

# Certifications in The Construction Industry: A Look Into Industry Standards

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Becoming certified in various areas of construction is a task that requires completing rigorous courses to become more knowledgeable and give those the tools to succeed in a certain path within construction. Having a multitude of certifications diversifies your portfolio, and strengthens your resume but acquiring multiple certifications can be a very expensive and time-consuming task. Is the time commitment and expenses worth it? By the end of this paper students will finally know the answer to a question they have always been asking, "Do construction certifications actually better your chances to get a job?" Since there are numerous certifications that are offered within the Construction Industry, we will be focusing on a list of ten. This paper will serve an important purpose to students as it will aid them to make valuable choices upon entering this industry, as well as faculty to decide whether to continue requiring their students to complete certain certifications as coursework.

**Key Words:** Construction Certifications, Job Opportunities, Diversify Portfolio, Certification Testing

## Introduction

Construction Management students across the nation share a common goal, and that is to become employed. Employment comes from recognition and there are multiple ways to gain recognition from industry, whether it be by school competitions, competitive GPA's, club affiliations, or the number of internships a student has completed. As the interest in Construction Management degrees has grown in recent years, students have standardized these forms of recognition and since then, students are beginning to ask: "What else can I do to separate myself from everyone else?"

Although there are many alternatives to do so, this paper will extensively evaluate one: construction certifications. Becoming certified shows an employer one's interest in construction, and the motivation and dedication to complete a certain task but showcasing these characteristics can be done alternatively. By the end of this paper, students will be able to decide on whether it is necessary for them to acquire certifications by evaluating the information provided by the construction industry.

## *Description of Certifications*

The certifications this paper will examine are:

**Certified Construction Manager:** Deemed as the "gold standard" for Construction Management Professionals. Nearly 4,000 people hold this certification and once accredited as a CCM, these professionals must be able to provide services which "apply effective management techniques to the planning, design, and construction of a project from inception to completion for the purpose of controlling time, cost and quality". (Cmaanet.org) Another important note, some owners are beginning to require General Contractors to input a CCM on the project team of their job.

**OSHA 10 / OSHA 30:** The government has made a commitment to keeping safety and health a priority. Since construction is one of the most dangerous occupations it is important to be aware its dangers. The OSHA 10 and OSHA 30 certifications educates workers on how to identify and prevent workplace hazards within various areas of

construction. Safety is important as it can be financially beneficial as you can avoid costly citations from OSHA personnel and companies who have a low injury count have better reputations. (Safetypartnersltd.com)

**Concrete Construction Special Inspector:** “Person qualified to inspect and record the results of concrete construction inspection based on codes and job specifications. The program covers inspection during preplacement placement, and post-placement operations”. (Concrete.org) In order to become certified within this program it is required you have a base knowledge of concrete construction.

**Associate Constructor:** The certification for professional constructors is the first-level of certification in the Construction Certification Program. Ideal for recent Bachelor Degree graduates in a 4-year Construction Management curriculum. Those who acquire this certification should exemplify their high-level of skill and knowledge in managing the process of construction. (Landis, ProfessionalConstructor.org) Enhances your professional image to your company, and owner of the job.

**Building Commissioning Professional:** Once certified as a Building Commissioning Professional the professional can distinguish themselves as “one who brings to your professional activities the full scope of knowledge requisite to the effective commissioning of existing buildings”. (Aeecenter.org) Building commissioning refers to the process of verifying all subsystems for MEPF’s in order to meet the owner’s desires according to the design by the architects and engineers.

**Designated Design-Build Professional:** Becoming a Design-Build Professional indicates an individual’s commitment to their knowledge and expertise in the field. This coursework teaches “how to” concepts about Design-Build in order to educate those who are unaware of Design Build. (Dbia.org) Some positions within a company prefer if not require you to be DBIA certified.

**Graduate Builder:** Primarily for those interested in residential construction. This certification will help sharpen business management skills and better understand today’s home building industry. NAHB (the certifying entity) also conducted a study and found that Certified Graduate Builders had revenues significantly higher than companies in similar size without a CGB leader. (*Certified Graduate Builder*, Nahb.org)

**Green Professional:** Another certification for those interested in residential construction. This certification recognizes builders, remodelers, and other industry professionals who incorporate green and sustainable building principles into homes. This coursework will provide you with the skills and knowledge on energy, water and resource efficiency, lot and site development and home owner education to deliver a sustainable home without driving up the cost. (*Certified Green Professional*, Nahb.org)

**Construction Site Safety Supervisor:** A program to help those who want to land an entry level position as a Construction Site Safety Supervisor. A Construction Site Safety Supervisor will either work in the office or on the field. If the supervisor is in the office, they set and review health and safety guidelines. If the supervisor is on site they will conduct safety audits. (Study.com)

**LEED:** Shows proficient knowledge in sustainable design, construction and operations standards. Green jobs are in a high demand, and by 2018 the green construction industry is expected to account for over 3.3 million jobs. (Usgbc.org) Becoming knowledgeable about LEED is important because it will save owners money in the long run and reduce the environmental footprint.

