About the Program
This seminar provides a comprehensive introductory overview of project management that focuses on development and delivery of projects in an iron and steel mill environment.

Project management fundamentals that will be covered include project setup and stakeholder engagement; scope development and control; engineering practices and tools; and project controls including estimating, scheduling and cost, project safety practices, risk management, construction methods, quality management, change management and commissioning and start-up. A focus will be put on outage-based projects including planning to mitigate risks and result in a vertical start-up. The curriculum will follow best practices for project management, but with a focus on aspects that are critical to success in a heavy industrial environment. The course will be taught by a variety of personnel from owners, engineering and project management firms, original equipment manufacturers (OEMs), and construction contractors.

Attendees will leave this course with a better understanding of the project fundamentals, allowing them to better manage all aspects of projects including major mill and furnace shutdowns.

Who Should Attend
Anyone who would like to expand their knowledge and understanding of project management and outage planning; this includes plant and capital projects engineering, maintenance, operations and management personnel as well as personnel from engineering firms, OEMs and construction contractors who are involved in project management.

Registration Fees
Advance registration by 23 August 2023: Member US$845, Non-member US$1,095. Registration fee after 23 August 2023: Member US$945, Non-member US$1,195. Registration includes breakfast and lunch Wednesday–Thursday, reception Wednesday, and a course workbook or flash drive including presentations.

Hotel Accommodations
Please call the hotel at +1.614.463.1234 by 12 September 2023 to secure the AIST discount rate of US$189 per night for single/double occupancy.

Professional Development Hours
This course may qualify for up to 14 Professional Development Hour (PDH) credits. Each attendee will receive a certificate listing the quantity of PDH credits earned for the course. This course is not approved for PDH credit in New York, Florida, North Carolina and Oklahoma.

Attention Non-Members
Non-member registration fees include membership in AIST through 31 December 2024. Membership is not automatic. A completed membership application must be returned to AIST.

Organized By
AIST’s Project & Construction Management Technology Committee.
Wednesday, 4 October 2023

7 a.m.  Registration and Breakfast

8 a.m.  Introduction to Project Management
        Neil Tannyan, Hatch
        This module will provide an overview of project terminology, project definition and setup, project charter, stakeholder engagement, overview of stage gate approaches, communication, team development and management. Safety management plan development and project execution plan (PEP) structure will also be discussed.

9 a.m.  Scope Development and Management
        Sean McCann, United States Steel Corporation
        This module will cover design basis, facility structure, work breakdown structure (WBS), customer requirements, etc. Financial analysis and business case development, early scope review and options analysis will be covered.

10 a.m.  Break

10:30 a.m.  Project Controls Setup and Scope Control
            Jeff Kuroien, Hatch
            Developing control budget, work packages, reporting, performance measurement, forecasting and change management. The discussion will introduce engineering work packages (EWPs) and construction work packages (CWP).

11:30 a.m.  Engineering Project Management
            Matthew Benovic, R. E. Warner & Associates Inc.
            The module covers: Setup of engineering work packages (EWPs) and correlation with construction work packages (CWP), document control, design for safety and HAZOP, testing, surveying and laser scanning, and value engineering.

12:30 p.m.  Lunch

1:15 p.m.  Digital Project Delivery
            Doug Sinclair, Hatch
            This presentation provides an introduction to BIM/7d and familiarizes attendees with the latest tools and applicability for various types of projects. Setting up a BIM execution plan will be covered. Discussion will include an overview of the use of smart 3D models from engineers to contractors, including benefits of stakeholder buy-in and types of models. The presentation will also cover the use of 3D laser scans, greenfield vs. brownfield projects; and how far to take digital project delivery.

2:15 p.m.  Integrated Project Delivery
            Brandon Leslie, Barton Malow
            Discussion of the mechanics of the integrated project delivery process with an emphasis on how transparency, partnership and team alignment lead to improved project outcomes (lower risk, lower cost, less litigation, better quality, better schedule).

3:15 p.m.  Break

3:45 p.m.  Schedule
            Jim Weinheimer, Middough Inc.
            This session will cover various aspects for schedule development, such as types of schedules; level of detail used in schedule; software programs utilized; the level of effort required to develop schedules; and how to organize, breakdown, filter, maintain and update a schedule. The session will cover the importance of breaking down and integrating the owners, engineers, equipment and fabrication suppliers, and contractors; and commissioning, start-up and close-out activities. This session will briefly discuss other aspects of information that can be incorporated into schedules and the information that can be extracted and reported during various phases of a project.

5-6 p.m.  Reception

Thursday, 5 October 2023

7 a.m.  Breakfast

8 a.m.  Risk Management
        Randy Heisler, Life Cycle Engineering
        This new project and construction are exciting, but also bring risk to the operation that must be identified prior to and during the project. This presentation will discuss risk mitigation techniques, monitoring and lowering operational risk.

8:30 a.m.  Quality Management
            Sean McCann, United States Steel Corporation
            The module covers: objectives for design life, vendor quality requirements and surveillance including quality inspections/audit and factory acceptance testing. The material will also review construction quality management.

9 a.m.  Safety
        Sean McCann, United States Steel Corporation
        Construction safety is significantly different from operational/maintenance safety. This module covers best practices for safety during construction, commissioning and start-up.

9:45 a.m.  Break

10:15 a.m.  Site Logistics
            William Kesterson, R. E. Warner & Associates Inc.
            Often overlooked is the impact of site access and materials management. This module will cover an introduction to site access and logistics considerations, materials and equipment receiving and storage, and trailer area setups.

10:45 a.m.  Progress Tracking and Earned Value During Implementation
            Larry Flowers, Kiewit Energy Group
            This module will discuss procedures for reviewing and processing change orders, and cost and schedule management, in particular related to construction costs (labor and material tracking and verification).

11:30 a.m.  Change Management
            Jim Weinheimer, Middough Inc.
            This session will discuss the importance of change management for a project. Topics to be covered are when change management should be started; types of changes; how to identify and document changes; reviewing, approval, and resolution methods; change logs; and tracking and reporting of changes during the project.

Noon  Lunch

1 p.m.  Outage-Based Projects
        Neil Tannyan, Hatch
        Implementing outage-based projects where a significant portion of the construction occurs during a production unit shutdown is the most challenging type of project. This module will discuss outage planning and management techniques to ensure the outage duration is realistic and is achieved.

2 p.m.  Construction Techniques
        Ted Vehas, Cleveland-Cliffs Indiana Harbor
        Introduction to construction techniques and terminology: Modularization, types of piling, types of rigging, electrical, welding, shoeing, embeds, anchor bolts, etc. The presentation will review various disciplines’ construction techniques at a high level. Discussion will also involve pre-installation fabrication and modularization.

3 p.m.  Break

3:30 p.m.  Commissioning and Start-Up Planning
            Ray Young, Primetals Technologies
            This module will cover testing, cold and hot commissioning, and production ramp-up. It includes testing/flushing, first fills, IO checkout and cold commissioning/hot commissioning; consideration for automation upgrades using off-line testing; and gradual ramp-up vs. outage in developing the plan.

4:30 p.m.  Wrap-Up — Key Factors of Successful Projects: Planning, Teamwork and Communication
            Neil Tannyan, Hatch