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ECQA - European Certification and Qualification Association

LSSA – Lean Six Sigma Academy.

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1 Introduction

After following a Lean Six Sigma training course, you have the opportunity to apply for certification. This document describes the various types of certification available and explains how to register for online certification through the ECQA - European Certification and Qualification Association. This document also describes the rules and guidelines for certification.

The ECQA is a not-for-profit association which was created as a result of a number of EU-supported initiatives over the past ten years within which educational establishments decided to follow a joint process for the certification of individuals working within industry as part of the European Union’s Lifelong Learning Program.

1.1 Certification types

Within Lean Six Sigma, individuals can be trained at various ‘Belt levels’. The levels are: Black Belt (BB), Green Belt (GB), Orange Belt (OB) and Yellow Belt (YB). These levels are used to establish one’s experience in the application of Lean Six Sigma methodologies and tools.

1.1.1 Yellow Belt / Orange Belt levels
For the Yellow Belt and Orange Belt levels, there is a theory certificate only.

1.1.2 Green Belt / Black Belt levels

For the Green Belt and Black Belt levels, there are two types of certification available:

1. Lean Six Sigma theory certificate – theoretical exam only
2. Complete Lean Six Sigma certificate – theoretical exam + two practical projects

The complete Lean Six Sigma certificate requires sufficient achievement in both theoretical and practical elements. If you do not pass the theoretical component, but you do well on the Lean Six Sigma projects, your projects will stay valid for two years during which time you can re-take the theoretical exam. This is also true in the inverse: if you complete the theoretical exam first, your results will be valid for two years during which time you must submit your two Lean Six Sigma projects for review.
1.2 Certification Bodies

You can apply for certification at one the following accredited examination bodies. All certification bodies mentioned have a contract with the ECQA.

You can find the latest list of certified exam bodies on the ECQA and LSSA websites.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Location</th>
<th>Levels</th>
<th>Type of certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECQA / LSSA</td>
<td>Online <a href="http://www.ecqa.org">www.ecqa.org</a></td>
<td>All levels</td>
<td>Theory certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full certificate</td>
</tr>
<tr>
<td>LSSA / University of Twente</td>
<td>Enschede, The Netherlands</td>
<td>Green Belt</td>
<td>Theory certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black Belt</td>
<td>Full certificate</td>
</tr>
<tr>
<td>LSSA / ROC Twente</td>
<td>Hengelo, The Netherlands</td>
<td>Yellow Belt</td>
<td>Theory certificate</td>
</tr>
</tbody>
</table>

1.3 Theoretical component

LSSA has developed four skill sets that specifically describe which Lean Six Sigma tools are included within each specific Belt level. If you would like to know what is expected from you at each Belt level for the theoretical exam, please review these skill sets. The skill sets can be downloaded from www.ECQA.org or from www.LSSA.eu.

The number of exam questions are as follows:

<table>
<thead>
<tr>
<th>Exam</th>
<th>Number of Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow Belt</td>
<td>45</td>
</tr>
<tr>
<td>Orange Belt</td>
<td>45</td>
</tr>
<tr>
<td>Green Belt</td>
<td>60</td>
</tr>
<tr>
<td>Black Belt</td>
<td>60</td>
</tr>
</tbody>
</table>
1. All questions are equally weighted; the results are calculated with the average algorithm (total of scores of all questions per element / number of questions per element).

2. To receive a certificate, a score of at least 66% must be achieved.

3. Each question has only one correct answer.

4. If the participant selects an incorrect answer, the question is scored zero (0%).

5. For the Yellow Belt and Orange Belt exam a calculator is necessary.

6. For the Green Belt and Black Belt exam a laptop with Minitab is necessary.

7. The use of books and training material during the exam is permitted.

8. Receiving assistance from someone/anything else during the exam is not permitted.

9. The presentation of personal identification may be required.

1.4 Practical component

For the Green Belt and Black Belt certificate it is required to complete two Lean Six Sigma projects. The must be digitally submitted in the LSSA standard review template (PowerPoint with approximately 25 slides). The projects do not need to be presented. The projects are assessed by LSSA accredited Master Black Belts. Projects must be in English.

Lean Six Sigma Green Belt project terms:

- Two successfully completed projects:
  - Project approach follows the Lean Six Sigma roadmap: DMAIC, DMADV or IDOV
  - Project is reported using standard review template (PowerPoint, 25 slides approx.)
  - Savings or Cost Avoidance is at least 20k€ per project per year
  - Project is signed off by the Champion and Financial Controller

Lean Six Sigma Black Belt project terms:

- Two successfully completed projects:
  - Project approach follows the Lean Six Sigma roadmap: DMAIC, DMADV or IDOV
  - Project is reported using standard review template (PowerPoint, 25 slides approx.)
  - Savings or Cost Avoidance is at least 50k€ per project per year
  - Project is signed off by the Champion and Financial Controller
  
- Project is at sufficient level:
  - Proven ability to apply important tools such MSA, SPC, DOE or VSM
  - Expertise shown in the field of Project Management / Change Management
Appendix A – How to Register at ECQA

1. Go to: www.ecqa.org
2. Select Certification and Examination – Exam Registration from the left menu.
3. If you have registered before, log in under ‘Participants’ and continue with step 8.
4. If you don’t have an account, please click on Register.

**IMPORTANT:**
You need to register before the exam is opened in order to participate the exam.

5. As exam participant please register / log in here.

6. First, select the profession you would like to register for (for example ‘Lean Six Sigma Green Belt’) and click Next.

7. Then select the examination organisation and click Next.

8. Click on the option ‘I am a new user and would like to create an account’.

9. To get to the registration form, please fill out this form completely and click Finish. You will be forwarded to the ECQA Exam System.
**IMPORTANT:**
Please make sure that you have entered your personal details correctly, as this data will be used for further contact with you. The surname and first name you enter (under ‘Contact details’) will appear on the certificate.

10. After logging in to the ECQA Exam System, select **Exam** from the menu and then **Perform**.

11. Start the exam by clicking on the **Start** button.

12. Close the exam by clicking on the **Finish** button.

Results can be displayed only after the exam is closed by the examination organization.

13. To display the results, select **Exam** and then **Results from the menu**:
Appendix B – ECQA Examination Rules & Regulations

1. The start and end time of the exam is set by the examination organisation.

2. The user can attend the exam at any time after the exam has started and at any time before it ends.

3. During the exam, the participant can log in and log out of the system. The completed answers are stored in the database.

4. If an internet connection break occurs (wireless connection drops, internet not working etc.) a warning message will be displayed. The user must then log out. When the internet connection has been re-established, the user can log in and must re-check if his last answers were saved correctly. In case of any problems, the person supervising the exam should be informed as soon as possible.

5. The results of the exam are displayed only after the exam is closed by the examination organisation. If the user finishes the test earlier he/she is not able to view the results until the exam is closed by the examination organisation.
It is important for businesses and organisations to continuously focus on customer satisfaction by supplying products or services with outstanding quality, cost efficiently and within the agreed lead time. Improving quality and efficiency is the domain of ‘Process Improvement’.

Realising these objectives is effectively achieved by applying Lean Six Sigma: a combination of Lean Manufacturing and Six Sigma approaches. Within Lean Six Sigma, individuals can be trained at various ‘Belt levels’. These levels are called Black Belt, Green Belt, Orange Belt and Yellow Belt.

After following a Lean Six Sigma training course, you have the opportunity to apply for certification. This document describes the various types of certification available and explains how to register for online certification through the ECQA - European Certification and Qualification Association. This document also describes the rules and guidelines for certification.

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