### *Summary of Certifications*

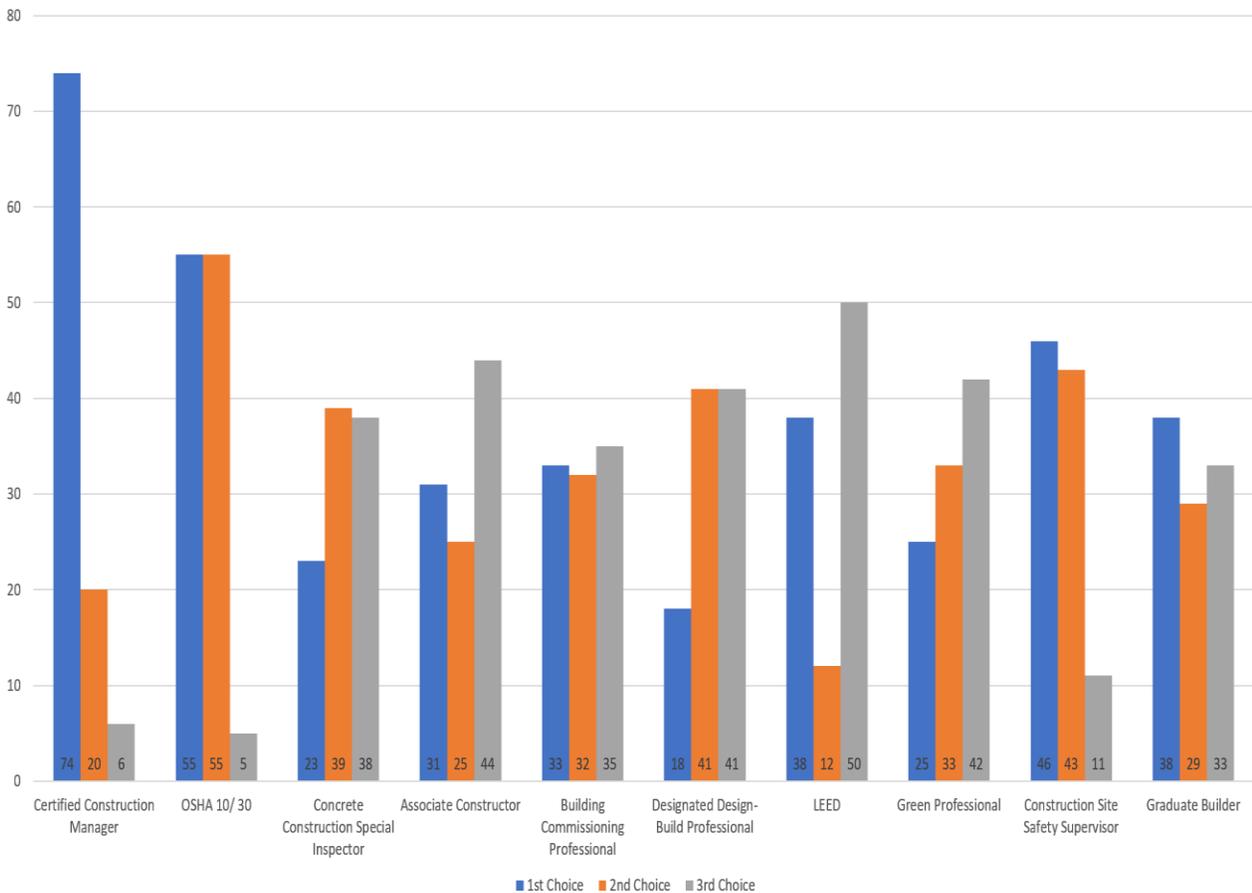
These certifications listed above are just few of many that can be acquired within this industry and it is important get educated on the various certifications. Each certification requires an incredible amount of time and effort, but within each description it shows how much information and knowledge is out there and how useful it can be. This information and knowledge creates building blocks to better understand a certain sector of construction and recognize how to deal with different scenarios. These building blocks of knowledge will separate you from the pack, but as an individual is that enough to deem it necessary?

