, break-even analysis, and earned value management. Studies effective tools and techniques that can allow project managers to translate specifications to realistic project plans that lead to a resource-loaded schedule and baseline budget. These tools and techniques can be used to minimize bottlenecks and downtime, identify and plan for resource needs, develop contingencies, and manage risk and scope creep. Topics include schedule development, cost estimating, and cost and schedule management through earned value management. A well-thought-out and well-managed schedule is critical to successful project management and is integral to the efficient management of project costs. Offers students an opportunity to learn to manage the project budget, revise cost estimates, and develop confidence levels.

PJM 6125. Project Evaluation and Assessment. 3 Hours. 
Offers students an opportunity to learn to develop metrics for determining and reporting project performance. Examines both quantitative and qualitative approaches of evaluation, with an emphasis on earned value management. Examines stakeholder analysis and techniques for reporting performance results.

PJM 6130. Organizational and Financial Views of Projects. 3 Hours. 
Designed to provide project managers with a basic understanding of the core financial concepts driving project management. Focuses on the use and application of financial techniques in managerial decision making. Covers financial statements, project costs and value, risk and return, and capital budgeting and financial strategy.

PJM 6135. Project Quality Management. 3 Hours. 
Designed to provide detailed instruction in Project Quality Management (PQM) processes, one of the nine knowledge areas outlined in the Project Management Institute's Project Management Body of Knowledge. Discusses how to integrate PQM processes into the overall project plan and how to prepare a PQM plan. Encourages students to work together in a team environment to complete a PQM plan for a project.

PJM 6140. Managing Troubled Projects. 3 Hours. 
Examines how to prevent failed and troubled projects, how to perform a project assessment/audit, how to develop a troubled project recovery plan, and how to develop a failed project shutdown plan. Includes team presentations of case study assignments to gain experience in managing and avoiding failed and troubled projects, one of the most significant assignments for a project manager.

PJM 6145. Global Project Management. 3 Hours. 
Expands the detailed treatment of project management into the global areas of environmental factors, national differences, cultural differences, outsourcing, and virtual project management. The state of the art in project management has advanced to heavy use of global project management. Addresses the Project Management Institute’s Project Management Body of Knowledge practices as applied in the organization and the future of project management.
PJM 6150. Project and Portfolio Management within the Enterprise. 3 Hours.
Explores tools and techniques for identifying, selecting, and deselecting in order to develop a balanced and desirable mix of projects to nurture by means of project termination decisions and management. Project managers often find themselves managing multiple projects that are sometimes interrelated and complex. The ability to successfully manage multiple projects, their resources, and the interproject relationships is now a sought-after skill for project managers. Effective portfolio management improves the speed and quantity of multiproject flow through the organization by minimizing unnecessary multitasking and shifting of priorities.

PJM 6155. Project Planning, Scheduling, and Implementation. 6 Hours.
Offer students an opportunity to work with effective tools and techniques that allow project managers to translate specifications to realistic project plans, plan for resource needs, analyze critical path and contingency planning strategies, become familiar with cost estimation and budgeting methods, as well as how cost and budget management impacts the development and execution of the project plan. Emphasizes that a well-thought-out and well-managed schedule is critical to successful project management.

PJM 6160. Project Risk and Quality Strategies for Project Success. 6 Hours.
Focuses on how risk and quality management can positively or negatively impact project goals and outcomes. The accurate identification of risks and quality metrics and the understanding of how to account for the potential impact can greatly impact the likelihood of project success. Examines quantitative techniques for risk and quality assessment and decision making, as well as the steps and elements of a risk and quality management plan, including the ongoing monitoring of progress.

PJM 6165. Project Evaluation and Financial Analysis. 7 Hours.
Offers students an opportunity to develop metrics for determining and reporting project performance. Examines both quantitative and qualitative approaches of evaluation, with an emphasis on earned value management. Students create two separate evaluation plans—one for performance evaluation to report project status and the other to provide tactical approaches for getting the project back on track when variances are found. Examines stakeholder analysis and techniques for reporting performance results. Introduces core financial concepts driving project management, including financial statements, project cost and value, risk and return, and strategies for planning capital.

PJM 6170. Project and Portfolio Management. 7 Hours.
Defines the strategies, processes, methods of information, analysis, and preferred deliverables of an effective portfolio management approach. Focuses on how to select a balanced and desirable mix of projects, implementing enterprise-level project portfolio management (PPM) based upon the organization's strategic business goals. Covers the design and implementation of a project management office (PMO). Also presents strategies to prevent failed and troubled projects, to perform a project assessment/audit, to develop a troubled-project recovery plan, and to develop a failed-project shutdown plan.

