



## Bronze Portfolio Requirements

Please read the [Portfolio Information and Instructions](#) document before building your Bronze Portfolio. You may find it helpful to have a copy of the [Lean Certification Competency and Behavior Model](#) and Lean Certification [Body of Knowledge](#) at hand as you complete your Portfolio requirements.

Bronze Certification is focused on tactical lean. Tactical lean is the deployment and application of lean principles, concepts and methods locally, within a work group or value stream. This may be a workshop or project focused on implementation of specific lean concepts or techniques regardless of the industry (services, manufacturing, retail, insurance, medical, etc.) where the project took place or was executed.

As a Lean Bronze Certification candidate, please complete the Plan-Do-Check-Act (Adjust) reporting on your three (3) best projects. It is expected that as a Lean Bronze Certification candidate you will have many projects to choose from, and your Portfolio should reflect the three that best represent your lean knowledge, experience, and continuing growth and development.

### NOTE:

**You must have passed your Lean Bronze examination before you can submit your Bronze Portfolio.**

## Bronze Portfolio Scoring

Each element of the Portfolio is scored individually. To successfully pass the Portfolio, you must receive:

- A “pass” on the education, training & development requirements.
- A score of 12 out of 15 possible points on EACH project (all three projects must pass).
- A score of 20 points out of 25 possible for your Portfolio reflection.

If an element of your Portfolio does not pass, your Portfolio will be returned to you and you have one opportunity to update the element that did not meet the requirements. Upon resubmission, only that element will be reviewed. Elements that already passed will not be re-evaluated.

### SCORING MATRIX

Portfolio Component	Scoring	Pass Point
Education, Training, and Development	Pass/Fail	Pass
Tactical Projects (3)	15 points per project	12 points per project*
Tactical Portfolio Reflection	25 points	20 points

\*Each project must receive a score of 12 or higher for successful Portfolio completion.

## Portfolio Review Process

All Portfolios will be peer reviewed. Portfolios will be evaluated and scored against the criteria outlined under the Portfolio Requirements.

Bronze candidate Portfolios will be evaluated by a single reviewer. As a system of checks and balances, if a Portfolio does not pass on the second submission with the original reviewer, it will then be sent to a second reviewer for review and score verification. If a second reviewer is required, a conference call between reviewers will be held to reach consensus on the Portfolio score before results are returned to the candidate.

The Portfolio review process may take up to 60 days to complete.



## Submitting Your Portfolio

To submit your Portfolio, [log into your SME Customer Account](#), or create a new account, in the upper right hand corner of the homepage ([sme.org](#)). If you need assistance, call SME Customer Care at 800.733.4763 or 313.425.3000, Monday through Friday, 8:00 a.m.–5:00 p.m. **View detailed instructions with images [here](#).**

1. After signing in, click View Your Profile (located in upper right hand corner of the webpage).
2. Under My Account, on the left side of the webpage, click Portfolio Submission under Certification.
3. At the bottom of the left side of the webpage under My Submissions, click New Submissions.
4. Under View Abstracts, click Start to the right of the Bronze Portfolio.
5. Keep yes checked for Are you a Author on this submission?
6. Enter the Title of your submission (i.e., Lean Bronze Portfolio).
7. Select Lean Portfolio for the Category from the drop down menu.
8. You do not need to enter any data in Length in Minutes or Audience Level of Expertise.
9. For Min. Number of Required Reviewers, enter one.
10. Highlight Bronze below Topic Options and click the arrow to move it to the box at the right of the screen.
11. Primary Topic will automatically populate after selecting Topic Option.
12. For Keywords, click on Tactical (Bronze) then click the arrow to move it to the box at the right of the screen. Click Save and Continue.
13. Verify or update your personal information then select Continue from the drop down box after Save and, then click Go.
14. In the Word text box, add a note about your Portfolio (e.g., Lean Bronze Portfolio, first submission). Text must be entered in this field to proceed.
15. Click Choose File and select your Portfolio file. Please use this naming convention for your file: CustomerID-Last Name First Name-Bronze Portfolio. **(Do not include zeros at beginning of Customer ID.)**
16. Click Upload.
17. Type Yes in the text box below Do you agree to the terms and conditions. Note: there are no terms and conditions to which you are agreeing.
18. The Usage Questions section is not applicable for portfolios. Please make sure all questions are answered no then click Save and Continue.
19. Verify your submission details and contact information. If everything is accurate, click Submit.

