

Strategies to Ensure Sustainable Construction and Maintenance of Infrastructure

# **Infrastructure Maintenance, Planning, Scheduling and Control Workshop**

3 CPD

Dates : 1-3 December 2021, 23- 25 February 2022,  
25-27 May 2022, 17-19 August 2022, 26 -28 October 2022

Venue : Johannesburg , South Africa / Online

NB\* dates set according to availability of our subject matter expert



For more information contact :

Tel: +27 794 117042 / +27 877005633 / Email: [register@casi.co.za](mailto:register@casi.co.za)

[www.casi.co.za](http://www.casi.co.za)



## Infrastructure Maintenance, Planning, Scheduling and Control

# Overview

Maximizing assets availability and reliability with the optimal cost are two conflicting objectives that each maintenance department needs to achieve. Maintenance planning and scheduling is the first step needed to assist you in achieving these objectives. Maintenance planning and scheduling is not only about using project management software to schedule tasks. Beside planning and scheduling activities the planner needs to ensure that all logistics are provided for. The planner will also need to be engaged in the financial evaluation of maintenance initiatives. Once the planning is done right, the next step will be to ensure that all the work orders are executed as per the plan and in compliance with all Health, Safety and Environment (HSE) guidelines as well as company policies and procedures. In this course various techniques will be discussed that will assist you in due course to plan, schedule and control all your maintenance work orders for maximum effectiveness.

### Course Methodology

The course uses a mix of interactive and hands-on techniques. Beside the brief presentations by the consultant and the participants, the thrust will be on real life work related situations to develop maintenance schedules for preventive and breakdown jobs, calculate re-order points and optimal quantities of spare parts, evaluate maintenance initiatives, and develop the right maintenance KPIs.

### Course Objectives

By the end of the course, participants will be able to:

- Explain the challenges and objectives facing maintenance organizations today
- Demonstrate the importance of work order systems and use techniques for time estimations and priority assignments
- Prepare a preventive maintenance program
- Apply project management techniques to effectively manage major maintenance activities and shutdowns
- Use business level financial models to focus maintenance on increasing profit
- Understand how to position maintenance to drive company performance and adopt effective continuous improvement
- Make critical workplace adjustments to stay ahead of COVID-19 risks

### Target Audience

Managers, supervisors and planners responsible for maintenance planning, scheduling and control activities.

### Target Competencies

- Maintenance theory and practice
- Maintenance work processes
- Project management
- Financial evaluation
- Planning and logistics theory and practice
- Performance management
- Adaptability





**Introduction**

- Aims and objectives
- Personal needs
- Benefits of planning and scheduling
- Where best practice comes from
- Introduction of the models of excellence

**Getting ahead of the curve on COVID-19 risks**

- The impact we have seen
  - Safety
  - Efficiency
  - Collaboration
- The need to innovate and digitalise radically, but effectively
- What to expect in a post COVID-19 world

**Objectives of maintenance**

- Definition of maintenance and asset management
- Challenges and objectives of maintenance
- The modern maintenance strategy
- Maintenance windows (setting when things can be done)

**The work order system**

- Purpose of the Work Order (WO) system
- Where people go wrong
- Information collected on a WO
- Job estimating methods
- Prioritizing maintenance work orders

**Maintenance types (breakdown, preventive, predictive and proactive)**

- Definitions of each maintenance type
- Relative strengths and weaknesses of each type
- The importance of implementing a Planned Maintenance (PM) program
- Establishing schedules
- Understanding and avoiding the risks associated with a PM program

**Planning and scheduling of major maintenance WOS and shutdowns**

- The unique challenge of maintenance shutdowns
- Work Breakdown Structure (WBS)
- Critical Path Method (CPM)
- Controlling scope
- Resource scheduling and leveling

**Planning and controlling maintenance materials**

- Considerations in inventory decisions
- Improving maintenance stores
- How much to order: Economic Order Quantity (EOQ)
- When to order (setting min and max levels)

