Editors Note - One of the advantages of ASQ certifications is they help you develop a broad and deep knowledge of specific areas of quality improvement methods and tools. However, few realize certifications can benefit most if taken in a particular sequence. Below, Grant Short, of the ASQ Certification Board explains the best approach to certification tracks.

# Use of the Certification Track Map



**Grant Short**
**Principal Design Quality Engineer**
**Medtronic Spinal and Biologics Division**

Shown at Figure 1 is the "Recommended ASQ Certification Order by Career Track." This graphic is found on the member portion of American Society for Quality (ASQ) website (www.asq.org) Certification Page under Frequently Asked Questions (the last general question *(Is there an"order" for acquiring certifications?)*). Its purpose is to identify a recommended order to acquire certifications such that the subsequent certifications' Bodies of Knowledge (BoKs) build on the BoKs of initially acquired certifications.

Figure 1: Recommended ASQ Certification Order by Career Track
(See notes 1 and 2, below)
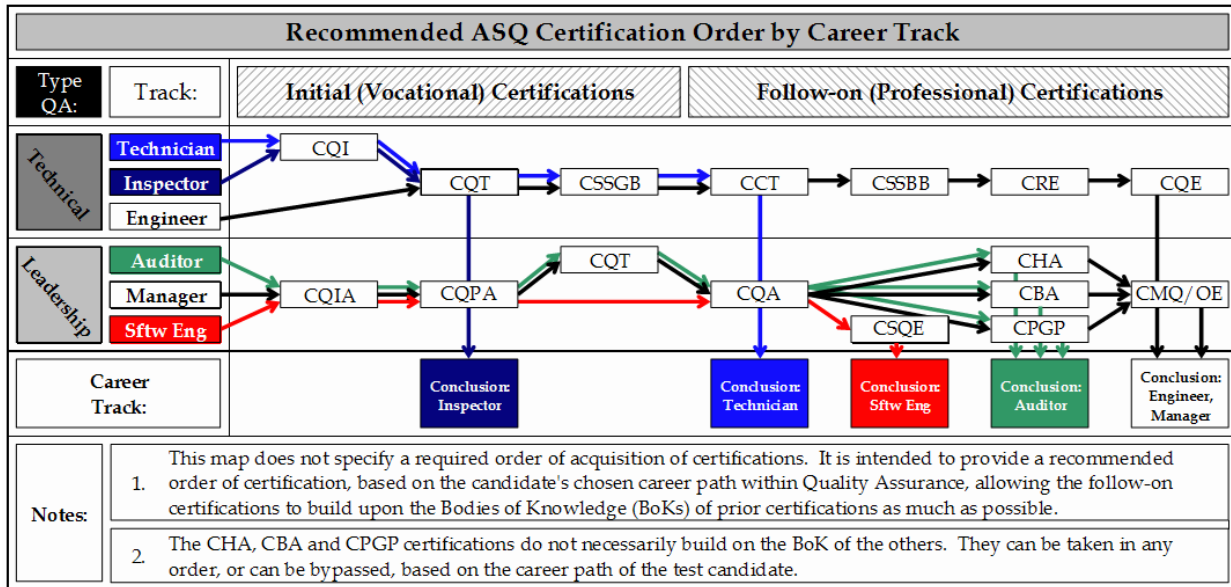


**Note 1:**

Tips for reading the map:

1. Find the career track that most closely aligns with your chosen career.
2. Ensure that you identify the color associated with that track. This color is track-specific in the initiation and conclusion boxes and the arrows marking the path.
3. Follow the path from initiation to conclusion.

**Note 2:**

It is important to note that there is **nothing prescriptive** in this map:

1. One may take the certification exams in any order (s)he desires. The map only details a path where the BoKs are additive, enabling cumulative acquisition of knowledge and skills.
2. One may take any of the (currently) fifteen certifications for which (s)he is authorized.
3. One may skip any certifications along the path as (s)he desires.
4. There is nothing to prevent one from changing career tracks map.
5. Currently, none of the certifications on the map is a mandatory pre-requisite for any other of the certifications on the map.

This series of examinations could be compared to a typical multi-year math curriculum in which students typically learn arithmetic first, then basic algebra, followed by geometry, advanced algebra, trigonometry, analytical geometry, and calculus. Likewise, ASQ certification candidates might start with the basics by preparing for the Certified Quality Inspector (CQI) exam before advancing their knowledge and skills to become a Certified Quality Technician (CQT). Both of these exams provide a basic grounding in quality tools and techniques used in manufacturing and related industry sectors.

The subsequent technical exam path leads candidates to learn basic tools and techniques associated with Lean and Six Sigma methodologies, covered in the Six Sigma Green Belt (CSSGB) BoK. A manufacturing quality professional continues with calibration essentials for the Certified Calibration Technician (CCT) exam, followed by more advanced Six Sigma capabilities through the Certified Six Sigma Black Belt (CSSBB), reliability expertise by means of the Certified Reliability Engineer (CRE), and finally putting all of that accrued knowledge together to master the Certified Quality Engineer (CQE).

In the two path-examples above, the candidate acquires knowledge and skills in a stepwise fashion, building mastery from one exam to the next. In all cases, the specific curriculum track for ASQ certifications depends on each candidate's career path.

ASQ has launched several new exam programs over the last decade, and as a result, this map took years to derive: One day, before the turn of the millennium, while I was the Education and Certification committee chair for the ASQ Greater Fort Worth Section (1416), I got a call from a section member asking for help. She summarized her professional situation and told me that she wanted to be certified. Her question was simple: "Which certification is appropriate for me?" We discussed her situation in detail and she derived a solution. This discussion was needed since at the time there was little available published information to help her with this process.

 However, it seemed to me at the time that the larger issue was "How many *other* members of my section needed this same kind of help?" This issue, combined with the fact that the majority of people who initially join the society precisely do so because they want to be certified in a quality area, made the need for creating an efficient means of imparting this kind of information all the more critical. As a result, I built a relatively simple map, based on the ASQ Certifications available at that time.

 Years later, I was a member of a Certification Board subcommittee tasked with building a means to answer "the simple question" for the society membership overall.

Once the subcommittee work began, four key issues became apparent:
 1. The guidelines would have to be general,
 2. The guidelines would need to take into account the prospective certification candidate's desired career track,
3. The guidelines would need to specify an order, based on sequential building of required knowledge and skills, and;
4. The updated map would be far more complex than the earlier simple one, due to the increased number and variety of ASQ Certifications available. This increased complexity had the most impact on the first two issues listed above.

 We used the original map as a starting-point for the final product.

 As there are usually two organizational sides to quality assurance organizations, we followed that model and divided the map in the same manner, using category labeled "Hard" and "Soft." We further divided each of these into three subcategories, based on specific career tracks: on the "Hard" side we included Inspectors, Technicians and Engineers, and on the "Soft" side were Auditors, Software Engineers and Managers.

There followed other notable changes: The "Hard" and "Soft," category descriptors each carried disagreeable connotations. These became "Technical" and "Leadership," respectively. We then added the new certifications and adjusted the paths accordingly. We developed several career tracks, based first on the expertise of the subcommittee members, and then on the collective expertise of the Certification Board members.

We've modified the map once since initial publication on the website – when the Certified Pharmaceutical Good Manufacturing Practice(GMP) Professional (CPGP) became the fifteenth ASQ certification.

The Certification and Training portion of the ASQ contains significantly comprehensive information regarding certification and recertification.I recommend that prospective certification candidates start there.