

DATE: July 28 and 29, 2020 TIME: 8:00am – 12:30pm PDT

### **OVERVIEW:**

BBA's two-day (4 hours per day) Principles of Community Asset Management course is designed to develop skills to manage portfolios of assets owned by communities. The course focuses on applications of the ISO:55000 standard for managing assets of any kind. Upon completion, students will understand the principles of integrated asset management and be able to help their communities realize value from their assets.

The course will be taught by Dr. Prodipto Ghosh. Dr. Ghosh has over 30 years of industry experience, has taught over 20 courses on specialist aspects of asset management and overseen 18 graduate students' thesis. Former students have commented on Dr. Ghosh's ability to present his expertise in an interesting, engaging manner that leads to understanding.

#### **SPEAKER DETAILS:**

Dr. Ghosh's 30+ years experience in engineering include asset management audit, asset management policy development and life cycle cost analysis. He is best known for his risk-based asset management framework for transformers, switchgear and cables.

He has been actively engaged in developing, organizing and conducting short courses since 1996 in Canada, Malaysia and India in the areas of maintenance, testing, protection, safety and asset management of electrical systems for engineers, technologists and field technicians from power utilities and industries. Over a period of 20 years he has built a strong research career through successful completion of three Ph.D. and 15 Masters level projects supervision in the field of high voltage insulation diagnostics and has published more than 50 technical articles in reputed international journals and conferences including IEEE.

#### **TARGET AUDIENCE:**

This program is designed for:

- Senior Managers/Policy Makers
- Technical/Maintenance/Asset Managers
- Process/Network Operators
- Maintenance Supervisors/Leads
- Maintenance Technicians
- Quality Assurance/Quality Control Specialists
- Maintenance & Testing Specialists (community has to decide whether the training can be extended to vendors)
- Maintenance Planner & Scheduler
- Tool Crib/Inventory Managers
- Reliability/Maintenance Engineers (community has to decide whether the training can be extended to vendors)
- Design Engineers (community has to decide whether the training can be extended to vendors)

About BBA: BBA has been providing a wide range of consulting engineering services for nearly 40 years. Today, its engineering, environmental and commissioning experts team up to quickly and accurately pinpoint the needs of industrial and institutional clients. The firm's expertise is recognized in the fields of energy, mining and metals, biofuels and oil and gas.







### **COURSE OUTLINE - DAY 1**

	DAY 1 - 8:00 am - 12:30 pm
8:00AM - 8:45AM	Introduction to Asset Management
	Introduction - Instructor and participants
	Define assets as per ISO55000
	Understand what a management system is, and what is the importance of asset management
	Know the standards that comprise the ISO55000 family
	Look at the history of asset management and how the ISO55000 standard evolved from PAS 55
	Key elements and hierarchy of policy, strategy, plan
	Understand the benefits of developing an asset management policy compliant with the ISO 55001 requirements
	Alignment of asset management strategy with corporate strategy.
	Visibility of operational performance through the asset management plans
8:45AM - 9:30AM	Case Example: Typical Municipal Asset Management Program Framework
9:30AM - 10:00AM	Exercise 1
10:00AM - 10:30AM	BREAK
10:30AM - 11:45AM	Asset Related Decisions, Life Cycle Value Optimization and Asset Lifecycle Delivery Activities
	Asset life cycle decision making
	Creation and acquisition of assets
	Demand analysis, asset design and capital investment choices
	Financial appraisal of projects
	Specification, procurement and installation of assets
	Operations and maintenance of assets
	Operations and maintenance work plans and resource plans
	Maintenance strategies - merits and demerits
	O&M decision making for optimal reliability of assets
	Shutdown planning
	Asset performance and capacity monitoring
	Extension of asset life / refurbishment
	Renewal, rationalization and disposal of assets
	Control operations for lifecycle activities, feedback and continuous improvement
	Application of whole lifecycle costing principles
11:45AM - 12:30PM	Case Example: Role of Operation & Maintenance in Asset Management

About BBA: BBA has been providing a wide range of consulting engineering services for nearly 40 years. Today, its engineering, environmental and commissioning experts team up to quickly and accurately pinpoint the needs of industrial and institutional clients. The firm's expertise is recognized in the fields of energy, mining and metals, biofuels and oil and gas.







### **COURSE OUTLINE - DAY 2**

	DAY 2 - 8:00 am - 12:30 pm
8:00AM - 8:45AM	Asset Information Needs and Information System
	Strategy, standards and asset information requirements
	Elements of asset information system and their relative value
	Collecting, archiving, analysing and reporting asset management information system
	Asset integrity - condition monitoring, condition health index and risk matrix
	Advanced asset analytics
	Asset information system management
	Benchmarking and industry best practices
8:45AM - 9:15AM	Contractor and Supplier Management
	Procurement policy, procurement standards
	Selection of contractors for goods and services
	Condition of supply
	Management of contractor performances and administration
	Meeting the strategic and policy goals through contractor and supplier management
9:15AM - 10:00AM	Case Example: Information Management is the foundation of Asset Management
10:00AM - 10:30AM	BREAK
10:30AM - 11:30AM	Management of Asset Related Risks
	Assessment and management of asset related risk
	Identify asset-related risks
	Understand the risk management framework
	Understand the importance of integration of asset management with organizational risk management
	Understand and apply some risk evaluation techniques
	Contingency planning
	Climate Change
	Management of change
	Contingency plans for Incident and emergencies response
	Asset management review and audit
	Key performance indicators and for
	Asset performance
	Asset management capabilities
	Asset management practices
	PDCA
	Asset management audit - framework
	Reporting
11:30AM - 12:00PM	Case Example: Municipality Perspective of Risk Management
12:00PM - 12:30PM	Exercise 2







#### **LEARNING OBJECTIVES**

This training will allow participants to:

- Understand the broader perspective of asset management, asset management subject areas, asset management framework and asset management as a profession;
- Recognize what is involved in creating an asset management strategy, policy and plan, and how these respond to business drivers and can be used to guide operational performance;
- Understand how to develop community-based asset management strategy, policy and plan;
- Explain how effective asset management practices can improve the bottom line of a business;
- Recognize the importance of analysing life cycle costs, risks and benefits of investment options;
- Recognize the role of operation and maintenance in asset management;
- Develop a realistic procurement criteria, identifying and evaluating procurement methods, determining terms and conditions, bidding, negotiating and monitoring the performance of suppliers/contractors;
- Recognize the purpose of identifying, assessing and mitigating risks from a community perspective associated with asset management to meet legal, regulatory, ethical and social requirements;
- Determine key performance indicators for asset management;
- Understand the necessity of asset management audit and reporting;
- Explain why resource planning, especially for maintenance, life-extension, decommissioning and disposal of assets, is critical for operational excellence;
- Recognize the importance of maintaining accurate and up-to-date asset management records, and
  understand how information systems become foundation and are used to support the delivery of an asset
  management plan.

### **COURSE DELIVERY**

This course has been designed as a web presentation where students will see the instructor in interactive video as well as course presentation material from their computers. Handouts and a quiz will be delivered through the web presentation.

The minimum class size is 4 people, the maximum class size is 10 people. Courses with 7 - 10 participants will have a moderator to support the instructor.

PRICING: \$650 per person

# **CLICK HERE TO REGISTER!**

About BBA: BBA has been providing a wide range of consulting engineering services for nearly 40 years. Today, its engineering, environmental and commissioning experts team up to quickly and accurately pinpoint the needs of industrial and institutional clients. The firm's expertise is recognized in the fields of energy, mining and metals, biofuels and oil and gas.



