

Commissioning Process Certifications:

General Information

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University of Wisconsin–Madison Certifications for Commissioning Process Professionals

Certification for Educational Achievement

- Qualified Commissioning Process Provider (QCxP or QCP)
- Building Enclosure Commissioning Process Provider (BECxP)
- Commissioning Authority + Building Enclosure (CxA+BE)

Certifications for Educational Achievement Plus Project Experience

- Commissioning Process Authority Professional (CxAP or CAP)
- Commissioning Process Manager (CxM or CXM)
- Commissioning Process Technical Service Provider (CxTS or CTS)
- Green Commissioning Process Provider (GCxP or GCP)

Introduction

Background

The University of Wisconsin–Madison initiated the development of a certification program for individuals involved in the Commissioning Process (CxP) in 2001, with a formal program launched in February 2003. The purpose of this program is to provide in-depth training and professional recognition, establishing a benchmark for commissioning professionals and supporting providers. The knowledge and experience demonstrated through the completion of the certification requirements are critical for success in implementing the Commissioning Process, which reduces the cost and improves the quality of constructed projects and existing buildings. These certifications can be used as one standard upon which to judge the expected performance of a commissioning authority, manager, or providers of related services. A primary objective of the program is to establish a rigorous, independently evaluated level of accomplishment, so that any individual who receives a University of Wisconsin–Madison certification will be capable of providing value to projects using the principles of the Commissioning Process.

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Philosophy of the Commissioning Process

The Commissioning Process is a proven method to consistently deliver cost-effective, quality buildings and construction projects. This includes, but is not limited to:

- New buildings, facilities, and construction projects
- Commissioning existing facilities
- Building and process rehab and modification
- Sustainable and green buildings, energy projects, and ESCO projects
- Performance contracts
- Design-bid-build, design-build, construction management, and other contract methods
- · Other construction and development projects

Although there are several guidelines on CxP practice, the University of Wisconsin–Madison certifications follow the Commissioning Process principles established by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers/National Institute of Building Sciences (ASHRAE/NIBS) Guideline 0-2019 (and prior versions), Guideline 3-2012 (and prior version 3-2006), Guideline 1.1-2007, Guideline 0.2-2015, and Guideline 1.2-2019.

Distinction in the Marketplace

The University of Wisconsin–Madison Commissioning Process certifications offer a unique distinction in the industry, as they provide the opportunity for individuals with varying levels of professional experience to gain recognition. This feature, in addition to the focus on the full Commissioning Process, creates an opportunity for individuals to distinguish their capabilities in a way not possible in many other certification programs.

All seven University of Wisconsin–Madison Commissioning Process certifications, including QCxP, BECxP, and CxA+BE, are educational certifications. They recognize educational achievement in knowledge of the Commissioning Process. The CxAP, CxM, CxTS, and GCxP further demonstrate experience in applying that knowledge to projects.

The CxAP, CxM, CxTS, and GCxP project experience certifications are considered equal in recognizing knowledge of the Commissioning Process, but differ to highlight the unique career focus of individuals involved in the practice of the CxP. Some successful applicants have earned more than one experience certification, due to their career history in various roles of implementing the Commissioning Process.

Accreditation

The University of Wisconsin–Madison and all academic programs within the university are accredited by the Higher Learning Commission (hlcommission.org). Postsecondary accreditation for universities and colleges is officially recognized by the U.S. Department of Education, and confirms that the learning outcomes of academic programs are valid and useful. As this is the highest standard of accreditation, postsecondary institutions and individual programs do not seek accreditation from additional organizations.

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Descriptions of Certifications for Educational Achievement

Everyone who completes the required education and successfully completes the CxP Provider exam will receive the QCxP. Those who complete the required building enclosure education and successfully complete the Building Enclosure CxP exam will receive the BECxP, CxA+BE, or both. There is no application form for the QCxP, BECxP, or CxA+BE.

Accredited Qualified Commissioning Process Provider (QCxP), (QCP)

Purpose:

To provide a level of recognition for those who have acquired an understanding of the Commissioning Process through education and demonstrated a minimum level of understanding of the Commissioning Process through an examination.

