Course Overview
Course number: MOPC-0003
Course length: 1 day

Understanding the benefits and risks of OPC technology helps integrators and end users obtain success with their connectivity projects.

During the course, students will:
- Review risk assessments and risk mitigation plans of critical data architectures aid in successful OPC deployment
- Learn how to create a secure OPC network infrastructure that meets business needs while complying with Governmental Legislation
- Learn common advanced architectures and solutions that are being used by many industries today to solve connectivity issues

Students will learn best practices within OPC project deployment as well as security legislations and how they affect OPC architectures. Students will also review how IT asset monitoring can be achieved using OPC. The course will conclude with a practical exercise where students will be given business requirements and asked to design and troubleshoot an OPC architecture.

Course Benefits
Students will learn:
- How to design efficient and robust OPC architectures
- OPC Project Risk Assessment using trusted taxonomy
- Best Practices during OPC project implementation
- When and when not to use OPC

Completion of MOPC-0002 and MOPC-0003 will grant the student to receive MatrikonOPC Systems Integrator certification. To learn more about MatrikonOPC Systems Integrator certification and how the completion of this course can be used for Educational and Professional Credits visit:
http://matrikonopc.com/training/workshops/opc-workshops-opcsi-certification.aspx

Course Topics
- Managing the Risk for OPC Project Deployment: This module explores how project management ideology can be applied to OPC implementation projects. Students will review the common questions that every user should ask their vendor before implementing an OPC project. These include: “Has the product been OPC Certified?” “Has your architecture been signed off by a certified architect?” and many more. The module also covers the steps in an OPC Project Execution to achieve maximum system reliability, and the importance of risk assessments and mitigation in critical data architectures for successful OPC Deployment

Who Should Take This Course?
Those who require a deeper understanding of OPC technology and how and when it should be used. These include:
- Automation Professionals
- Instrumentation Professionals
- Process Control engineers
- IS / IT
- Project Managers
- EPC Contractors
- End Users

Prerequisite/Skill Requirements
Prerequisite Course(s)
- MOPC-0002

Required Skills and/or Experience
- Microsoft Windows and basic computer use
- An understanding of automation requirements

Desirable Skills and/or Experience
- None

Course Delivery Options
- In-Center Instructor-Led Training
- On-Site Instructor-Led Training
Course Topics continued

- **Implementing Security in OPC Projects**: Cybersecurity is necessary for process control networks if they intend to integrate with business networks. Due to the pervasive nature of Windows and DCOM, when the IT department locks down communication, many applications, including OPC applications, are affected. Students will review how government legislations such as SOX, NERC can affect current OPC communication. Students will also learn how to implement secure OPC architecture while complying with corporate and government legislations.

- **OPC Health Monitoring**: Many companies have an increased focus towards predictive or condition based maintenance. However, in many cases, maintenance strategies do not include the IT hardware or software associated with the collection, transmission, and analysis of their process data. It becomes increasingly difficult to manage and predict when and why problems are occurring. This module focuses on the guiding principles for designing OPC IT Health Monitoring architectures.

- **OPC Architecture Design**: As part of this module, students will be given a set of business requirements (including budgetary and hardware limitations) and asked to design and implement an OPC architecture based on those requirements. Once the OPC architecture has been implemented, the instructor will disrupt data flow and students will be asked to troubleshoot and resolve communication issues.

Additional Training

To increase your knowledge and skills, there are additional courses available from Automation College.