PJM 6205. Leading and Managing Technical Projects. 3 Hours.
Offer students an opportunity to learn about leadership and management skills and strategies needed to succeed in a demanding technical project environment. Many project managers understand the technical aspects of a particular project environment but lack these critical management and leadership skills. Topics covered include understanding the technical environment, managing and motivating team members, understanding organizational culture, interpersonal strategies, and developing a personal leadership approach.

PJM 6210. Communication Skills for Project Managers. 3 Hours.
Offers students an opportunity to learn strategies for communicating technical concepts in a clear, concise, and appropriate manner for both written and oral communication media. In all project environments, communication is critical for project success. The ability to craft project reports and to communicate with customers, clients, team members, and company executives is critical for anyone leading technical projects. Often, the project manager needs to communicate technical data to a nontechnical audience. Explores various communication models and approaches with a focus on applying those models in a real-world context.

PJM 6215. Leading Remote Project Teams. 3 Hours.
Offers students an opportunity to learn strategies for creating a cohesive, high-performing project team in a remote project environment. The challenges of leading a remote project team are apparent to anyone who has attempted it. The technological challenges are complicated by the reality that most teams have participants located around the world. Therefore, we face not only the standard fare of interpersonal challenges but also cultural challenges as well.

PJM 6220. Planning and Scheduling Technical Projects. 3 Hours.
Offers students an opportunity to learn to plan and schedule projects using a variety of techniques, such as agile, critical chain, and other appropriate methodologies. Technical projects can present unique challenges and opportunities. To meet these challenges and capitalize on the opportunities, a variety of planning and scheduling techniques can be applied. Students practice applying a variety of planning and scheduling techniques through the use of case studies and applied project assignments.

PJM 6705. Portfolio Management in the Enterprise Environment. 3 Hours.
Defines the strategies, processes, methods of information, analysis, and preferred deliverables of an effective portfolio management approach. An ever-increasing number of project managers are being asked to manage multiple, sometimes interrelated, complex projects. This is now a cornerstone skill for a senior project manager. Offers students an opportunity to learn how to identify, select, and de-select in order to develop a balanced and desirable mix of projects to nurture by means of project termination decisions and management, as well as to attain a knowledge of the components, significance, and challenges of implementing enterprise-level project portfolio management (PPM) based upon the organization's strategic business goals.

PJM 6710. Introduction to Program and Portfolio Management. 3 Hours.
Examines project, program, and portfolio management with a primary focus on the similarities and distinctions between program management and portfolio management. Offers students an opportunity to develop and evidence a foundational understanding of program and portfolio management and the critical role these play within today's global environment.

PJM 6715. Advanced Program Management. 3 Hours.
Offers students an opportunity to develop a deep understanding of program management and the program management life cycle. Covers best practices for developing and managing a program that is consistently aligned with the strategic direction of the organization, ensuring that stated benefits are realized. Uses case studies and real-world examples throughout to engage students in an experiential and applied manner.
PJM 6720. Advanced Portfolio Management. 3 Hours.
Offers students an opportunity to develop a mature understanding of portfolio management topics, techniques, and tools. Emphasizes learning to identify, prioritize, and oversee a portfolio of programs and projects that deliver value aligned with the strategic direction of the organization. Applied exercises and case studies used throughout the course are designed to ensure students are able to understand how to apply these competencies in a workplace-ready manner.

PJM 6725. Program and Portfolio Leadership. 3 Hours.
Discusses the leadership challenges and opportunities present to those who work in program and portfolio management roles, including engaging stakeholders effectively, communicating with senior-level executives, and managing the competing priorities associated with creating successful programs and a balanced and benefits-oriented portfolio. The ability to meet the leadership challenges inherent to program and portfolio management is essential for success in managing the dynamics of project management programs and portfolios.

PJM 6730. Program and Portfolio Evaluation. 3 Hours.
Offers students an opportunity to learn the skills and tools they need to evaluate and measure performance at the program and portfolio level with attention given to identifying and measuring benefits and their continued value to accomplishing the strategic goals of the organization. A key benefit of effective and impactful program and portfolio management is the ability to develop and utilize meaningful qualitative and quantitative metrics at the project, program, and portfolio level.

PJM 6735. Program and Portfolio Management Capstone. 3 Hours.
Offers students an opportunity to complete a capstone project that illustrates their mastery of competencies taught throughout the program. Capstone projects should evidence a student’s ability to apply their learning in an experiential manner to solve a real-world challenge faced by program and portfolio managers.