Description:

As the Commissioning Process continues to grow in the industry, there are many individuals who have gained significant knowledge of the CxP and may wish to differentiate themselves from those providing traditional commissioning services. The QCxP offers these individuals an opportunity to be recognized for their knowledge. All applicants who have completed the educational requirement and successfully passed the CxP Provider examination will be awarded the QCxP. The QCxP will be valid for five years. At the end of five years, the certification holder will have the option to renew the QCxP. Details on the renewal process are included later in this document. The QCxP can be renewed as many times as desired, as long as it is maintained in active status.

At any time while the QCxP is active, the certification holder may opt to pursue one or more of the project experience certifications. Details on these certifications and the application process are included later in this document. Once an applicant has achieved one of the project experience certifications, the QCxP expires.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one's name shall be noted by: QCP or QCxP.

Requirements:

- ✓ Completion of the approved Commissioning Process education
- ✓ Successful completion of the UW–Madison CxP Provider examination

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Accredited Building Enclosure Commissioning Process Provider (BECxP) and

Accredited Commissioning Authority + Building Enclosure (CxA+BE)

Purpose:

To provide a level of recognition for those who have acquired an understanding of the Commissioning Process specific to building enclosures, as demonstrated through education and examination.

Description:

The building enclosure is frequently the most expensive aspect of a new building and is usually the most difficult and costly to correct after construction. The BECxP and CxA+BE certifications were developed to recognize and encourage the use of the Commissioning Process principles for building enclosures. The two certifications include:

- BECxP: This individual provides the technical knowledge and experience to implement specific building enclosure CxP activities that verify the installed building enclosure meets the owner's requirements. This individual is an extremely valuable member of the CxP team who is an expert in the design, construction, and maintenance of building enclosures.
- CxA+BE: An individual holding CxA+BE is a leader of the Commissioning Process team, usually defined as the commissioning process authority, who also has sufficient building enclosure knowledge to lead the team in Commissioning Process activities specific to the building enclosure.

All applicants who have completed the building enclosure educational requirement and successfully passed the Building Enclosure CxP examination will be awarded either the BECxP, CxA+BE, or both. The Building Enclosure CxP examination is divided into two parts: Commissioning Process Principles (Part 1) and Building Enclosure Principles (Part 2). The BECxP is awarded to those who achieve a minimum of 60% on Part 1 and 80% on Part 2, while the CxA+BE is awarded to those who achieve a minimum of 80% on Part 1 and 60% on Part 2. If a person scores 80% or higher on both parts, they are awarded both designations. The BECxP and CxA+BE will be valid for five years. At the end of five years, the certification(s) can be renewed. Details on the renewal process are included later in this document. The certification(s) can be renewed as many times as desired, as long as it is maintained in active status.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one's name shall be noted by: BECxP or CxA+BE.

Requirements:

- ✓ Completion of the approved Commissioning Process building enclosure education
- ✓ Successful completion of the UW–Madison Building Enclosure CxP examination

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Descriptions of Certifications for Educational Achievement Plus Project Experience

An applicant's previous experience in implementing the Commissioning Process on projects, as demonstrated through the submitted application package, determines which certification will be awarded. There is no secondary exam for the project experience certifications. Individuals may opt to pursue more than one project experience certification by submitting separate applications showing the appropriate project experience for each. See the Application Instructions document for detailed requirements of each project experience certification.

Accredited Commissioning Process Authority Professional (CxAP), (CAP)

Purpose:

The purpose of this certification is to recognize Commissioning Authorities (the CxP team leader) with a demonstrated level of knowledge, experience and success in implementing the full Commissioning Process. This includes the Commissioning Process team leader as designated by titles other than commissioning authority, which may be used by some organizations. The CxAP designation is meant to recognize individuals who have led the Commissioning Process from pre-design through the first year of occupancy, which normally includes developing a lifetime CxP plan for the facility. This can include both employees of the project owner and contract service providers.