An email acknowledgement will be sent when your portfolio is received. If you do not receive an acknowledgement within 48 hours, please assume your portfolio was not received. Report any upload difficulties to [certification@sme.org](mailto:certification@sme.org) or call SME Customer Care at 800.733.4763 or 313.425.3000.

Review of your portfolio may take up to 60 days to complete.



## Education, Training, and Development Documentation

Please document the lean-related education, training, and development activities in which you have participated. They may include training (public or company-sponsored), conference attendance, hands-on workshops, books, videos, etc.

The education, training, and development requirement for Lean Bronze Certification is 80 hours.

Education, training, and development documentation MUST demonstrate continuing investment in your lean education over time. For example, if you started your lean journey in 2001, you should illustrate how you've invested in your education, training and development from 2001 to the present.

**Your education, training, and development for Lean Bronze Certification should include three (3) or more of the various categories of professional development activities listed below. Information submitted could be subject to audit.**

See [Lean Bronze Certification: Education and Training Requirements](#) document for acceptable credit hours.

Your total combined education, training, and development MUST include all four (4) categories of the Lean Certification [Body of Knowledge](#) (PDF):

- Cultural Enablers
- Continuous Process Improvement
- Consistent Lean Enterprise Culture
- Business Results

Indicate the parts of the Lean Certification Body of Knowledge covered in the training you've documented by placing X's in the appropriate columns of the Lean Certification Body of Knowledge categories. Please refer to the Lean Certification [Body of Knowledge](#) (PDF) for the topics covered under each major category.

NOTE: If you are including Kaizen events or other "hands-on" events in this section, they may not be used for your Portfolio projects. You may only count each activity or event one time within your Portfolio.



## Education, Training, and Development Form

Please enter your education, training, and development activities in the form below. The number of hours will sum automatically. You can download the Lean Certification Body of Knowledge at [sme.org/leanbok](http://sme.org/leanbok).

**NOTE:**

You are seeking a Lean Certification, so while Six Sigma, Balanced Scorecard, Leadership Development, and other activities are certainly relevant, they should not dominate the education, training, and development activities you list below to the exclusion of lean activities.

Place an "X" in the cells below to indicate the following Lean Certification Body of Knowledge areas covered by your education, training, and development activities. (See the Lean Certification Body of Knowledge for topic details.)

Education, Training, and Development Activities (Descriptions)	Year	Hours	Cultural Enablers	Continuous Process Improvement	Consistent Lean Enterprise Culture	Business Results
<b>If submitting a single activity for more than 20 hours of credit, provide an outline of the course/activity, explaining its content.</b>						
<b>TOTAL EDUCATION, TRAINING, AND DEVELOPMENT HOURS:</b>						



## Lean Course Outline

If any one item accounts for more than 20 hours, a course outline should be provided in order to evaluate lean course content.

**Please paste copy from course outline below:**



## Lean Bronze Project Documentation

### Tactical (Local) Projects

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Lean Bronze candidates are focused on the tactical (local) application of lean, and must report out on three (3) lean projects. Tactical (local) lean is the deployment and application of lean principles, concepts and methods within a work cell, work group or value stream. A project may be a workshop, event or activities focused on implementation of specific lean concepts or techniques.

For the Lean Bronze Certification projects, please use the “Tactical (Local) Project Form” to document each of your projects. Describe the three (3) most significant lean projects you have lead or participated in (one per page). It is assumed that a Lean Bronze candidate will have lead or actively participated in more than three (3) projects, and should select the best projects from that experience. Projects should reflect both the depth and breadth of your lean knowledge and experience.

Projects should demonstrate continuing practice in lean. For example, if you are applying for certification in 2014, and you started your lean practice in 2001, you may choose to include projects from 2002, 2008 and 2012 in your Portfolio to demonstrate that you are still practicing lean.

PASS POINT: Each tactical project must score 12 out of 15 possible points. Each project must pass for successful Portfolio completion.

