Project Management (PM)

Courses

PM A430 Systems Engineering Fundamentals 3 Credits
Explores the systems engineering process from requirements to functional analysis and solution architecture. Analyzes the process, methods and tools for the orchestration of work in multiple project disciplines and the integration of logistics throughout the entire project or product life cycle.

Special Note: Not available for credit to students who have completed PM A630.

Registration Restrictions: Instructor approval may be required
May Be Stacked With: PM A630

PM A601 Project Management Fundamentals 3 Credits
Fundamentals of project management to initiate, plan execute, monitor, control and close projects in different organizational and industry contexts. Alignment with strategic and operational objectives and stakeholder requirements. Hands-on application of tools and methodologies. Interactive and collaborative learning environment emphasizes communication, leadership, teamwork and professionalism.

Registration Restrictions: Graduate level standing and PM Department approval

Prerequisites: PM A601 or concurrent enrollment.

PM A602 Application of Project Management Processes 3 Credits
Application of project management processes from project inception through closeout. Integration of project management processes in all nine Knowledge Areas through use of hands-on, end-to-end project case studies. Demonstrates mastery of project leadership, project requirements definition, stakeholder management, change control, schedule management, risk management, professional responsibility, effective communication and teamwork.

Registration Restrictions: Graduate level standing and PM Department approval

Prerequisites: PM A601 or concurrent enrollment.

PM A603 Project Initiation and Planning 3 Credits
Explore in depth Project Management (PM) Knowledge Areas, tools and techniques, and the necessary considerations when initiating and planning complex projects. Introduce tools, methods and critical issues associated with the initiation and planning of a project management plan. Students will function in teams and will be challenged with preparing and planning projects with real-world relevance.

Registration Restrictions: PM Department approval and graduate level standing.
Prerequisites: PM A601 and PM A602.

PM A604 Project Executing, Monitoring and Control 3 Credits
Explore in depth Project Management (PM) Knowledge Areas, tools and techniques, and the necessary considerations when in the executing, monitoring and controlling phases of basic and complex projects. Introduce tools, methods and critical issues associated with the execution, monitoring and controlling of a project management plan. Students will function as teams and will be challenged with monitoring and controlling projects with real world relevance.

Registration Restrictions: PM Department approval and graduate level standing.

Prerequisites: PM A601 and PM A602.

PM A605 Operational Integration and Project Closure 3 Credits
Explore in depth Project Management (PM) Knowledge Areas, tools and techniques, and the necessary considerations for operational integration and closure processes of complex projects. Introduce tools, methods and critical issues associated with the operation integration and closure processes of completing a project management plan. Students will function in teams and will be challenged with re-prioritizations and re-assignments projects across various industries with real-world relevance.

Registration Restrictions: PM Department approval and graduate level standing.

Prerequisites: PM A603 and PM A604.

PM A612 Project Time Management 3 Credits
Advanced project time management processes utilized to ensure on-time project completion. Processes include defining project activities, sequencing activities, estimating activity duration, and developing and controlling the project schedule. Project scheduling software will be utilized in these processes.

Registration Restrictions: Graduate level standing.

PM A623 Stakeholder Engagement and Collaboration 3 Credits
Theory, case studies and hands-on application of tools to ensure effective identification, engagement, collaboration and alignment with and among stakeholders from project inception through planning, execution, closure and successful operational integration.

Registration Restrictions: Graduate standing or instructor permission

Prerequisites: PM A601 with a minimum grade of C and PM A602 with a minimum grade of C.

PM A624 Advanced Project Risk Management 3 Credits
Examines methods and processes of planning for, identifying, assessing, prioritizing, monitoring and responding to project threats and opportunities. Qualitative and quantitative risk analysis processes, including risk modeling and simulation, risk ranking, and risk mitigation and response techniques.

Registration Restrictions: Graduate standing and statistics course, or instructor permission.

Prerequisites: PM A601 with a minimum grade of C and PM A602 with a minimum grade of C.

PM A626 Project Procurement Management 3 Credits
Procurement management processes for project planning, solicitation, source selection, contract administration, and contract closeout are presented.