**Controlling maintenance work**

- Developing SMART objectives
- Using Maintenance Key Performance Indicators (KPIs)
- Developing KPIs to drive the workflow
- Generic maintenance indicators

**The role of planning and scheduling in Performance Improvement**

- Maintenance as a business process
- How scheduled maintenance can lock in waste and cost
- Drawing learning from recurring maintenance tasks
- Reviewing planned maintenance
- Improving productivity
- Capturing learning from inspection work

**Key digital and system changes for a post-COVID world**

- Risk assessment process
- Digital solutions that we have witnessed working effectively
- Simple non-digital solutions that make a difference



## In-house Training

Maximize on learning and reduce on company downtime by managing your employee training .

### Designed for you

Tell us your training needs, and we will plan an agenda to address the issues that matter most to your organization Focus on your own company rather than generic examples, and maximize impact by incorporating presentations from your auditors or company management.

Run the training where and when you want it – at your own premises or at another suitable venue of your choice - anywhere in the world.

### Rely on our experience

Receive first class support and advice from our dedicated team from planning to delivery and de-brief.

Work with CASI CA instructor best qualified for your organization and your business sector.

Tackle confidential issues and strategic challenges privately under the guidance of our specialists.

### The benefits

Upgrade your team's skillset, invest in your staff and increase their job satisfaction through empowerment.

Our in-house courses qualify for professional education training credits (CPD) from relevant bodies.

Our cost effective In-House courses are priced per day with no limit to the number of participants. If you choose to train locally, you will save on course fees, travel expenses and time away from the office.

### What are the Costs?

Every In-House Training session is different - we customize the training and that applies to the pricing too. Tell us about your project, and we will give you a specific training proposal and price according to your training needs. The price will be based on a per day (rather than per person) basis, and we place no limit on the number of participants.

Contact our team of training consultants today to discuss your specific requirements. [register@casits.co.za](mailto:register@casits.co.za)

## Registration

- Complete the registration on the last Page
- Select delegate package
- Submit scanned copies to [register@casits.co.za](mailto:register@casits.co.za)
- Receive invoice , Make payment , Complete pre-workshop Questionnaire
- Attend Session



[www.casits.co.za](http://www.casits.co.za)

To register Email: [register@casits.co.za](mailto:register@casits.co.za)

Contact Numbers +27 87 700 5633 /+27 794 11 70 42

**Delegate Registration form- MK** [www.casi.co.za](http://www.casi.co.za) +27 (0) 87 700 5633/ +27 794117042 Email scanned copy to : [register@casi.co.za](mailto:register@casi.co.za)

### Delegate Details

Full Names : \_\_\_\_\_

ID number : \_\_\_\_\_

Position : \_\_\_\_\_

Cell Number : \_\_\_\_\_

Email : \_\_\_\_\_

Regular          Vegetarian          Halal

Full Names : \_\_\_\_\_

ID number : \_\_\_\_\_

Position : \_\_\_\_\_

Cell Number : \_\_\_\_\_

Email : \_\_\_\_\_

Regular          Vegetarian          Halal

Full Names : \_\_\_\_\_

ID number : \_\_\_\_\_

Position : \_\_\_\_\_

Cell Number : \_\_\_\_\_

Email : \_\_\_\_\_

Regular          Vegetarian          Halal

### Infrastructure Maintenance, Planning, Scheduling and Control

**23- 25 Feb 2022**

**17-19 Aug 2022**

**25-27 May 2022**

**26 -28 Oct 2022**

#### Delegate Fees

**R9 999** excl. VAT per delegate Local Delegate

Session , Conference fees , material hand outs . Does not include Travel and Accommodation .

**R11 999** excl. VAT per delegate International Delegate

Session , Conference fees , material hand outs . Does not include Travel and Accommodation .

#### Payment By Means Of Bank Transfer

All Payments Must be made directly into the CASI Bank Account provided on the invoice and proof of banking details

Please state the invoice number as reference .