Description:

Those obtaining the **CxAP** certification are Commissioning Process providers that have shown they can successfully implement the requirements of the full Commissioning Process from project inception through first year of occupancy. The application requires submission of two projects if the primary project on the application has a construction cost of \$4 million or greater for new construction, or CxP fees/costs greater than \$50,000 for an existing building project. Otherwise, four projects must be submitted where CxP fees/costs were at least \$20,000 per project. To qualify for CxAP, the candidate's application materials **must** show that he or she served in the role of the primary commissioning authority or commissioning team leader during all phases (pre-design through occupancy for new construction). The applicant must provide documentation that will demonstrate a reasonable level of confidence by the review committee that the person receiving the designation as a CxAP will be able to bring high value to their employer or clients on all projects using the Commissioning Process. The applicant must also submit letters of reference by project owners on each project. Note: ASHRAE Guideline 0.2-2015 (and 1.2), should be used as the quideline methods for commissioning existing buildings.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one's name shall be noted by: CxAP or CAP.

Requirements for CxAP:

- ✓ Current active status as Qualified Commissioning Process Provider (QCxP)
- ✓ Successful UW certification committee review of submitted documentation on two or four projects per application requirements

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Accredited Commissioning Process Manager (CxM), (CXM)

Purpose:

The purpose of the CxM certification is to recognize individuals who have successfully managed the Commissioning Process for a project owner. The CxM designation will be awarded to those applicants who have shown they have managed the Commissioning Process activities either as an owner's in-house Commissioning Process manager, or equivalent title, or as a third-party provider of these management services for an owner.

Description:

Those with the **CxM** certification will be able to effectively set requirements for the owner's commissioning efforts or for solicitation of third-party commissioning authorities to provide high value and cost savings for their projects, employer's projects, or contractually managed projects. They will be able to effectively manage, organize, and integrate the Commissioning Process into all new construction and existing building commissioning projects. They will have a sound understanding of the requirements, benefits, and implementation of the Commissioning Process. Individuals representing governments or utilities that provide funding and management for commissioning projects are eligible for CxM. The application requires submission of two projects if the primary project on the application has a construction cost of \$4 million or greater for new construction, or CxP fees/costs greater than \$50,000 for an existing building project. Otherwise, four projects must be submitted where CxP fees/costs were at least \$20,000 per project. Applicants for CxM must provide documentation that the commissioning authority on their projects was involved from project inception through one year of occupancy. The Commissioning Authority on each project must be listed in the application. The applicant must also submit letters of reference by project owners on each project. Note: ASHRAE Guideline 0.2-2015 (and 1.2), should be used as the guideline methods for commissioning existing buildings.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one's name shall be noted by: CXM or CxM.

Requirements:

- ✓ Current active status as Qualified Commissioning Process Provider (QCxP)
- ✓ Successful UW certification committee review of submitted documentation on two or four projects per application requirements

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Accredited Commissioning Process Technical Service Provider (CxTS), (CTS)

Purpose:

The purpose of the CxTS certification is to identify those individuals who contribute significantly to the successful implementation of the Commissioning Process in a role *other than* as a lead commissioning authority or manager of the Commissioning Process program. In addition, the CxTS designation highlights the accomplishments of individuals who demonstrate success in Commissioning Process projects where they served as primary commissioning authority or provided assistance during some, but not all, phases of the process.

Description:

Those obtaining the CxTS certification understand the full Commissioning Process and provide support in a wide range of Commissioning Process activities. This may include performing Commissioning Process tasks in some phases of a project that implements the complete CxP, activities not typically performed directly by a CxAP or CxM, or implementation of the Commissioning Process on a large number of small new or existing building projects. Examples include, but are not limited to: (1) providing essential portions of the Commissioning Process on small projects, (2) serving to support or assist either a CxAP or CxM, (3) providing Commissioning Process tools or software, and (4) involvement in specific aspects or phases of the full Commissioning Process, such as testing, commissioning construction management, checklist creation and/or field verification, programming, or design verification. The application requires submission of two projects if the primary project on the application has a construction cost of \$4 million or greater for new construction, or CxP fees/costs greater than \$50,000 for an existing building project. Otherwise, four projects must be submitted where CxP fees/costs were at least \$20,000 per project. The applicant must also submit letters of reference by project owners on each project. Note: ASHRAE Guideline 0.2-2015 (and 1.2), should be used as the guideline methods for commissioning existing buildings. Prior to 2009, the title of the CxTS designation was Commissioning Process Technical Support Provider; those holding the CxTS certification may opt to use the term "Support" or "Service".

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one's name shall be noted by: CxTS or CTS.

