



Project Title Professional Certifications and Credentials Project

Project Team

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Project Purpose

The current Promotion Benchmarks allow for numerous credentials/certifications; however, there is currently no clear guidance on how to interpret these requirements.¹ This can lead to confusion by engineer category members about which credentials/certifications they should pursue and how promotion committee members should evaluate their relevancy to the work of Corps engineering activities.

The purpose of this project is to develop one or more "fact sheets" that help guide engineers towards identifying credentials/certifications that will provide the most value to their career. Such fact sheets will include information about the credentials/certifications such as sponsoring organization, description, website, and the costs/effort of studying, exam length, continuing education requirements, etc. Promotion committee members may use summary information to understand how much credit to give each credential/certification when officers include them on their CVs.

The CPO is particularly interested in helping guide biomedical engineers (BMEs) towards identifying certifications/credentials that will be of value to them. BMEs within the category have historically raised concern that PE licensure may not be practical, feasible, or value-added to become more effective officers.

To address the concerns raised by the CPO, in addition to developing fact sheets, we will develop a whitepaper that compares the requirements for PE licensure versus select certifications/credentials that may be more relevant to BMEs. This comparison will include the costs and amount of studying (books and/or classroom training), the cost to sit for the exam and its length, and continuing education requirements for maintaining certification after it has been earned.

Project Stakeholders

USPHS Engineer Officers – officers in category will be more aware of advanced certifications and credentials

Engineer Category – will in turn have more officers with advanced certifications and credentials

¹ Per the PY2021 Engineering Category Benchmarks, "Other job-related certifications or licensure should be considered as value added to the Corps and Agency."





Agencies – will potentially offer funding to USPHS Engineers to achieve certifications and credentials

Promotion Board – will become more aware of various certifications and credentials in addition to PE

CPO – will need to request updates to Category Benchmarks as a result of information provided from project

EPAC – will provide comments to team before RADM Dieser can incorporate in benchmarks

Project Schedule/Milestones

| Milestone | Target Completion Date |
|---|------------------------------|
| Develop project plan | Complete |
| Draft survey questions | Complete |
| Present project plan and survey questions at CDS meeting. Solicit feedback. Explain that we are starting this out to be focused on BME but may expand it in the future to other engineering disciplines. [Update: project scope has been expanded based on meeting with CPO] | Complete |
| Revise project plan and survey questions based on CDS feedback. | Complete |
| Present project plan and draft survey questions to CAPT Boyd and CDR Ishihara. Review the raw data already captured during the FDA PHS Engineer Survey (especially that which was not included in the presentation) and determine the delta. | Complete |
| Allow EPAC to review and approve our plan to use MAX.gov to host a survey. This may require an EPAC vote. | Complete |
| Create survey in MAX.gov | Complete |
| Announce survey to category | Complete |
| Analyze survey results data to understand (1) the different certifications held across the engineer category, and (2) those held specifically by BMEs. Depending on the quality of the data, this may require follow-up with the respondents. | February 2021 |
| Vet certifications to consider only those that require a reasonable amount of effort to obtain (<i>i.e.</i> , we want to dismiss those that are just "paid for"). Depending on the quality of the data, this may require follow-up with the respondents or additional online research. | April 2021 |
| Select some certifications as good examples to be included in biomedical engineer (BME) whitepaper | May 2021 |
| Based on the amount of information on hand at the time, provide informal recommendations for revising the engineering category benchmarks for PY2022 (refer to EHO benchmarks as potential model) | June 2021 |
| Write rough draft of whitepaper, which we plan will include: High-level overview to show the breadth of roles that PHS biomedical engineers hold | July 2021 |





| PE has long been the "benchmark" but may not be practical, feasible, or value-added for BMEs to become more effective officers. Comparison of the requirements for PE versus other certifications relevant to BMEs (identified in previous step). This will include the costs and amount of studying (books and/or classroom training), the cost to sit for the exam and its length, continuing education requirements for maintain certification after it has been earned, and how much value the PE and certifications add to the engineer's agency and/or USPHS. | |
|--|----------------|
| Present draft whitepaper to CDS and solicit feedback | August 2021 |
| Revise whitepaper and present to CDS | September 2021 |
| Present whitepaper to EPAC for review and approval by CDS | October 2021 |
| Determine how certification/credential data will be organized as "fact sheets" (e.g., by agency, role, society that offers the certification, etc.) | November 2021 |
| Draft the fact sheets to include information about the certification such as society that offers it, description, website, and the costs/effort of studying, exam length, continuing education requirements, etc. | February 2022 |
| Present fact sheets to EPAC CDS and solicit feedback | March 2022 |
| Revise fact sheets as necessary based on feedback | April 2022 |
| Submit to CPO for review and endorsement (as per attached document below) | May 2022 |
| Develop plan for keeping fact sheets up to date. Ideally, certification data will be housed in the PHEP certifiable skills database and officers will be able to add certifications to the database through a web application. Our team could then monitor for new certifications that arise and determine whether new fact sheets need to be created. | TBD |



Project Deliverables

Whitepaper and fact sheets (see above)

Team Communication

Communications will primarily take place via email, with meetings held on an as-needed basis

Assumptions/Constraints

We are assuming that all certification/credential data will be housed in PHEP certifiable skills database being created by CDR Gumapas and LCDR Wandersee.

We are also assuming that officers will be able to query the database and submit certification/credential updates through a web application that has yet to be determined (e.g., SharePoint).

Ideally, engineers will be able to query the database to discover certifications they were not aware of and/or identify those who hold certification(s) of interest to them. This could create

Last edited 10FEB2021





"study buddy" or mentorship opportunities that are assumed to be outside the scope of this project.

All coordination with the PHEP subcommittee will be handled by LCDR Mary Millner, who is Project Lead for the "Core Competencies Assistance to PHEP Subcommittee" CDS project.

Approval

Project Lead, LCDR Tom Peter

CDS Leadership