PJM 6740. Managing Program and Portfolio Risk and Complexity. 3 Hours.
Examines program and portfolio management with a primary focus on the development of risk-management plans and risk-response plans at the program and portfolio levels. Explores techniques to recognize and address complexity factors as well as developed enterprise-level risk-management challenges and opportunities.

PJM 6750. Strategic Management and Decision Making for Program and Project Portfolio Managers. 3 Hours.
Explores strategic management frameworks and decision-making models that can be applied to the creation and management of programs and portfolios. Program and portfolio managers are challenged to ensure that their collection of projects and programs optimizes realization of organizational strategies. Emphasizes the role of globalization and virtualization, as well as working in increasingly dynamic strategic environments. Topics include environmental analysis; analysis of strengths, weaknesses, opportunities, and threats (SWOT); strategy formulation; development of business cases; and strategy implementation.

PJM 6810. Principles of Agile Project Management. 3 Hours.
Provides an overview of the fundamentals of agile project management. Topics include agile vs. traditional approaches, the agile manifesto, and the development of agile as a value-added business practice. Introduces key agile project management practices, including communication management planning and risk-management planning. Reviews agile-specific practices and method tailoring from an application perspective. Investigates agile project management tools.

PJM 6815. Advanced Agile Project Management. 3 Hours.
Constitutes an advanced offering focusing on specific approaches to executing projects in an agile environment. Seeks to provide the student with a firm grounding and an applied, experiential understanding of specific agile approaches. Offers students an opportunity to engage in real-world-oriented case studies to evidence a strong understanding of the methodologies in a practical, experiential manner by planning and simulating an agile project using a methodology taught in the course.

PJM 6820. Agile Implementation and Governance. 3 Hours.
Explores the implementation of agile within an organization and the governance structure to support agile projects. Studies the use of change management techniques to address stakeholder needs as the organization moves from a traditional to agile or blended approach to projects. Reviews and applies advanced topics in program/ portfolio management in agile environments. Offers students an opportunity to develop an implementation strategy and governance plan.

PJM 6825. Agile Lean Product Development. 3 Hours.
Offers a practical overview of modern lean/agile product exposure based on contemporary industry practice. To win in today’s competitive market requires giving your business the ability to deliver highly profitable products faster than the competition. Covers the complete life cycle of product management, from identifying customers and users through to sales, marketing, and managing teams. Covers how to minimize investment and output while maximizing the information discovered in order to support effective decision making.

PJM 6910. Capstone. 3 Hours.
Offers students an opportunity to utilize all of the project management skills they have acquired in this master’s certificate program to evaluate project processes and outcomes of a single project throughout the entire project life cycle. Examines both quantitative and qualitative methodologies, with an emphasis on tactical approaches and earned value management. Also examines stakeholder analysis and practical techniques for reporting performance results. Intended to be the final course in the project management curriculum after successful completion of all other courses.

PJM 6961. Internship. 1-4 Hours.
Provides students with an opportunity for internship work. May be repeated without limit.

PJM 6962. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

PJM 6964. Co-op. 0 Hours.
Provides eligible students with an opportunity for work experience.

PJM 6966. Practicum. 1-4 Hours.
Provides eligible students with an opportunity for practical experience.

PJM 6970. Seminar. 1-4 Hours.
Offers an in-depth study of selected topics.

PJM 6980. Capstone. 7 Hours.
Covers the key elements of project management as defined by the “Guide to the Project Management Body of Knowledge.” Offers students an opportunity to prepare individual sections of the plan (including a focus on stakeholder identification, scope, time, cost, quality, risk, communication, human resources, and procurement) and then integrate these sections; to review earlier sections as each new area is planned, revising them to coordinate with the recent added plans; to develop a change management plan to ensure that this integration and coordination is maintained throughout the project life cycle; and to conduct a “lessons learned” session and incorporate the suggestions from this review to improve and finalize their integrated plan.
PJM 6983. Topics. 1-4 Hours.
Covers special topics in project management. May be repeated without limit.

PJM 6995. Project. 1-4 Hours.
Focuses on in-depth project in which a student conducts research or produces a product related to the student's major field. May be repeated without limit.

PJM 7976. Directed Study. 1 Hour.
Offers students an opportunity to carry out an individual reading and research project under the supervision of a faculty member. The directed study format allows for the thorough study of a particular topic not covered in-depth or the study of a subject not typically covered at all in the curriculum. A directed study proposal must be approved by the faculty sponsor, division head, and dean of academic affairs.