Requirements:

- ✓ Current active status as Qualified Commissioning Process Provider (QCxP)
- ✓ Successful UW certification committee review of submitted documentation on two or four projects per application requirements

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Accredited Green Commissioning Process Provider (GCxP), (GCP)

Purpose:

The purpose of this certification is to recognize those who lead the commissioning process activities as commissioning authorities (the CxP team leader) on new or existing building projects that emphasize green and sustainable building principles. This includes the Commissioning Process team leader as designated by titles other than commissioning authority, which may be used by some organizations.

Description:

The **GCxP** designation recognizes individuals with knowledge, experience, and success in implementing the principles of the Commissioning Process. This designation is specifically applicable to those who have been the designated commissioning authority on LEED new construction and major rehab or existing building projects, and also applies to other rating systems for sustainable construction. Projects that have sustainable emphasis, but are not rated, and achieve an equivalent or greater level of Commissioning Process activities can be submitted. The person eligible for this designation can include both employees of the project owner and third-party providers.

To obtain the **GCxP** certification, commissioning process providers must show they have successfully implemented the commissioning process on two or four green building projects where CxP fees/costs were at least \$20,000. To qualify for **GCxP**, the candidate's application materials **must** show that he or she served in the role of the primary commissioning authority or commissioning team leader. For LEED BD+C projects (New Construction, Core & Shell, etc.), two projects must achieve the Enhanced Commissioning credit. If the applicant has achieved the Enhanced Commissioning credit on two projects, only these two projects need to be submitted (instead of four). For LEED EB O+M projects, two projects must achieve all commissioning points. If the applicant has achieved all commissioning points on two EB projects, only these two projects need to be submitted (instead of four). For all others, the combination of the four projects must show that the applicant is able to lead commissioning process activities comparable to the level of rigor of the LEED commissioning prerequisite and credits.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one's name shall be noted by: **GCxP** or **GCP**.

Requirements:

- ✓ Current active status as Qualified Commissioning Process Provider (QCxP)
- ✓ Successful UW certification committee review of submitted documentation on two or four projects per application requirements

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Limitations of Certifications

These certifications only indicate that the person has met the minimum requirements as set forth by UW–Madison, based upon review of material submitted, completion of educational requirements, and grading of an examination. None of these measures provide a definitive means of predicting an individual's actual performance of the Commissioning Process. The certifications do not imply a guaranteed level of competency, proficiency, knowledge, or ability to communicate or to successfully carry out various aspects of CxP practice. The certification is similar to an educational degree or diploma, in that actual implementation on a specific project has many variables that may not be reflected in prior demonstration of experience, education or examination.

Application Information

Important Notes:

- 1. There is no application form for the QCxP, BECxP, or CxA+BE.
- 2. No applications for CxAP, CxM, CxTS, or GCxP will be accepted until the applicant has earned the QCxP.
- 3. The QCxP status must be active (not expired) at the time of application submission.
- 4. There is an online application for the CxAP, CxM, CxTS, and GCxP certifications.
- 5. It will be the UW-Madison Commissioning Certification Committee's option to offer the applicant the certification that meets the applicant's demonstrated qualification and experience.

The applicant may indicate which certification he or she is requesting. For example, if the applicant applies for the CxAP certification but does not fully meet the requirements of that certification, the committee may issue a different certification, based upon information provided to support the application. As an individual's professional Commissioning Process experience changes, he or she may submit another application at a later date. After receiving a certification, an applicant may also choose to apply for one or more of the other project experience certifications if desired.

Detailed instructions and guidance on preparing an application for CxAP, CxM, CxTS, and/or GCxP are contained in a separate "Application Instructions" file available for download at http://interpro.wisc.edu/Cx. The file contains the detailed submission requirements for each certification, along with guidance on choosing projects for the application.

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Recertification/Renewal Procedure for All Certifications

All University of Wisconsin–Madison Commissioning certifications are valid for a period of five years. This includes any certifications issued under previous policies showing shorter timeframes. The purpose of expiration dates is to provide a process to verify that individuals holding UW–Madison Commissioning certifications are remaining actively engaged and knowledgeable about the current implementation and guidelines of the Commissioning Process.