### Lean Certification Portfolio Writing Tips

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#### Effective Portfolio Tips

Don't assume, remember that the reviewers weren't present for your experience. Maximize the space allotted for each section in the Portfolio form to give direct, concise accounts of your experience.

#### State “What” and “How”

Go beyond simply answering the “what” to also tell the reviewers the practical application of the tools — the “how”. For example, to answer what metrics you used in the project, simply listing the metrics doesn't tell the reviewer how they were used. Consider one additional sentence to tell a more complete story.

Example: Metrics used in this project: floor space utilization, motion, and process cycle time (What). These metrics were critical to aligning the team to the project objectives, helped us prioritize the most pertinent opportunities for improvement, and were visually posted to communicate progress along the way (How).

#### Don't Forget About You!

Remember this certification is about you! This is an individual certification that is intended to recognize you for your lean leadership. Be clear in describing what you personally did to deliver success in the projects.

Example: A general team statement like, “The team utilized fishbone diagrams and five-why's to complete root cause analysis,” tells the reviewer something different than stating how you personally impacted or led the team. This statement, “I facilitated the team through effective root cause analysis by utilizing tools such as fishbone and the five whys. These tools helped allowed the team to complete structured, facilitated, discussions to go beyond symptoms and drive to true root causes for the issues we faced,” offers better information Telling the story of your lean experience by being concise, stating the facts, and focusing on your lean leadership will help you write an effective Portfolio in support of your quest for lean certification!



## Tactical (Local) Project 1

### Project Title:

#### Organization Function

**Industry and organization function affected.**

Two parts: which industry and which function in the organization(s).

#### Problem Statement

**Describe the problem or opportunity using complete sentences.**

What were you attempting to accomplish? Why?

#### Project Dates

**Provide the project start date.**

If you are no longer involved in the project, also provide the date you transitioned off the project. Projects should show a progression in dates to reflect a history of lean experience. When did the project begin and end, and when did you join and leave?

#### Your Role

**Role in the project and team selection**

Two Parts: your role and how team members were selected. What did you do on the team? If you selected others to be on the team, explain if you were selected, explain why?



## Tactical (Local) Project 1

### PLAN

4 POSSIBLE POINTS

#### 1 Project Selection

**How were you involved in project selection and definition?**

Why did you select this project to work on? If you were assigned to this project, explain your understanding of why this project was selected.

**Why was the project selected?**

Define the problem in more depth than the problem statement above. For example, you might explain its scope and/or how it fit into the bigger picture for the organization.

**What was the impact on the whole organization?**

**How did this project link to customer quality, cost, and delivery?**

**Why do you think those links were important?**





## Tactical (Local) Project 1

### 2 Documentation

**Describe the current process condition that produced the current process outcome.**  
Be specific, and quantify your response, if you can. What was YOUR role in documenting the current condition?

**What was the target condition (specific and measurable)?**

**What was YOUR role in documenting it?**

**What was the most important takeaway in deciding the target condition?**



## Tactical (Local) Project 1

### 3 Metrics

**What metrics were used to measure the problem and why were they relevant to achieve the target condition?**

State facts and figures to support your reasoning.  
Note: Company confidential data can still be used in an indexed or normalized data format.

### 4 Planning

**What planning tools were used in tracking the progress of the project? Why were those tools chosen? What was your role in managing the project?**

## DO

3 POSSIBLE POINTS

### 1 Project Contribution

**What were YOUR roles and YOUR responsibilities during your tenure on the project? How did the team benefit from your participation?**



## Tactical (Local) Project 1

### 2 Countermeasures

List specific countermeasures and solutions.  
Why were those countermeasures and solutions chosen?  
What was your role in deciding on the countermeasures and solutions?

Describe the actions taken to implement and test the countermeasures.  
Why were those actions taken?  
What was your role in deciding the actions?

How did the team identify and make changes?  
What was your role in that process?

### 3 Lean Principles and Tools

What lean principles (Lean Thinking or Shingo Prize concepts and principles) did YOU use in this project?  
Why were those principles appropriate for this project?  
What was your role in deciding on the lean principles?

What Lean Tools were used in this project?  
Why were they appropriate for this project?  
What was your role in deciding the tools to use?



