

Management and Strategy Institute, LLC.

Problem Solving Techniques Certified (PSTC)

Course of Study

Introduction

In just about any industry or any role, we are almost constantly involved in solving problem. It is what makes humanity progress forward by constantly searching for better solutions to common problems or new solutions to new problems as our societies become more complex.

As the problems have become more complex, the need to solve problems in a group has increased. Groups now contain a variety of experts looking at a problem in relation to their own respective domains. Participants will learn about good brainstorming techniques and how to improve their communication skills in meetings.

The PSTC exam is a timed, online exam. It consists of approximately 25 questions and has a required passing score of 70%.

Competencies

This course of study covers the following competencies:

What is Problem Solving

- Today's complex problems are often solved by a group of people working together.
 - Learning Outcome: Understand blocks to problem solving and helpful attitudes. You'll learn how to improve your problem solving techniques.

How to Solve Problems

- There are 4 critical steps when solving problems.
 - Learning Outcome: Understand Defining the problem, generating ideas, evaluating solutions, and implementing solutions. You'll also explore CATWOE and cause/effect diagrams.

Generating Ideas

- Methodically generate ideas and use visual techniques to organize them into meaningful logical categories.
 - Learning Outcome: Understand affinity diagrams and generating ideas.

Brainstorming

- Use a number of established brainstorming techniques to search for solutions by maximizing idea generation, participation and creativity.
 - Learning Outcome: Understand brainstorming guidelines, questioning skills, good & bad questions. Understand the nominal group technique, group passing, directed brainstorming.

Decision Making

- Make qualitative decisions by evaluating various aspects of potential solutions using a systematic method.
 - Learning Outcome: Understand SFA Balance sheet, constructive controversy.

Planning

- Plan to implement your solution by scheduling, analyzing critical parts of the plan, managing resources and carrying out a requirements analysis.
 - Learning Outcome: Understand Gantt charts, Work Breakdown Structure (WBS), Critical path method, MoSCoW, Mind mapping & SWOT.

Learning Resources

Recommended:

Material included with your purchase is required reading.

- Free online training material provided by MSI. The material includes everything you will need to learn to pass the exam. This material is included for free with the purchase of your exam. It is in digital form, and available immediately after payment.

Optional:

This material is not required, however it will assist you in becoming certified.

- Sandor Lehoczky, Richard Rusczyk (August 1, 2006), *The Art of Problem Solving, Vol. 1: The Basics*, ISBN-13: 978-0977304561
- Jennifer Wilson (February 9, 2017), *Critical Thinking: A Beginner's Guide to Critical Thinking, Better Decision Making and Problem Solving*, ISBN-13: 978-1542966146

Preparing for Success

In order to successfully complete the PSTC exam, you will need to make sure you have the appropriate resources to support your learning.

- A quiet location, free from distraction.
- Internet access.
- Current (newest) version of Internet Explorer, Firefox, or Chrome browser.
- Take study notes while going through the training.
- When you are ready to take the exam, you should allot 2-hours of time.

Frequently Asked Questions

What happens if I fail the exam?

- You are given two additional attempts to pass the exam at no additional cost.