## Methodology

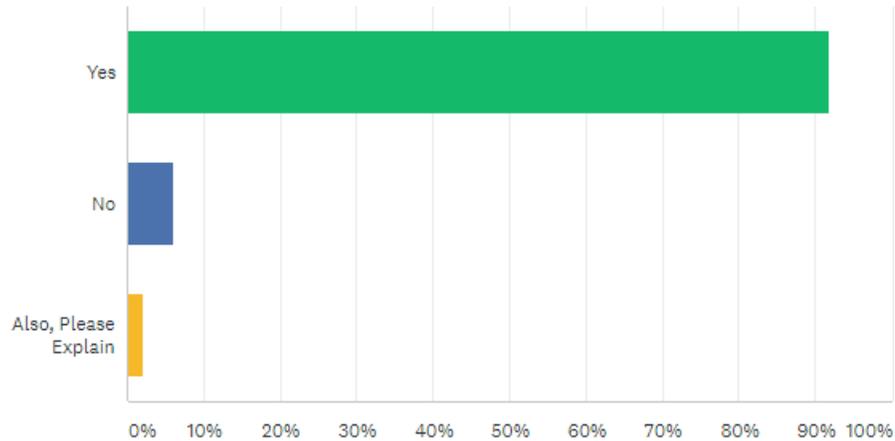
The methodology chosen for this research was primarily quantitative. Data was gathered through two individual surveys that were sent to students and alumni/industry. The surveys sent to alumni were to gather information regarding certifications by asking various questions circulating the main idea of becoming certified. Questions such as how many years they have been in the industry and their positions held were asked as well. The surveys sent to students asked about their job desires as they enter the industry and questions regarding the construction-related certifications; how much they know and what their ambitions are. This information was then used to compare students desires and ambitions to alumni/industries advice which will become useful knowledge for students to formulate an answer on if they think it is necessary or not.

### *Student Survey*

As you can see in Figure 1, through my student-survey responses I wanted to compare all first choices, second choices, and third choices. Out of all ten certification options, 74% of the students who took this survey chose Certified Construction Manager to be their first option. For the second choice, 55% of students who took this survey chose OSHA 10/30. For the 3<sup>rd</sup> choice, LEED was rated fairly-high ranking in 50% of the votes. These top three choices will have a parallel with the Alumni/Industry responses which will be addressed later within this paper.



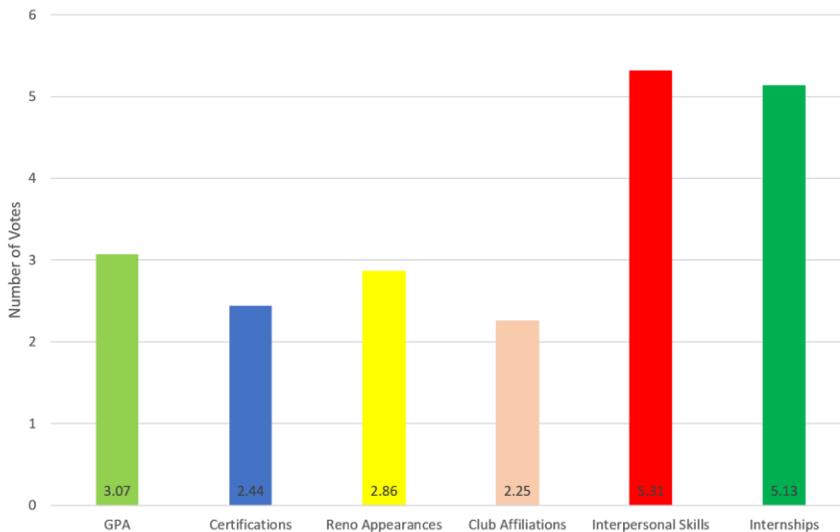
*Figure 1 – Top 3 Certifications Selected by Students*



*Figure 2 – Certification Inquiry Interest*

This graph reflects the question regarding if the students wished Cal Poly’s Construction Management department gave more information about construction-related certifications and how to acquire them. With more than ninety percent (90%) wishing they did, this goes to show how thirsty students are to learn about their field of study. Unfortunately, since there isn’t any structure or helpful information from the department they have no direction or education on how to make the first steps to do so. Students, especially the older classmen, have a general knowledge on certain certifications through word of mouth, but there are still a generous amount that are not discussed about. With a decent-sized response from the student body (50), it would be beneficial for students to have access to information regarding construction certifications provided by the department.