Renewal emails and/or letters will be sent during January or early February for any individual whose certification expires during that calendar year. For example, forms will be sent in January or February 2023 for any certification that expires between January 1, 2023 and December 31, 2023. The renewal process includes a survey and short online multiple-choice quiz. See the Fee Summary Table in this document for the current renewal fee. Once renewed, the certification is valid until five years beyond December 31 of the original expiration year. For example, if a certification expires in August 2023 and is renewed anytime during 2023, a new certification will be issued with an expiration date of December 31, 2028. An individual may opt to allow their certification to expire by not responding to the email or letter by the deadline indicated. The certification is considered to be in "active" status until the end of the renewal period indicated in the email/letter.

Please note: The certification committee uses the last known contact information of the certification holder when sending renewal emails and letters. Any certification holder who would like to update their address for renewal purposes should contact Karen Kulcinski (contact info shown on cover page) prior to January 1st of the year the certification expires to ensure timely receipt of the email or letter. Mailing addresses can be updated at any time, but may delay the letter if received after January 1st of the expiration year.

The re-certification process requires 4 steps. These are shown on the renewal email and letter and summarized below:

- 1. Log into the renewal website shown on the email/letter
- 2. Pay the renewal fee (if required see fee schedule)*
- 3. Update your contact information and complete the online survey
- 4. Complete the online Re-certification educational quiz (17 multiple-choice questions)

After these steps are complete, a new certification with the updated expiration date will be sent to the updated mailing address indicated.

*The renewal schedule is tied to the date of examination, not the certification held. If a person applies for CxAP, CxM, CxTS, or GCxP during their renewal year, the renewal fee is still due as indicated in the letter.

Renewal After Expiration

After expiration, all certifications can be renewed by retaking the examination. Examination fees will apply according to the fee schedule below.

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Fee Schedule

The fee structure is summarized in the following table. This fee structure replaces all prior published fees. Fees are subject to change.

Orientation/Review session, Study Guide, and examination (all applicants): \$775

First-Time renewal fee (five years after passing exam, all certifications): \$0

• Renewal fee (all renewals after first, all certifications): \$195*

Application fee for CxAP, CxM, CxTS, or GCxP certification: \$0

Application fee for each additional certification awarded: \$195 each

• Fee to retake examination after any certification has expired: \$395

Fee Summary Table	Examination	First Renewal (five years after successful exam)	Ongoing 5-Year Renewals (second, third, and beyond)	Apply for CxAP, CxM, CxTS, or GCxP
Commissioning Process Certifications	\$775	\$0	\$195	\$0 (\$195 per each additional certification)
Building Enclosure CxP Certifications	\$775	\$0	\$195	Not Applicable
All Expired Certifications	\$395 to retake examination	Not Applicable	Not Applicable	Not Applicable

^{*}Please note that the renewal process and schedule is tied to the date of successful examination, not the certification held. If a person applies for CxAP, CxM, CxTS, or GCxP during their renewal year, the renewal fee is still due according to the table above. For CxAP, CxM, CxTS, or GCxP certifications awarded after 2021, the renewal schedule is based on the applicant's year of successful examination. CxAP, CxM, CxTS, or GCxP certifications achieved prior to 2021 will continue on their existing renewal schedule.

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Contact Information

These certifications are administered and managed by Interdisciplinary Professional Programs in the College of Engineering at the University of Wisconsin–Madison.

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Web Site: http://interpro.wisc.edu/ Home Page

http://interpro.wisc.edu/Cx Commissioning Certifications Web Page

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Index of Abbreviations

ASHRAE - American Society of Heating, Refrigerating, and Air-Conditioning Engineers

BECxP - Building Enclosure Commissioning Process Provider

BCA – Building Commissioning Association

Cx - commissioning

CxA – Commissioning Authority (some use agent)

CxA+BE - Commissioning Authority + Building Enclosure

CxAP – Accredited Commissioning Process Authority Professional (also CAP)

CxM - Accredited Commissioning Process Manager

CxTS –Accredited Commissioning Process Technical Support Provider (also CTS)

CxP - Commissioning Process

CxPlan - Commissioning Process Plan

EBCxP – Existing Building Commissioning Process

GCxP - Accredited Green Commissioning Process Provider (also GCP)

NCBC - National Conference on Building Commissioning

NIBS - National Institute of Building Science

QCxP – Qualified Commissioning Process Provider (also QCP)

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