

# **Risk Management for Electrical Construction Projects**

Credit Hours	4 Hours
Instructor(s)	Jerry Durham
Fee	\$55.00

#### **Course Description**

**Course Name** 

The course identifies typical risks found on electrical construction projects and riskmanagement-techniques that can be used to mitigate those risks.

#### Learning Objectives

At the completion of the course, students can expect to be able to:

- Describe project constraints and variables for controlling risks
- Describe how improving communications can minimize risks
- Identify safety precautions used to mitigate risks to workers
- Identify how to develop good financial fundamentals and accurate reporting
- Describe common worries for contractors and workers that impact worker safety
- Describe how implementing safety helps to minimize risks
- Describe how proven project management guidelines can minimize risks
- List what new technology is being used to minimize risks
- Describe how to grade a risk for probability and consequence
- Describe how to use an S-Curve for earned value management
- Describe how the Monte Carlo method is used to minimize risks
- Describe how new software is used to minimize risks
- List where to find additional risk management training

#### **Equipment Requirements**

You must have an active, working internet connection to access this course online, as well as a platform to access the internet, such as a computer, tablet, or phone. All popular web browsers are supported, including Google Chrome, Mozilla Firefox, Safari, and Opera. No specialized software, speaker, microphone, or web camera is required.

#### **Schedule and Location**

This course is available online at any time at <u>www.JadeLearning.com</u>. Upon enrolling in the course, students will have access until the agency-issued course expiration date. After the access

expiration date, the course will be removed from the student's account and any progress in the course will be lost. Before the access expiration date, the student may sign in and out of the course as many times as needed to complete the course.

## **Student Support**

Both general and technical support is available to the student before, during, and after taking the course online. Students have access to general customer support via phone, chat, and email. Students have access to the course instructor via a contact form in the course and email. All questions, concerns, and comments received will be responded to within one business day.

### Participation/Interactivity Verification

<u>Inactivity Timer</u> - Students are automatically logged out of the training after 30 minutes if the system does not sense interactivity (e.g., a mouse click or typing).

<u>Timed Logs</u> - Per our company's record retention policy, each student's every log-in, log-out, and lesson/assessment completion time is tracked and retained as part of the student record.

<u>Assessment</u> - At least one content question is delivered at the bottom of each page of text and the section is not considered complete until the related question has been answered. The licensee must complete all multiple-choice questions with a score of at least 70% in order to get credit for the course. Question choices are randomized so each participant will have a unique testing experience. This course is set up to allow users to go back through the section questions and reanswer questions while they meet the time requirement.

<u>Global Timer</u> - Students will not get credit until they spend a minimum of 200 active minutes total in the course.

#### **Identity Verification**

<u>Unique Username/Password</u> - Each student that wants to complete a training course with us must create and account by registering a unique personal email address and password. The student must enter this unique identifier every time they want to access the course after logging out or being logged out.

# **Risk Management for Electrical Construction Timed Syllabus**

	Construction Risk Introduction	2	
		2	5
3	Understand the Contract	2	5
3	Control the Scope	2	5
4	Develop Accurate Cost Estimates and Bids	2	5
5	Project Bid Development Guidelines	2	5
6	Capture Risks and Assumptions in the Bids	2	5
7	Mitigate Risks with Value Management	2	5
8	Develop Detailed Schedule to Meet Contract	2	5
9	Key Words and Terms in Detailed Schedules	2	5
10	Resource Loaded Schedule	2	5
11	Establish an Acquisition Strategy	2	5
12	Qualified Team	2	5
13	Communications a Must	2	5
14	Project Status Communication Tools	2	5
15	Accurate Performance Reporting	2	5
	Effective Negotiation	2	5
17	Complex Negotiating	2	5
18	When to say "No Deal"	2	5
	Improving Cash Flow	2	5
20	Construction Worksite Safety Violations and Fatalities	2	5
	Elevated Work Surfaces	2	5
	Struck by An Object	2	5
23	Electrical Hazards	2	5
	Caught-In or Caught-Between Machines and Materials	2	5
	Improve Safety and Productivity Use Augmented and Virtual Reality	-	0
25	Technologies	2	5
26	Use Robots, Drones and Simulators to Reduce Construction Safety Risks	2	5
	Control Damage and Theft	2	5
28	Address Environmental Concerns	2	5
	Electrical Contractors and Workers Worries	2	5
	Excessive Overtime and Other Factors that Reduce Productivity	2	5
	New Technology	2	5
	Risk Management Plan and Assessment Report	2	5
	Risk Workshops – Threats and Opportunities	2	5
34	Risk Grading Guidance	2	5
	Risk Register/Log – Putting it all Together	2	5
35 36	Risk Management Training	2	5
	Software to Assist with Managing Construction Risks	2	5
	Monte Carlo – Why Care?	2	5
	Electrical Contractor Benefit of Using BIM Technology	2	5
40	Reduce Construction Risk	2	5
40	Totals:	80	200
	Student Minimum Time Required:	00	200