## Tactical (Local) Project 1

### CHECK

3 POSSIBLE POINTS

1 Results	
Referencing the Plan section parts 2 and 3, was the expected target achieved? How was it validated? What was your role in assessing the improved condition?	
Referencing the reasons for selecting the project, what were the benefits of the improved condition?	
If the condition didn't improve, explain why?	



## Tactical (Local) Project 1

### 2 Monitor

Describe your personal role in monitoring the project. Specifically, what process did you follow and why did you choose that process?

How did you monitor the implementation of the improvements to see if it was producing the results you expected, and if not, how did you make adjustments?

What actions were taken to monitor changes? If you found an exception, what did you do to correct it?



## Tactical (Local) Project 1

### 3 Assessment

Referencing the target condition and metric, describe the level of improvement assessment. Did the changes meet, exceed, or fall short of your expectations (explain why)?

Did the actual level of improvement match your planned level of improvement? Why / why not?

Referencing the target condition and at least three measures of the metric, describe the trend of Improvement assessment. Are the improvements holding, improving, or sliding back to the old ways?

Explain why trends are responding the way they are.



## Tactical (Local) Project 1

### ACT/LESSONS LEARNED

5 POSSIBLE POINTS

#### 1 What have you personally done to sustain this project?

How long were YOU involved in ensuring the new processes became the new way of operating and what did YOU do to make sure the gains were held? (We are looking for specific actions YOU did to ensure sustainment)

#### 2 Next Steps

What do you think are the next improvement steps for this project? What else should or could be done to continue to improve in this problem area, or area of opportunity?



## Tactical (Local) Project 1

### 3 Lessons Learned

What has the experience of planning and implementing this project taught you personally?

What did you learn about the work area that you did not know before?

How does this knowledge inform you or deepen your understanding of what affects the target condition(s)?

What change in approach will you take for future projects?

What new knowledge did you gain either technically and/or working with people?





## Tactical (Local) Project 2

### Project Title:

#### Organization Function

**Industry and organization function affected.**

Two parts: which industry and which function in the organization(s).

#### Problem Statement

**Describe the problem or opportunity using complete sentences.**

What were you attempting to accomplish? Why?

#### Project Dates

**Provide the project start date.**

If you are no longer involved in the project, also provide the date you transitioned off the project. Projects should show a progression in dates to reflect a history of lean experience. When did the project begin and end, and when did you join and leave?

#### Your Role

**Role in the project and team selection**

Two Parts: your role and how team members were selected. What did you do on the team? If you selected others to be on the team, explain if you were selected, explain why?



## Tactical (Local) Project 2

### PLAN

4 POSSIBLE POINTS

#### 4 Project Selection

**How were you involved in project selection and definition?**

Why did you select this project to work on? If you were assigned to this project, explain your understanding of why this project was selected.

**Why was the project selected?**

Define the problem in more depth than the problem statement above. For example, you might explain its scope and/or how it fit into the bigger picture for the organization.

**What was the impact on the whole organization?**

**How did this project link to customer quality, cost, and delivery?**

**Why do you think those links were important?**



## Tactical (Local) Project 2

### 5 Documentation

**Describe the current process condition that produced the current process outcome.**  
Be specific, and quantify your response, if you can. What was YOUR role in documenting the current condition?

**What was the target condition (specific and measurable)?**

**What was YOUR role in documenting it?**

**What was the most important takeaway in deciding the target condition?**



## Tactical (Local) Project 2

### 6 Metrics

**What metrics were used to measure the problem and why were they relevant to achieve the target condition?**

State facts and figures to support your reasoning.  
Note: Company confidential data can still be used in an indexed or normalized data format.

### 7 Planning

**What planning tools were used in tracking the progress of the project? Why were those tools chosen? What was your role in managing the project?**

## DO

3 POSSIBLE POINTS

### 4 Project Contribution

**What were YOUR roles and YOUR responsibilities during your tenure on the project? How did the team benefit from your participation?**



## Tactical (Local) Project 2

### 5 Countermeasures

List specific countermeasures and solutions.  
Why were those countermeasures and solutions chosen?  
What was your role in deciding on the countermeasures and solutions?

Describe the actions taken to implement and test the countermeasures.  
Why were those actions taken?  
What was your role in deciding the actions?

How did the team identify and make changes?  
What was your role in that process?