Registration Restrictions: Graduate level standing.
PM A630 Systems Engineering Fundamentals 3 Credits
Explores the systems engineering process from requirements to functional analysis and solution architecture. Analyzes and applies the process, methods and tools for the orchestration of work in multiple project disciplines and the integration of logistics throughout the entire project or product life cycle.

Special Note: Not available for credit to students who have completed PM A430.

Registration Restrictions: Graduate standing or instructor approval
May Be Stacked With: PM A430

PM A652 Advanced Project Controls 3 Credits
Advanced principles of project control and analysis including the development and integration of Work Breakdown Structure, risk analysis, resource performance, task and project metrics, and cost, with schedule and risk management tracing.

Registration Restrictions: Graduate standing or instructor permission
Prerequisites: PM A603 with a minimum grade of C.

PM A650 Information Technology Project Management 3 Credits
Advanced evaluation, selection, application, and assessment of Information Technology Project Management approaches, methodologies, processes, and measurements and control techniques to improve the strategic and operational performance of IT projects in organizations and enterprises.

Registration Restrictions: Graduate academic standing and PM departmental approval
Prerequisites: PM A601.

PM A651 Advanced Construction Project Management 3 Credits
Advanced application of project management principles and processes used in the strategic selection, planning and management of construction and development projects from concept through operation. Identification, selection and application of field engineering systems and procedures to effectively meet construction project objectives.

Registration Restrictions: Graduate level standing and PM Department approval.
Prerequisites: PM A601.

PM A652 Project Definition and Research Methods 3 Credits
Explores the techniques used to identify customer requirements for proper definition of a project and describe tools and methods to conduct research projects in project management knowledge areas.

Registration Restrictions: Graduate standing and statistics course or instructor permission

PM A653 Project Management Application Tools 3 Credits
Explore widely-used tools in project management knowledge areas and apply them to practical problems. Includes software and non-software tools essential for dealing with unique and challenging problems in project management situations.

Registration Restrictions: Graduate standing or instructor permission
Prerequisites: PM A601 with a minimum grade of C.

PM A686A Capstone Project: Initiating and Planning 3 Credits
Initiating, planning and researching a sponsored, student-selected and faculty-approved capstone project undertaken to research and/or contribute new concepts, tools and capabilities to address relevant project management challenges. Demonstrates mastery of project management principles, processes, tools/techniques and cumulative knowledge gained from prior coursework as specifically applied to project initiating and planning processes.

Registration Restrictions: Graduate level standing and department approval
Prerequisites: PM A603 with a minimum grade of B.

PM A686B Capstone Project: Executing, Controlling and Closing 3 Credits
Executing, controlling and closing component of a sponsored, student-selected and faculty-approved capstone project undertaken to research and/or contribute new concepts, tools and capabilities to address relevant project management challenges.

Registration Restrictions: Graduate level standing and department approval
Prerequisites: PM A604 with a minimum grade of B and PM A686A with a minimum grade of B.

PM A690 Selected Topics in Project Management 3 Credits
Exploration of advanced issues, unique areas and specialized topics related to project management.

Registration Restrictions: Admission to the MSPM program or ESPM Department approval.
Special Note: May be repeated with a change in subtitle.
Prerequisites: PM A601.

PM A695 Project Management Internship 1-6 Credits
Provides students with opportunities to practice project management skills in a professional environment. Professional work experience designed to provide students with the opportunity to investigate practical applications of project management tools and techniques within an organization. Assignments and projects arranged with cooperating organizations and agencies.

Registration Restrictions: Graduate level standing and ESPM Department approval
Prerequisites: PM A603 or PM A604.

PM A698 Individual Research 3-6 Credits
A project to be designed between the student and faculty members to allow the opportunity to pursue special advanced interests in project management. Students complete an applied research project that involves the conceptualization, design, implementation and dissemination of results and outcomes that demonstrate mastery of project management concepts and contribute to the project management body of knowledge and professional practice.

Registration Restrictions: Graduate standing and instructor approval
Prerequisites: PM A601 and PM A602.