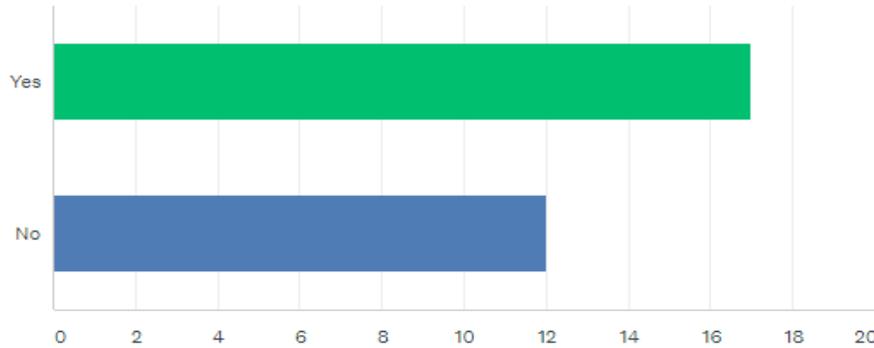
*Alumni and Industry Survey*



*Figure 3- Categories of What Industry Looks in New Hires*

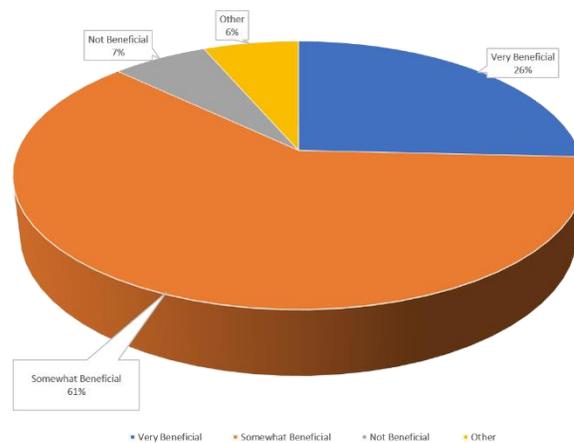
The figure above represents what the alumni/industry look for in new-hires. I asked the surveyors to rate on a scale from 1-6, (1 being highly looked at and 6 being lowly looked at) what they look for in new hires. To help interpret the graph, most people voted for interpersonal skills whereas very few voted for club affiliations. Out of the thirty (30) respondents, none of them deemed having certifications the most important. On a scale from 1-6, (1 being highly looked at and 6 being lowly looked at) most voted it a 5 or 6. But, there were a few outliers. A few people rated it as high as 2 or 3. This brought my attention so I looked at their positions held in their respective companies

and found something interesting, the few who voted it a 2 or 3 held Human Resource positions at their company. Also, another note to add is that since there is such a huge supply of jobs, companies will begin to look how well you fit with the team. If we were to do apply this same survey ten years down the line where the gap between supply of jobs and demand of jobs shrinks, grades would matter more and interpersonal skills will be lowly looked at.



*Figure 4 – Alumni/Industry Acquisition of Certifications*

Figure 4 reflects the question on if they have acquired any certifications. As you can see seventeen (17) do, and twelve (12) don't. Then I looked at each individual to see what certifications they have and hopefully correlate why they have them. Within my research I found that out of the seventeen (17) most of them only acquired two certifications and those two were LEED, and OSHA both of which were either paid by the school or by their companies. Not a single person paid for LEED or OSHA out of their pocket. This is a very interesting and important note that a majority primarily have these two certifications but both were subsidized by Cal Poly or their respective companies.



*Figure 5 – Rate of Benefiting from Certifications as a New-Hire*

Figure 5 shows how beneficial the industry/alumni thought it is for students to have any construction-related certification for an entry level position. By adding the very beneficial and somewhat beneficial categories, this leaves eighty-seven (87%) thinking it is beneficial to acquire construction-related certifications. Students can interpret this depending on what position they want. For instance, if they want to become a safety coordinator they should consider becoming OSHA 10/30 certified, or Construction Site Safety Supervisor certified.

## Summary

In comparing the student responses to industry responses in terms of certifications I found a few parallels. The top three certifications the students wanted to acquire were the Certified Construction Manager, OSHA 10/30 and LEED. After asking the industry which certifications they had (if they had them) were CCM, OSHA, and LEED. This shows the students ambitions were the same as what the industry has. I went a step further to ask those who had certifications how they were paid for and 100% of them said they were subsidized by Cal Poly or their respective employers.

There is a very fine barrier between alumni/industry and undergrad students, and I wanted this information to be used as a weapon to slowly break this barrier. Students sometimes will misinterpret what the industry wants and vice versa. Within this industry it is vital to find ways to become more efficient and I want students to use this information to be more efficient in finding ways to separate themselves from the pack. Even though this paper only touches on ten (10) out of many certifications offered, I hope it serves its purpose as an outline. An outline of what Construction Management departments around the country can refine and build open. This can be such a useful tool for students if they had access to a printed list or database of certifications including a short description; and filters for costs, prerequisites, test locations, and importance factor for a certain position.

## Conclusion

Students must educate themselves about construction-related certifications; there are hundreds of certifications that are available to undergrads or recent hires and it would only benefit them to know about each one, and what the industry thinks about them. Back to what I stated earlier, all Construction Management students have one thing in common, to become employed by the end of their college career. Since history repeats itself, the gap between job supply and job demand will shrink and students will want to find alternatives to strengthen their chances to get jobs and this alternative is just one of many.

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