### 6 Lean Principles and Tools

What lean principles (Lean Thinking or Shingo Prize concepts and principles) did YOU use in this project?  
Why were those principles appropriate for this project?  
What was your role in deciding on the lean principles?

What Lean Tools were used in this project?  
Why were they appropriate for this project?  
What was your role in deciding the tools to use?



## Tactical (Local) Project 2

### CHECK

3 POSSIBLE POINTS

#### 1 Results

Referencing the Plan section parts 2 and 3, was the expected target achieved?  
How was it validated?  
What was your role in assessing the improved condition?

Referencing the reasons for selecting the project, what were the benefits of the improved condition?

If the condition didn't improve, explain why?



## Tactical (Local) Project 2

### 2 Monitor

Describe your personal role in monitoring the project. Specifically, what process did you follow and why did you choose that process?

How did you monitor the implementation of the improvements to see if it was producing the results you expected, and if not, how did you make adjustments?

What actions were taken to monitor changes? If you found an exception, what did you do to correct it?



## Tactical (Local) Project 2

### 3 Assessment

Referencing the target condition and metric, describe the level of improvement assessment. Did the changes meet, exceed, or fall short of your expectations (explain why)?

Did the actual level of improvement match your planned level of improvement? Why / why not?

Referencing the target condition and at least three measures of the metric, describe the trend of Improvement assessment. Are the improvements holding, improving, or sliding back to the old ways?

Explain why trends are responding the way they are.





## Tactical (Local) Project 2

### ACT/LESSONS LEARNED

5 POSSIBLE POINTS

#### 1 What have you personally done to sustain this project?

How long were YOU involved in ensuring the new processes became the new way of operating and what did YOU do to make sure the gains were held? (We are looking for specific actions YOU did to ensure sustainment)

#### 2 Next Steps

What do you think are the next improvement steps for this project? What else should or could be done to continue to improve in this problem area, or area of opportunity?



## Tactical (Local) Project 2

### 3 Lessons Learned

What has the experience of planning and implementing this project taught you personally?

What did you learn about the work area that you did not know before?

How does this knowledge inform you or deepen your understanding of what affects the target condition(s)?

What change in approach will you take for future projects?

What new knowledge did you gain either technically and/or working with people?



## Tactical (Local) Project 3

### Project Title:

#### Organization Function

**Industry and organization function affected.**  
Two parts: which industry and which function in the organization(s).

#### Problem Statement

**Describe the problem or opportunity using complete sentences.**  
What were you attempting to accomplish? Why?

#### Project Dates

**Provide the project start date.**  
If you are no longer involved in the project, also provide the date you transitioned off the project. Projects should show a progression in dates to reflect a history of lean experience. When did the project begin and end, and when did you join and leave?

#### Your Role

**Role in the project and team selection**  
Two Parts: your role and how team members were selected. What did you do on the team?  
If you selected others to be on the team, explain if you were selected, explain why?



## Tactical (Local) Project 3

### PLAN

4 POSSIBLE POINTS

#### 4 Project Selection

**How were you involved in project selection and definition?**

Why did you select this project to work on? If you were assigned to this project, explain your understanding of why this project was selected.

**Why was the project selected?**

Define the problem in more depth than the problem statement above. For example, you might explain its scope and/or how it fit into the bigger picture for the organization.

**What was the impact on the whole organization?**

**How did this project link to customer quality, cost, and delivery?**

**Why do you think those links were important?**



## Tactical (Local) Project 3

### 5 Documentation

**Describe the current process condition that produced the current process outcome.**  
Be specific, and quantify your response, if you can. What was YOUR role in documenting the current condition?

**What was the target condition (specific and measurable)?**

**What was YOUR role in documenting it?**

**What was the most important takeaway in deciding the target condition?**



## Tactical (Local) Project 3

### 6 Metrics

**What metrics were used to measure the problem and why were they relevant to achieve the target condition?**

State facts and figures to support your reasoning.  
Note: Company confidential data can still be used in an indexed or normalized data format.

### 7 Planning

**What planning tools were used in tracking the progress of the project? Why were those tools chosen? What was your role in managing the project?**

## DO

3 POSSIBLE POINTS

### 7 Project Contribution

**What were YOUR roles and YOUR responsibilities during your tenure on the project? How did the team benefit from your participation?**



## Tactical (Local) Project 3

### 8 Countermeasures

List specific countermeasures and solutions.  
Why were those countermeasures and solutions chosen?  
What was your role in deciding on the countermeasures and solutions?