A copy of the bank deposit / Proof of Payment receipt must be emailed to [accounts@casits.co.za](mailto:accounts@casits.co.za)

#### Invoice Contact

Full Names : \_\_\_\_\_

Position : \_\_\_\_\_

Department : \_\_\_\_\_

Direct Line : \_\_\_\_\_

Cell Number: \_\_\_\_\_

Email : \_\_\_\_\_

**I hereby acknowledge that I have read an understood all the terms and conditions of registration and have the authority to approve the registration on behalf of the company**

Name \_\_\_\_\_ Position \_\_\_\_\_

Approving Managers Signature : \_\_\_\_\_ Date: \_\_\_\_\_ email: \_\_\_\_\_

Direct line: \_\_\_\_\_ Company Name: \_\_\_\_\_

Type of Business: \_\_\_\_\_ Company Registration# \_\_\_\_\_

Tel : \_\_\_\_\_ Fax: \_\_\_\_\_ VAT Number \_\_\_\_\_

Address: \_\_\_\_\_

P.O.BOX : \_\_\_\_\_

Term "CASI" refers to CASI Construction Academy PTY LTD . The signed registration form is a legally binding contract. The signed registration form is a legally binding contract. Please take note that a booking submission made via email or web submission or Telephonic is considered legally binding and as such , the registered delegates must inform the organiser if they will not be able to attend failure to which the case will be handed over and penalties apply . CASI does not provide refunds for cancellations, however you may provide substitute delegates at any time. For cancellations received in writing more than seven(7) days prior to the conference you will receive 100% credit, subject to a 10% administration fee, to be used at another CASI conference for up to one year from the date of issue. For cancellations received seven(7) days or less prior to an event (including day 7), no credit will be issued. In the event that CASI cancels an event, delegate payment at the date of cancellation will be credited to one future CASI This credit will be available for up to one year from the date of issue. All participants must pay the registration fee prior to arrival at the conference venue. The same applies to live online sessions , all delegates must pay the fees before receiving a link to register to attend . Delegate fees on online live sessions only include course fees and course material which are provided to fully registered delegates . CASI reserves the right to change the LMS platform if deemed fit .

In the event that CASI postpones an event, delegate payments at the postponement date will be credited towards the rescheduled date. If the delegate is unable to attend the rescheduled event, the delegate will receive 100% credit representing payments made towards one future CASI. This credit will be available for up to one year from the date of issue. No refunds will be available for cancellations or postponements. We reserve the right to postpone a seminar due to low enrolment. CASI reserve the right to amend any part of the Conference programme if necessary at any time. CASI suggests clients wait until a week prior to course commencement that a course has been confirmed to go ahead as scheduled before booking flight and accommodation. CASI is NOT responsible for cost associated with cancellation/ Postponement of classes such as flight and accommodation for clients.

CASI will not be held liable for travel and accommodation costs. The conference fee for physical classes includes: conference material, lunches and refreshments, but excludes travel & accommodation. CASI has a strict no cash Refund Policy . We reserve the right to cancel delegate registration if delegate conduct is not followed .CASI is not responsible for any loss or damage as a result of a substitution, alteration or cancellation/ postponement of an event. CASI shall assume no liability whatsoever in the event this conference is cancelled ,rescheduled or postponed due to a fortuitous event, act of God, unforeseen occurrence or any other event that renders performance of this conference impracticable or impossible. For purposes of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergencies. Alterations to the program will be communicated to the fully registered delegates . Any venue/ platform listed must be treated as provisional . Please note: Upon receiving the registration form, an invoice will be issued electronically.

Delegates are not permitted to record or reproduce any part of the online session . When payments are made, please supply the bank with your Invoice number as reference. The organisers reserve the right to make to the programmes, speakers, venue or the dates should the need arise. All unpaid invoices will be handed over . Invoices must be paid within 5 days of registration . We have the right to limit the vouchers being offered.