Asset Management and Lifecycle Planning Training Course

Ref: #INM3807

Course Introduction / Overview:

This comprehensive training course is designed to provide professionals with the strategic knowledge and practical tools needed to excel in modern asset management and lifecycle planning. The program focuses on moving beyond reactive maintenance to a proactive, data-driven approach that optimizes the value and longevity of an organization's physical assets. Participants will learn how to create a systematic framework for managing assets from their acquisition to disposal, ensuring that every stage is aligned with business objectives. Key topics include asset condition monitoring, risk-based maintenance, and developing a capital investment plan. This course is a must for anyone who wants to improve operational efficiency, reduce costs, and enhance the reliability of their assets. The curriculum is informed by established academic and industry standards, drawing on the principles from authors like John Woodhouse, whose book "Managing Industrial Risk" provides a solid foundation for understanding asset reliability. This training, offered by BIG BEN Training Center, emphasizes the practical application of these concepts through real-world scenarios and case studies. It is an essential program for those who are ready to build a more strategic and forward-looking approach to asset management within their organizations.

Target Audience / This training course is suitable for:

- Asset managers and coordinators.
- Maintenance and reliability engineers.
- Operations and plant managers.
- Financial officers and analysts.
- Facilities and public works personnel.
- Supply chain and procurement specialists.
- Government agency employees are responsible for infrastructure.

Target Sectors and Industries:

- Manufacturing and production.
- Utilities and energy.
- Transportation and logistics.
- Public works and infrastructure.
- Commercial real estate and facilities.
- Oil and gas.
- Government agencies.

Target Organizations Departments:

- Asset management.
- Maintenance and engineering.
- Operations and production.
- Finance and procurement.
- Planning and strategy.
- Supply chain.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop a comprehensive asset lifecycle management strategy.
- Apply risk management principles to asset maintenance and investment.
- Optimize maintenance budgets and resource allocation.
- Conduct a full asset condition assessment and criticality analysis.
- Create a long-term capital investment and replacement plan.
- Use a computerized maintenance management system (CMMS) effectively.
- Enhance asset reliability and reduce total cost of ownership.

Course Methodology:

This course uses a highly interactive and case-based methodology to ensure participants gain a deep understanding of asset management principles. The training blends theoretical concepts with extensive, practical exercises that simulate real-world asset management challenges. Participants will engage in group projects where they will develop an asset management plan for a hypothetical company, from initial assessment to final budget proposal. This hands-on approach is reinforced through discussions and expert feedback, allowing each participant to refine their skills. The curriculum includes case studies drawn from various industries, demonstrating how different sectors approach asset lifecycle planning. The instructor, a professional with extensive experience in the field, will guide the participants through the process of using various tools and techniques to make data-driven decisions. BIG BEN Training Center believes that this combination of focused theory, collaborative work, and personalized guidance is the most effective way to equip professionals with the strategic mindset and practical skills needed for modern asset management.

Course Agenda (Course Units):

Unit One: Foundations of Asset Lifecycle Planning

- Introduction to asset management and its strategic importance.
- Understanding the asset lifecycle: from acquisition to disposal.
- Key concepts of asset integrity and reliability.
- The role of data in modern asset management.
- Building a business case for asset management initiatives.
- Developing asset hierarchy and criticality analysis.
- Overview of ISO 55000 standards.

Unit Two: Asset Valuation and Financial Planning

- Methods for valuing physical assets.
- Calculating total cost of ownership (TCO) for various assets.
- Developing a comprehensive maintenance budget.
- Strategies for capital investment planning.
- Financial forecasting for asset renewal and replacement.
- Optimizing spending on maintenance vs. capital projects.
- Case study on budget allocation for an asset portfolio.

Unit Three: Risk-Based Maintenance and Reliability

- Introduction to risk-based maintenance (RBM).
- Conducting a risk assessment for critical assets.
- Failure modes and effects analysis (FMEA).
- Developing a reliability-centered maintenance (RCM) program.
- Using condition monitoring to predict failures.
- Implementing a robust predictive maintenance strategy.
- Group exercises on risk mitigation for a plant's key assets.

Unit Four: Asset Information and Technology

- The role of a computerized maintenance management system (CMMS).
- Selecting and implementing the right CMMS for your organization.
- Using a CMMS for work order management and reporting.
- Introduction to asset information systems and databases.
- Leveraging IIoT and sensor data for asset intelligence.
- Data governance and quality control for asset information.
- Workshop on using CMMS to track asset performance.

Unit Five: Strategic Implementation and Continuous Improvement

- Developing a phased implementation plan for a new asset management system.
- Change management strategies for operational teams.
- Auditing and evaluating the effectiveness of an asset management program.
- Continuous improvement and performance management.
- Building a culture of asset stewardship.
- Future trends in asset management: digital twins and AI.
- Final project: presenting a full asset lifecycle plan to a board.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

Beyond mere maintenance, how can a comprehensive asset lifecycle plan be leveraged as a strategic tool to drive an organization's long-term financial performance, competitive advantage, and sustainability?

What unique qualities does this course offer compared to other courses?

This course stands out because it treats asset management not just as a maintenance function but as a core business strategy. While other programs may focus on specific tools or technical skills, this curriculum provides a holistic, end-to-end framework for managing an organization's physical assets from a lifecycle perspective. We emphasize the critical link between effective asset management and financial performance, teaching participants how to make data-driven decisions that reduce total cost of ownership and improve return on investment. The training goes beyond theory by providing hands-on experience in developing real-world asset plans and using key management tools. The program also integrates a focus on risk and reliability, ensuring that participants can anticipate and mitigate failures before they occur. Offered by BIG BEN Training Center, this course is designed to transform participants from tactical maintenance professionals into strategic asset leaders who can drive significant value for their organizations.