Describe the actions taken to implement and test the countermeasures.  
Why were those actions taken?  
What was your role in deciding the actions?

How did the team identify and make changes?  
What was your role in that process?

### 9 Lean Principles and Tools

What lean principles (Lean Thinking or Shingo Prize concepts and principles) did YOU use in this project?  
Why were those principles appropriate for this project?  
What was your role in deciding on the lean principles?

What Lean Tools were used in this project?  
Why were they appropriate for this project?  
What was your role in deciding the tools to use?



## Tactical (Local) Project 3

CHECK	3 POSSIBLE POINTS
<p><b>1 Results</b></p> <p>Referencing the Plan section parts 2 and 3, was the expected target achieved? How was it validated? What was your role in assessing the improved condition?</p>	
<p>Referencing the reasons for selecting the project, what were the benefits of the improved condition?</p>	
<p>If the condition didn't improve, explain why?</p>	





## Tactical (Local) Project 3

### 2 Monitor

Describe your personal role in monitoring the project. Specifically, what process did you follow and why did you choose that process?

How did you monitor the implementation of the improvements to see if it was producing the results you expected, and if not, how did you make adjustments?

What actions were taken to monitor changes? If you found an exception, what did you do to correct it?



## Tactical (Local) Project 3

### 3 Assessment

Referencing the target condition and metric, describe the level of improvement assessment. Did the changes meet, exceed, or fall short of your expectations (explain why)?

Did the actual level of improvement match your planned level of improvement? Why / why not?

Referencing the target condition and at least three measures of the metric, describe the trend of Improvement assessment. Are the improvements holding, improving, or sliding back to the old ways?

Explain why trends are responding the way they are.



## Tactical (Local) Project 3

### ACT/LESSONS LEARNED

5 POSSIBLE POINTS

#### 1 What have you personally done to sustain this project?

How long were YOU involved in ensuring the new processes became the new way of operating and what did YOU do to make sure the gains were held? (We are looking for specific actions YOU did to ensure sustainment)

#### 2 Next Steps

What do you think are the next improvement steps for this project? What else should or could be done to continue to improve in this problem area, or area of opportunity?



## Tactical (Local) Project 3

### 3 Lessons Learned

What has the experience of planning and implementing this project taught you personally?

What did you learn about the work area that you did not know before?

How does this knowledge inform you or deepen your understanding of what affects the target condition(s)?

What change in approach will you take for future projects?

What new knowledge did you gain either technically and/or working with people?



## Bronze (Tactical) Portfolio Reflection Form

### PORTFOLIO REFLECTION

25 POSSIBLE POINTS

1 What are your lessons learned through completing the lean certification process (training, knowledge exam, portfolio)?

How have you improved your knowledge and skills as a result of pursuing Lean Certification?

2 What has been the greatest challenge in your lean journey and how did you address it?

There are always struggles and challenges in learning and implementing lean. Describe one major challenge and how you overcame it.

3 What have you learned in your Lean journey and how have or will you change your approach/application. Give specific example.

What could you improve about your approach to leading and implementing Lean?



## Bronze (Tactical) Portfolio Reflection Form

**4 What is your three year personal lean developmental/continuous improvement plan? With respect to leading and implementing lean, what self-improvement objectives have you set for the next few years?**

**Year 1**

Be explicit in explaining the rationale behind your plan.

**Year 2**

Be explicit in explaining the rationale behind your plan.

**Year 3**

Be explicit in explaining the rationale behind your plan.

**5 What do you see as the greatest challenges to achieving your plan and how do you plan to overcome them?**

**What might stop you from achieving the self-improvement objectives you outlined in #4 above?**



## Portfolio Feedback (Optional)

What suggestions or ideas do you have to help us with the continuous improvement and ongoing maintenance of the Lean Certification program? Enter your suggestions or ideas below.

Please provide your contact information so reviewer(s) may contact you during the review process if clarification is needed:

<b>Name</b>	
<b>Preferred Phone</b>	
<b>Preferred Email Address</b>	